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Determinants of Consumer Loyalty with the Servqual Model at Franchised Pharmacies in the City of Surabaya



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ABSTRACT: This study purposes to know the factors influencing loyalty of consumer at franchised pharmacies in the City of Surabaya passing through satisfaction variable of consumer as intervening variable. This research used quantitative method namely path analysis. Sampling technique was carried out according to accidental by taking respondents who happened to be at the research place. Collecting data in this study exerted was distributing questionnaires. The result of study showed that the dimension of service quality that are tangible, reliability, responsiveness, assurance, empathy which effected on consumer loyalty through the satisfaction of consumer as intervening variable to franchised pharmacies. To increase loyalty of consumer, the person in charge of the pharmacy should focus on improving tangible, reliable, assurance and empathy variables that proven to have an effect on loyalty of consumer at the company's franchised pharmacies.

KEYWORDS: Consumer satisfaction, Consumer loyalty, Servqual model

I. INTRODUCTION

In this globalization era, people now increasingly aware that health is the most important thing in life. This case also raises the demand of health facility [1]. One of the aspects of health problem is doctor's prescription. Medicines are the most important part of health care cause drug consumption can achieve 40 % of health care cost. It requires health care provider to provide and increase the quality of therapeutic and preventive service in order to raise the quality of life and keep consumer satisfaction to the health care. Pharmacy has dual roles namely health care provider and business unit so the Pharmacy should give good service to the consumer [2]. In the establishment of the Pharmacy, it can be divided into franchised pharmacy and independent pharmacy. Franchise pharmacy is built through joint business between owner and businessman. Previously, we might see "Pharmacy A" only have 2-3 branches in every city, nowadays it applies franchise system to expand their business and increase profit. They are such as Apotek K-24, Apotek Century, Apotek Mal 24, Apotek Kimia Farma and etc.

Pharmacy belongs to service field so it needs to provide good and optimal service quality to the consumer in order to make the loyalty of consumer. In addition to provide health products, pharmacies also have to focus to the service quality. Consumers do not only ask high quality product but also prima service [3]. Therefore, the study aim to measure service quality by using SERVQUAL theory which is established by Parasuraman. This analyzing is used to value expectation and consumer perception to the service of service provider. There are five dimensions of service quality by Parasuraman [4]. like tangibles, reliability, responsiveness, assurance and empathy. Those instruments are sufficient popular used by scientist because they are easy to use and applied in various service field. At the first decade since that instrument established, SERVQUAL seen as the most complete instrument in conceptualizing and measuring service quality [5].

Relevance between service quality, consumer satisfaction, and consumer loyalty are the most prerequisite, loyalty and consumer satisfaction are the effect of service quality mediation to the consumer loyalty [6]. This explains that good service quality is one of the factors that influence consumer satisfaction and loyalty consumer which is consumer satisfaction is higher so does loyalty level to the company. The dimension of service quality that are assurance, empathy and responsiveness influence consumer intention to always use the service because effect that felt from quality [7]. Ramanathan, Subramanian, and Parrott (2017) explains that dimension of service quality is assurance from company that have significant effect to the whole perception of service quality in influencing consumer satisfaction and loyalty. But, the study of Arıkan and Güner (2013) gives different result that service quality does not influence customer loyalty. Izogo and Ogba (2015) in their study discover that there is no significant relation between tangible dimension of service quality toward consumer satisfaction. Ngo and Nguyen (2016) said that variable

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of consumer satisfaction mediate the relation between service quality and consumer loyalty of retail bank in Vietnam, Aga and Safakli (2007) explain that empathy dimension is the only one of SERVQUAL dimension that has relation with consumer satisfaction and loyalty. Based on the research gap and problem on Pharmacy business have founded on several studies, further research will be carried out entitled “ Determinants of Consumer Loyalty with the Servqual Model at Franchised Pharmacies in the City of Surabaya”.

II. THEORETICAL REVIEW

Loyalty is consumer willing to use company products and consumer exclusively and recommend to their friends. Loyalty can be divided into brand loyalty and store loyalty. Brand loyalty can be said that consumer like and admire a particular brand which is reflected from repeated and consistent purchasing. Whereas store loyalty can be seen with consumer behavior which is consistently visit the store, obtain to buy everything that they need on store. Griffin explains that loyalty focusing on behavior taken from parts of decision maker to buy product or service repeatedly on company.

Kotler & Keller said that satisfaction is a feeling of pleasure or disappointment experienced by someone who is obtained from the results of comparing product performance with perceived results with expectation of products or services. Generally, there are three levels of consumer satisfaction, if performance is not appropriate with expectation so the consumer are disappointed but if the performance is agree with the expectation so the consumer are very satisfaction and intend to use it repeatedly. Rating of product depends on some factors which product has positive value so it will also make positive consumer perception and the consumer intend to sustained use.

Ramanathan, Subramanian and Parrott (2017) explained that service quality has complex definitions. Some dimension of service quality which is commonly used such as:

- Reliability, ability to give precise service that are applying good service, obtain to communicate well with consumer such as conferring good service through telephone, email or direct service.
- Responsiveness, willingness to give good service and assistance to the consumer. It can be seen through the service activities served to strength consumer satisfaction. Responsiveness measures how well the personnel give attention when there is complaint and question from the customer.
- Assurance, measuring the skill of personnel to create the trust of consumer.
- Empathy, focusing on consumer treatment as individual. One of the treatments is giving attention and helping consumer when they get troubles and serving what the consumer need.
- Tangibles (physical), emphasizing on physical elements. They can be seen, felt, touched, and be able to listen. It is involved facilities such as building, office, parking are and location, instrument, physical performance of the employee such as neat, friendly furthermore material physical such as advertising aim to catch the consumer and it is easy to remember whereas the service quality indicator in this study is SERVQUAL such as Reliability, Responsiveness, Assurance, Empathy, Tangibles..

Service quality is one of the elements to determine level of consumer satisfaction. If the service quality is good so consumer loyalty increase [11]. Based on Rasheed and Abadi (2014) explains about positive relations between service quality and consumer loyalty. High level of consumer satisfaction impact to consumer loyalty [13]. There is a Meta-Analysis related to consumer loyalty where the effect of service quality provides an increasing consumer loyalty over time. [14];[15].

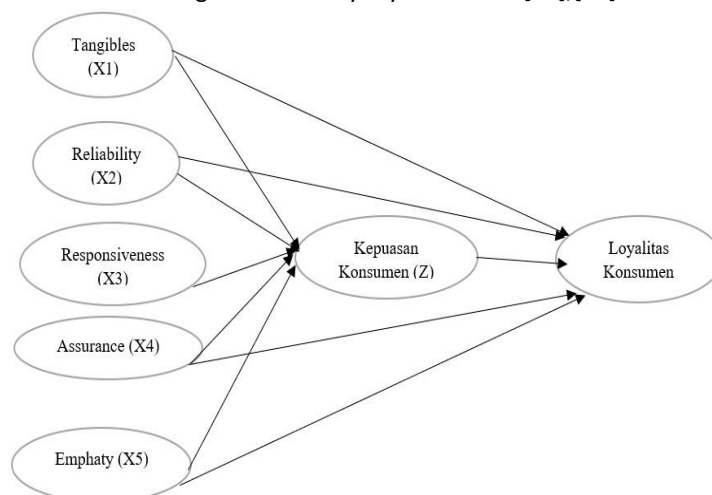


Figure 1. Conceptual Framework

Determinants of Consumer Loyalty with the Servqual Model at Franchised Pharmacies in the City of Surabaya

Hypothesis

- H1 : Tangibles dimension has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H2 : Reliability dimension, has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H3 : Responsiveness has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H4 : Assurance dimension has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H5 : Empathy Dimension has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H6 : Consumer satisfaction has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H7 : Tangibles dimension has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H8 : Reliability dimension has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H9 : Responsiveness has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H10 : Assurance dimension has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H11 : Empathy Dimension has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city
- H12 : Consumer satisfaction has a significant and positive influence to the consumer satisfaction at franchised pharmacy in Surabaya city

III. RESEARCH METHODOLOGY

Type of Research Methodology

Approachment that used is quantitative approach. Population is consumer of franchise pharmacy in Surabaya. This study is involved confirmatory research that aimed to exam the theories or hypothesis to strengthen or reject previous theory or research hypothesis. The method of data collection in this research are:

1. Questionnaire is collecting and distributing questionnaire which have been arranged to the respondent. The scale used is linkert scale. According to Sugiyono, linkert scale is a measuring instrument to assess opinion, attitude, someone perception about social phenomenon.
2. Interview is data collection method through direct question toward respondent. Interview was conducted with the aim if researcher wants to investigate the problem.

Data Analysis

Path analysis used to get pattern of relationship between variables. This model used to see the direct and indirect effect between independent variable and dependent variable. Thus, this study use path analysis and SPSS version 25 to process the data.

Validity and Reliability Test

Valididity test is an instrument to accurately measure what it is supposed to measure. This explains how score/value be able to describe the result of observation and measuring appropriately. Reliability test clarify consistency that is if the researcher obtain to evaluate research instrument based on different technique. But the basic question to measure data reliability is "how is the consistency of data collected".

Test Model (Test Statistic F)

The F Test used to know the influence of independent variable to dependent variable partially. Decision making seen through comparing t count and t table. If t count > t table so independent variable has effect to dependent variable so hypothesis is proven as well. On the other hand, it can be seen from significant level, if probability <0,05 ($\alpha = 5\%$), so independent variable has an effect to the dependent variable.

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Determination Coefficient Test

When R^2 close to 1, independent variable describe dependent variable that is close to 100 percent and use appropriate model. There are five conditions can explain the effect of mediation such as:

1. Independent variable has significant effect to mediation variable
2. Independent variable has effect to dependent variable
3. Mediation variable has effect to dependent variable when independent variable put into regression equality
4. If influential of independent variable to dependent variable is not significant when put into regression equality so perfect mediation occurs. If it is significant but the strength is less so partial mediation happens.
5. Independent variable assumed causing mediator in order to independent variable have to make significant correlation with dependent variable.

Sobel Test

Sobel test carried out to assess the strength of indirect-effect between independent variable (X) and dependent variable (Y) through intervening or mediation variable. Indirect-effect X to Y through Z counted with shift path $X \rightarrow Y$ or ab so coefficient $ab = (c - c')$, namely c is the influential X variable toward Y variable without controlling Z, whereas c' namely coefficient effect X to Y after controlling Z. Standard of coefficient error both a and b written with S_a and S_b as score of standard error has indirect effect. If the significance of probability level is $0,00001$ ($P \leq 0,05$), it has no mediation effect.

IV. DISCUSSION

Validity and Reliability Test

Based on validity test in every question of tangibles variable like reliability, responsiveness, assurance and empathy, consumer satisfaction obtained score r count $\geq r_{table}$ pada $df-2 = 98 = 0,1966$, which means all the questions to reliability, responsiveness, assurance and *Empathy* are valid. For reliability test obtained score for every variable are *Tangibles* sebesar 0,991, *Reliability* sebesar 0,983, *Responsiveness* sebesar 0,984, *Assurance* is 0,988, *Empathy* is 0,993, consumer satisfaction that is 0,991, consumer loyalty sebesar 0,967, comparing count result with Cronbach Alpha obtained to every standard with alpha standard 0,70 so it can be concluded that every variable indicators used in study is reliable.

F-Simultaneous Test

F-Statistic test used to explain whether tangibles variable (X1) *Reliability* (X2) *Responsiveness* (X3) *Assurance* (X4) *Empathy* (X5) simultaneously influence to consumer satisfaction (Z) as intervening variable. The result of significant Simultaneous (F test)

Table 1. Result Of (F Test)

F	Sig.
4766.450	.000 ^b

According to the table 1 shows that F count is 4766.450 with significance score 0,000 is smaller than 0,05, so it can be concluded that regression equality made is appropriate becoming estimation instrument and showing that *Tangibles* (X1) *Reliability* (X2) *Responsiveness* (X3) *Assurance* (X4) *Empathy* (X5) impact to consumer satisfaction (Z) as intervening variable. **Regression**

Determination Coefficient Model 1 (R2)

Table2. Determination Coefficient

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.898 ^a	.816	.826	.121

Table 2 shows that score R square Square (R^2) is 0,816 or 81,6%, means that *Tangibles* variable (X1), *Reliability* (X2), *Responsiveness* (X3), *Assurance* (X4), *Empathy* (X5) contributing 81,6% on consumer satisfaction as intervening variable. While reminding 18,4% explained by other factors which excluded in analysis equality.

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Regression Determination Coefficient Model 2 (R²)

Table 3. Coefficient Determinant R²

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.959 ^a	.897	.897	.075

On table 3 shows that score R square Square (R²) is 0,897 or 89,7%, means that *Tangibles* variable (X1), *Reliability* (X2), *Responsiveness* (X3), *Assurance* (X4), *Empathy* (X5) contributing 89,7% on consumer loyalty (Y). While reminding 10,3 % explained by other factors which is excluded in analysis equality.

Determination Coefficient Total (R_m²)

$$R^2_m = 1 - P^2_{e1} \times P^2_{e2}$$

$$P^2_{e1} = \sqrt{1 - R^2_1}$$

$$P^2_{e1} = \sqrt{1 - 0,816} = 0,428952$$

$$P^2_{e2} = \sqrt{1 - 0,897} = 0,320936$$

$$R^2_m = 1 - (0,428952 \times 0,320936) = 0,862334 \text{ (86,23 \%)}$$

On Determination Coefficient Total explained that R square total (R_m) is 0,862334 or 86,23% means information in data 86,23% be able to describe by model, whereas the rest 13,77% explained by other factors which are excluded in analysis equality.

Direct Effect Between Tangibles (X1) Reliability (X2) Responsiveness (X3) Assurance (X4) Empathy (X5) Consumer Satisfaction (Z) To Consumer Loyalty (Y) At Franchised Pharmacy.

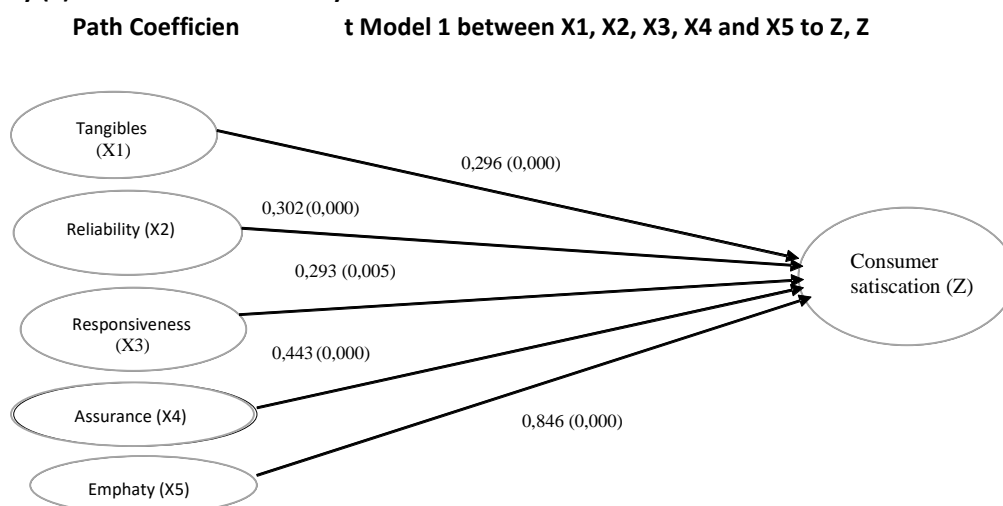


Figure 2. Path Coefficient Model 1

Based on Picture 2 shows that Tangibles (X1), *Reliability* (X2), *Responsiveness*, *Assurance* (X4), *Empathy* (X5) have positive effect and significant to consumer satisfaction (Z). It is showed by significance score for every independent variable is smaller than significant level that expected that is 0,05. In line with research by Kitapci *et al.*, (2014) shows that Tangibles, *Reliability*, *Responsiveness*, *Assurance*, *Empathy* dimension from service quality that reflected from attention and understanding that given to the consumer make positive effect to patient satisfaction in healthcare industry in Turkey.

Direct effect between Tangibles (X1) Reliability (X2) Responsiveness (X3) Assurance (X4) Empathy (X5) Consumer Satisfaction (Z) to consumer loyalty (Y) at Franchised Pharmacy

According to picture 3 explains that Tangibles (X1), *Reliability* (X2), *Assurance* (X4), *Empathy* (X5) have positive effect and significant to consumer loyalty (Y), as long as research Ahmad *et al.*, (2017) that direct effect on every service quality dimension that are Tangibles, *Reliability*, *Responsiveness*, *Assurance*, *Empathy* to consumer loyalty. But *Responsiveness* (X3) has no effect to consumer loyalty (Y). This result showed by significance score 0,588 is bigger than significant level that is 0,05, based on Shi *et al.*, (2014) explains that *Responsiveness* dimension do not contribute to consumer loyalty.

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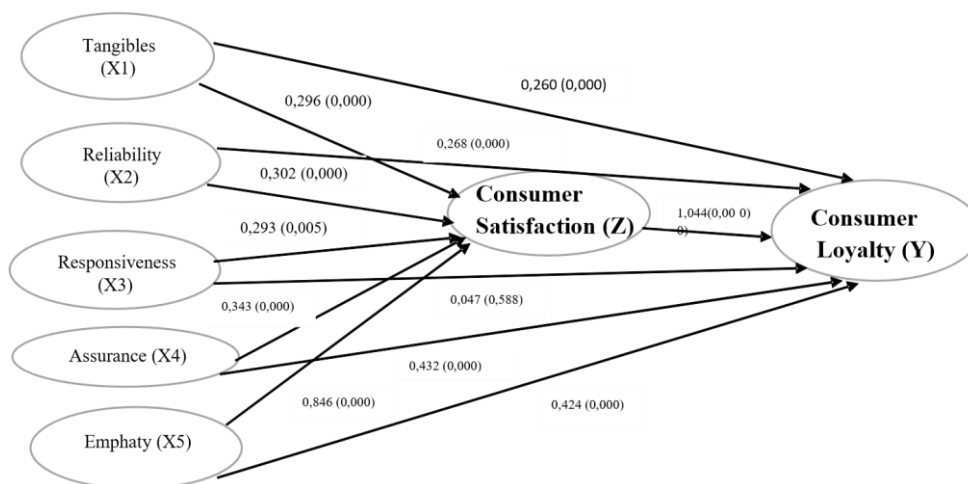


Figure 3. Path Coefficient Model 2

Indirect effect between Tangibles (X1) Reliability (X2) Responsiveness (X3) Assurance (X4) Empathy (X5) to consumer satisfaction (Y) as intervening variable to consumer loyalty

Table 4. Direct effect of Path Coefficient and Indirect effect of Path Coefficient

variable	Direct effect coefficient	Indirect effect coefficient
Tangibles	0,260	0,30902
Reliability	0,268	0,31528
Responsiveness	0,047	0,30589
Assurance	0,432	0,46249
Empathy	0,424	0,88322

Based on table 4 known that indirect effect of path coefficient tangibles variable is 0.30902 is bigger that direct effect of path coefficient that is 0,260, as well as Reliability, Responsiveness, Assurance and Empathy each score is 0.31528, 0.30589, 0.46249, 0.88322. It shows that indirect effect of path coefficient is bigger than direct effect of path coefficient so consumer satisfaction (Z) can become intervening variable. Furthermore, to know what is the relation through mediation variable significantly obtain as mediator so it can use Sobel test.

In this study, indirect effect is calculated by using Sobel Online test so the following result are obtained:

1. The significance of indirect effect of tangibles variable (X1) through consumer satisfaction (Z) towards consumer loyalty (Y) obtained result P – Value= 0,0005. Based on the result of Sobel test obtained significance of 0,0005 < 0,05 (significance used), indirect effect coefficient is 0,30902, it showed that tangibles variable (X1) has positive and significant effect towards consumer loyalty through consumer satisfaction (Z) as intervening variable.
2. The significance of indirect effect of reliability variable (X2) through consumer satisfaction (Z) towards consumer loyalty (Y) obtained result P – Value= 0,0005. Based on the result of Sobel test obtained significance of 0,0005 < 0,05 (significance used), indirect effect coefficient is 0,31528, it showed that reliability variable (X2) has positive and significant effect towards consumer loyalty through consumer satisfaction (Z) as intervening variable.
3. The significance of indirect effect of responsiveness variable (X3) through consumer satisfaction (Z) towards consumer loyalty (Y) obtained result P – Value= 0,00549. Based on the result of Sobel test obtained significance of 0,00549 < 0,05 (significance used), indirect effect coefficient is 0,30589, it explained that responsiveness variable (X3) has positive and significant effect towards consumer loyalty through consumer satisfaction (Z) as intervening variable.
4. The significance of indirect effect of assurance variable (X4) through consumer satisfaction (Z) towards consumer loyalty (Y) obtained result P – Value= 0,000636. Based on the result of Sobel test obtained significance of 0,0006365 < 0,05

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(significance used), indirect effect coefficient is 0,46249, it showed that responsiveness variable (X4) has positive and significant effect towards consumer loyalty through consumer satisfaction (Z) as intervening variable.

5. The significance of indirect effect of *empathy* variable (X5) through consumer satisfaction (Z) towards consumer loyalty (Y) obtained result $P - Value = 0,000675$. Based on the result of Sobel test obtained significance of $0,000675 < 0,05$ (significance used), indirect effect coefficient is 0,88322, it showed that *empathy* variable (X1) has positive and significant effect towards consumer loyalty through consumer satisfaction (Z) as intervening variable.

V. CONCLUSIONS

Based on the results of research and analysis, it can be concluded that Tangibles, Reliability, Responsiveness, Assurance, Empathy have positive and significant influence on consumer satisfaction. Tangibles, Reliability, Assurance, Empathy and consumer satisfaction have a significant and positive influence on consumer loyalty, but Responsiveness does not have an influence on consumer loyalty. Those Tangibles, Reliability, Responsiveness, Assurance, Empathy have a positive and significant influence on consumer loyalty pass through the variable consumer satisfaction as an intervening variable.

VI. RESEARCH LIMITATIONS

In this study, the subject of research that used a limited number of 200 respondents, so that it cannot be generalized to a large number of subject groups. If using the same questionnaire instrument, it is expected to take a sample according to the number of questions multiplied by five for minimum sample and multiplied by ten for the maximum sample. The concept was exerted in this study only using variables that were estimated possessing a correlation with the dependent variable, so that they are possible still exiting other variables which relating to independent variable. It is expected that further research could increase other variables that have not been included in the model. The field of this study is only in the scope of franchised pharmacies in the City of Surabaya using ten samples of them.

REFERENCES

- 1) H. M. Musa, C. Hayes, M. J. Bradley, A. Clayson, and G. Gillibrand, "Measures Aimed at Reducing Plastic Carrier Bag Use: A Consumer Behaviour Focused Study," *Nat. Environ.*, vol. 1, no. 1, p. 17, 2013, doi: 10.12966/ne.06.02.2013.
- 2) S. J. Chan, "A Model Linking Store Attributes, Service Quality, Customer Experience and Business Performance: a Study Among Community Pharmacies," vol. 10, no. March, pp. 321–342, 2015.
- 3) A. Puni, A. Okoe, and J. B. Damnyag, "A Gap Analysis of Customer Perceptions and Expectation of Service Quality amongst Mobile Telephony Companies in Ghana," *J. Manag. Strateg.*, vol. 5, no. 3, 2014, doi: 10.5430/jms.v5n3p60.
- 4) U. Ramanathan, N. Subramanian, and G. Parrott, "Role of social media in retail network operations and marketing to enhance customer satisfaction," *Int. J. Oper. Prod. Manag.*, vol. 37, no. 1, pp. 105–123, 2017, doi: 10.1108/IJOPM-032015-0153.
- 5) S. Nyeck, R. Ladhari, M. Morales, and F. Pons, "10 Years of Service Quality Measurement: Reviewing the Use of the Servqual Instrument," *Esan - Cuad. Difusión*, no. 1988, pp. 101–107, 2002.
- 6) M. V. Ngo and H. H. Nguyen, "The Relationship between Service Quality, Customer Satisfaction and Customer Loyalty: An Investigation in Vietnamese Retail Banking Sector," *J. Compet.*, vol. 8, no. 2, pp. 103–116, 2016, doi: 10.7441/joc.2016.02.08.
- 7) J. Hamari, N. Hanner, and J. Koivisto, "Service quality explains why people use freemium services but not if they go premium: An empirical study in free-to-play games," *Int. J. Inf. Manage.*, vol. 37, no. 1, pp. 1449–1459, 2017, doi: 10.1016/j.ijinfomgt.2016.09.004.
- 8) E. Arikan and S. Güner, "The Impact of Corporate Social Responsibility, Service Quality and Customer-company Identification on Customers," *Procedia - Soc. Behav. Sci.*, vol. 99, pp. 304–313, 2013, doi: 10.1016/j.sbspro.2013.10.498.
- 9) E. E. Izogo and I. E. Ogba, "Service quality, customer satisfaction and loyalty in automobile repair services sector," *Int. J. Qual. Reliab. Manag.*, vol. 32, no. 3, pp. 250–269, 2015, doi: 10.1108/IJQRM-05-2013-0075.
- 10) M. Aga and O. V. Safakli, "An empirical investigation of service quality and customer satisfaction in professional accounting firms: Evidence from North Cyprus," *Probl. Perspect. Manag.*, vol. 5, no. 3, pp. 84–98, 2007.
- 11) R. W. Y. Yee, A. C. L. Yeung, and T. C. Edwin Cheng, "An empirical study of employee loyalty, service quality and firm performance in the service industry," *Int. J. Prod. Econ.*, vol. 124, no. 1, pp. 109–120, 2010, doi: 10.1016/j.ijpe.2009.10.015.
- 12) F. A. Rasheed and M. F. Abadi, "Impact of Service Quality, Trust and Perceived Value on Customer Loyalty in Malaysia Services Industries," *Procedia - Soc. Behav. Sci.*, vol. 164, no. August, pp. 298–304, 2014,

Determinants of Consumer Loyalty with the Servqual Model at Franchised Pharmacies in the City of Surabaya

doi: 10.1016/j.sbspro.2014.11.080.

- 13) C. T. Liu, Y. M. Guo, and C. H. Lee, "The effects of relationship quality and switching barriers on customer loyalty," *Int. J. Inf. Manage.*, vol. 31, no. 1, pp. 71–79, 2011, doi: 10.1016/j.ijinfomgt.2010.05.008.
- 14) Y. Shi, C. Prentice, and W. He, "Linking service quality, customer satisfaction and loyalty in casinos, does membership matter?," *Int. J. Hosp. Manag.*, vol. 40, pp. 81–91, 2014, doi: 10.1016/j.ijhm.2014.03.013.
- 15) T. N. Quach, P. Thaichon, and C. Jebarajakirthy, "Internet service providers' service quality and its effect on customer loyalty of different usage patterns," *J. Retail. Consum. Serv.*, vol. 29, pp. 104–113, 2016, doi: 10.1016/j.jretconser.2015.11.012.

Effect of e-Service Quality on e-Trust and e-Satisfaction: A Study on Online Learning during the Covid-19 Pandemic



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ABSTRACT: Online learning was applied during the COVID-19 pandemic in almost all universities in Indonesia. Online learning needs to be evaluated for its effectiveness, especially regarding the responses from students. This study examines the effect of e-Service Quality on e-Trust and e-Satisfaction during the covid-19 pandemic. The study was conducted on 1,212 students who have participated in online learning by distributing online questionnaires. The analytical tools used are SPSS and WarpPLS. The results of this study indicate that e-service quality has a significant positive effect on e-trust, e-service quality has a significant positive effect on e-satisfaction, and e-trust has a significant positive effect on e-satisfaction.

KEYWORDS: e-Service Quality, e-Trust, e-Satisfaction, Covid-19 pandemic

I. INTRODUCTION

Online learning has become a reliable method during the COVID-19 pandemic in universities. This is because face-to-face learning cannot be carried out due to restrictions on direct interaction during the pandemic. The Minister of Education and Culture of the Republic of Indonesia has determined online learning to prevent the spread of Corona Virus Disease (Covid-19). Since March 2020 all state universities in Indonesia have held online lectures as a substitute for face-to-face lectures.

Online learning is still relatively new to be applied massively at all levels of education so that the effectiveness of learning needs attention. Research that examines the effect of the quality of online learning on student satisfaction is still relatively minimal. Students as online learning participants are in a position that is vulnerable to loss, so a study of trust is very important to do. Online learning should not harm students so that students feel satisfied with the quality of online learning. This study examines student satisfaction as college customers. Research on the effect of online learning quality on trust and satisfaction is still very limited. This research is needed to evaluate the role of e-service quality in online learning in creating trust and student satisfaction.

II. LITERATURE REVIEW

E-Service Quality

Online learning has encouraged universities to provide excellent e-service quality to students. E-service quality is a development of service quality in general. E-service quality was developed to evaluate a service provided on the Internet network. Rowley (2006) describes E-service quality as an interactive information service. E-service quality provides a mechanism for companies to differentiate their service offerings and develop their competitive advantages (Santos, 2003). Chase et al. (2006) reveal e-service quality as an extension of the ability of a site to facilitate shopping, purchasing, and distribution activities effectively and efficiently. Electronic service quality is the extent to which a website facilitates efficient and effective shopping, purchasing and delivery (Zeithaml et al., 2002). Thus, the authors define e-service quality in the context of online learning as the ability of an online learning method to facilitate learning activities.

According to Wolfinbarger & Gilly (2003), there are still differences in determining the dimensions of e-service quality. Neuner & De Landtsheer (2005) and Toots (2006) offer four antecedent constructs of e-service quality, namely content, interactivity, ease of use and aesthetics. Meanwhile Ho and Lee (2007) revealed 5 dimensions of e-service quality measurement, namely: information quality, security, website functionality, customer relationship, and responsiveness. Ladhari (2010) proposes six dimensions of e-service quality which include reliability, responsiveness, privacy/security, usefulness/quality of information, and ease of use/usability. Parasuraman et al. (2005) and Luo and Lee (2011) measure e-service quality with dimensions of

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efficiency, system availability, promise fulfillment, and privacy. Vlachos et al. (2011) proposed seven antecedents of e-service quality including ease of use, usability, aesthetics, content, privacy, customization and customer service.

E-Trust

Trust has a long-term impact on the relationship between customers and service providers. Long-term relationships are determined by the extent to which customers are always satisfied and customers do not feel disadvantaged. Thus, trust is an important element in maintaining the sustainability of a service. Customer trust is defined as customers feel confident that service providers can be trusted and relied on to fulfill their promises effectively (Ganesan, 1994). Gefen, Karahanna, & Straub (2003) define trust in the online environment as a distinct set of beliefs in one's integrity, virtue, and abilities. Trust was a willingness to be vulnerable to another party based on a separate set of trustworthiness beliefs in ability, benevolence, and integrity (Mayer & Davis, 1999). Generally, e-trust depends on assurance of security, reputation, web search, compliance (e.g., willingness to customize), presentation (e.g., web quality), technology, and interactions such as e-forums (McKinney, Yoon, & Zahedi, 2002). Singh & Sirdeshmukh (2000) stated that the interests of customers are one of the building blocks of trust. Someone will believe in a service if the service product is consistently able to meet their needs.

E-Satisfaction

Referring to disconfirmation theory, e-satisfaction occurs when an online product or service exceeds consumer expectations. E-satisfaction is represented as customer satisfaction that comes from previous purchases with certain electronic services (Ong, et al., 2014). In the context of online shopping, e-satisfaction as customer satisfaction with online shopping which consists of happiness in the buying process and user appreciation in using information technology (Tang and Huang, 2015). Anderson and Srinivasan (2003) describe e-satisfaction as customer satisfaction that comes from previous real purchasing experiences with a particular e-commerce company. In the context of online learning, e-satisfaction is defined as the level of feeling of users of online learning services after comparing expectations and performance of online learning.

Relationship between e-Service Quality and e-Trust

McKinney, Yoon, & Zahedi (2002) have revealed that e-trust depends on e-Service Quality which includes security assurance, reputation, web search, compliance (e.g., willingness to customize), presentation (e.g., web quality), technology, and interactions such as e-forums. e-Service Quality fosters trust for users regarding the ability of online learning as an effective learning method, provides benefits for students and students feel confident that they will not feel disadvantaged while participating in online learning. Thus, the hypothesis can be determined as follows:

H1. e-service quality has a significant effect on e-trust.

Relationship between e-Service Quality and e-Satisfaction

E-service quality encourages e-satisfaction (Zhu & Lin, 2010). Eid (2011) asserts that online customer satisfaction is determined by the performance of the website and the products provided by the website. Zha & Wang (2006) revealed that the dimensions of e-service quality as a predictor of online consumer satisfaction. Many studies have found a relationship between e-service quality and online customer satisfaction (Yang & Tsai, 2007; Zhang & Prybutok, 2005). E-service quality is predicted to determine the level of e-satisfaction of students participating in online learning. Thus, the hypothesis can be determined as follows:

H2. e-service quality has a significant effect on e-satisfaction.

Relationship between e-Satisfaction Quality and e-Trust

E-Trust is predicted to have a positive effect on e-satisfaction. This is supported by previous studies which revealed that e-trust is a strong predictor of e-satisfaction (Hidayat & Anasis, 2018). When students feel confident in the ability of online learning as a learning method and do not feel disadvantaged, students feel satisfied. hypothesis can be formulated as follows:

H3. e-trust has a significant effect on e-satisfaction.

III. RESEARCH METHOD

This explanatory research aims to examine and explain the causal relationship between e-service quality, e-trust, and e-satisfaction in the context of online learning. Measurement of e-service quality refers to Vlachos et al. (2011). The measurement of e-trust is in accordance with the opinion of Doney & Cannon (1998), Giffin (1967), Luhmann (1988), and Mayer & Davis (1999). Meanwhile the measurement of e-satisfaction refers to Ting et al. (2016). A quantitative approach is used in analyzing this research (Kerlinger, 2003). Questionnaires were distributed online to 2000 students at the Yogyakarta Veterans National Development University who were actively participating in online lectures. The number of respondents who filled out the questionnaire were 1,212 students. The measurement scale used in this study is attitude scales. The type of scale used is a Likert

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scale graded between a score of 1-5 (1=strongly disagree to 5=strongly agree). The analytical tool used to test the instrument is SPSS, while the analytical tool used to test the effect between variables is WarpPLS.

IV. RESULT AND DISCUSSION

Table 1 shows the results of instrument testing on 100 students using SPSS. The test results show that all indicators have a correlation coefficient of 0.30 and Cronbach's Alpha 0.6). Thus, this research instrument is declared valid (Sekaran, 2011) and reliable (Malhotra, 2010).

Table 1: Result of instrument validity test

Variable	Indicator	Correlation Coefficient	Cronbach's α
e-Service quality	Easy to use	0.664	0.721
	Benefits	0.677	
	Aesthetics	0.540	
	Content	0.559	
	Privacy	0.662	
	Customization	0.735	
	Customer service	0.793	
e-Trust	Ability	0.777	0.762
	Credibility	0.759	
	Benevolence	0.732	
	Don't feel harmed	0.779	
e-Satisfaction	Interesting experience	0.771	0.886
	Enjoy online learning	0.788	
	Performance as expected	0.844	

Table 2. Characteristics of the sample (% of respondents, n = 1.212)

Gender	Male	50.66
	Female	49.34
Online learning experience	Yes	77.06
	No	22.94
Network used	Wi-Fi	35.31
	Connection from smart phone	42.24
	Other	22.45

Profile of Respondents

Table 2 shows that the number of male and female students is comparable, however, the number of male students is dominant. Most of the respondents had experience (77.06%) in taking online lectures before the covid-19 pandemic. The majority of respondents use a connection from a smart phone as the first choice (42.24%). Furthermore, the use of wifi is 35.31% and using other networks is 22.45%.

Final Structural Model

Measurement of model fit and quality indices refers to the WarpPLS analysis tool (Kock, 2015). The measurement results show the followings. Average Path Coefficient (APC) was 0.886, $p < 0.001$; average R-squared (ARS) was 1.323, $p < 0.001$; average adjusted R-square (AARS) was 1.326, $p < 0.001$; average block VIF (AVIF) was 4.429, acceptable if ≤ 5 ; average full collinearity VIF (AFVIF) was 4.427, acceptable if ≤ 5 ; Tenenhaus GoF (GoF) was 0.833, acceptable if ≥ 0.36 ; Sympson's Paradox Ratio (SPR) was 1,000, acceptable if ≥ 0.7 ; Statistical Suppression Ratio (SSR) was 1,000, acceptable if ≥ 0.7 ; Nonlinear Bivariate Causality Direction Ratio (NLBCDR) was 0.782, acceptable if ≥ 0.7 . These results indicate that the model is supported by good data and has quality indicators that meet the requirements in the WarpPLS.

Table 3. Hypothesis testing results

Relations between variables		Coefficient	p-value	Description	Hypothesis Decision
e-Service Quality	e-Trust	0.642	< 0.000	Significant	Accepted
e-Service Quality	e-Satisfaction	0.702	< 0.000	Significant	Accepted
e-Satisfaction	e-Trust	0.773	< 0.000	Significant	Accepted

Hypothesis Testing

Hypothesis 1 states that e-Service Quality influences e-Trust. The results (Table 3) show that *p* value is <0.000, so hypothesis is accepted. Positive coefficients indicate that e-Service Quality has a significant positive effect on e-Trust.

Hypothesis 2 states that e-Service Quality influences e-Satisfaction. The results (Table 3) show that *p* value is <0.000, so hypothesis is accepted. Positive coefficients indicate that e-Service Quality has a significant positive effect on e-Satisfaction.

Hypothesis 3 states that e-Trust influences e-Satisfaction. The results (Table 3) show that *p* value is <0.000, so hypothesis is accepted. Positive coefficients indicate that e-Trust has a significant positive effect on e-Satisfaction.

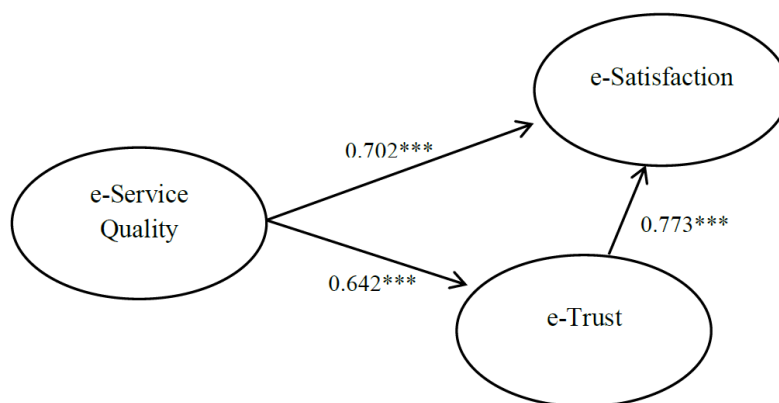


Figure 1. Final Model

DISCUSSION

The results of this study found that e-service quality has a significant positive effect on e-trust. This finding is consistent with McKinney, Yoon, & Zahedi (2002) have revealed that e-trust depends on e-Service Quality. Ease of use, usability, aesthetics, online learning media content, privacy, customization, and customer service form e-trust. Students feel confident that online learning has good abilities as a learning method, has good credibility, makes learning easier during a pandemic, and does not harm the interests of students.

The results of this study found that e-service quality had a significant positive effect on e-satisfaction. This finding is consistent with the results of Eid (2011) which states that online customer satisfaction is determined by the performance of the website and the products provided by the website. These results also support research by Zhu and Lin (2010) that e-service quality encourages e-satisfaction. In the context of online buying, the results of this study are also in line with previous research. e-service quality and e-satisfaction have a strong positive relationship with online shoppers on B2C sites (Yang and Tsai, 2007; Zhang and Prybutok, 2005). Zha and Wang (2006) asserted that the dimensions of e-service quality can be used to predict online consumer satisfaction.

The findings of this study indicate that e-trust has a significant positive effect on e-satisfaction. These results support previous studies which found that e-trust is a strong predictor of e-satisfaction (Hidayat & Anasis, 2018). Student confidence in online learning creates student satisfaction. Students get interesting experiences and enjoy online learning. In addition, students feel that online learning performance builds feelings of pleasure in students.

The results of this study are useful for universities in implementing technology-based online learning methods. Students want applications that are easy to use, have high usability, have a high level of aesthetics, complete content, well maintained privacy, can be adapted to user needs, and have fast and accurate services. These aspects are indicators of e-service quality that must be met by universities. The quality of online learning applications that are in accordance with the wishes of students gives high trust and satisfaction to students. Students as college customers do not mind if online learning is forced to do when offline learning is not possible.

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The limitation of this research lies in the scope of the research. This research is still being carried out in the Yogyakarta area, Indonesia so that further research is recommended to expand the scope of research by involving universities in other areas. In addition, the e-learning applications used in each university are also different (google meet, zoom, webex, etc.) so that further researchers can examine more deeply the relationship between e-learning applications and learning performance. This research is a cross sectional study conducted at the beginning of the Covid-19 pandemic, so a longitudinal study is needed to compare the results of research at different times.

V. CONCLUSION

The main findings of this study indicate that there is a significant effect of e-service quality on online learning on e-trust and e-satisfaction. E-trust has also been shown to have a significant positive effect on e-satisfaction. The results of this study contribute to improving the quality of online learning through e-service quality. Universities need to design online services in learning to increase student trust and satisfaction as future customers.

REFERENCES

- 1) Anderson, R.E., and Srinivasan, S.S. 2003. E-satisfaction and e-loyalty: A contingency framework. *Psychology and Marketing*, 20(2), 123-138.
- 2) Chase, R. B. Jacobs, F. R. and Aquilano, N.J. 2006. *Operation Management for Competitive Advantage*, 9th. New York: McGraw-Hill
- 3) Doney, P. M., Cannon, J. P., and Mullen, M. R. 1998. Understanding the Influence of National Culture on the Development of Trust, *Academy of Management Review* (23:3), 1998, pp. 601- 620.
- 4) Ganesan, S., 1994. Determinants of Longterm Orientation in Buyer-Seller Relationship. *Journal of Marketing*, 1994. 58: p. 1-19.
- 5) Gefen, D., Karahanna, E., Straub, D.W. 2003. Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, Vol. 27, No. 1 (Mar., 2003), pp. 51-90
- 6) Giffin, K. 1967. The Contribution of Studies of Source Credibility to a Theory of Interpersonal Trust in the Communication Process, *Psychological Bulletin* (68:2), 1967, pp. 104-120.
- 7) Hidayat, R., Anasis, N.S. 2018. Analysis of E-Service Quality on Website E-Commerce on E-Customer Satisfaction. *Advances in Social Science, Education and Humanities Research*, volume 298 Proceedings of the First International Conference on Applied Science and Technology (iCAST 2018)
- 8) Ho, C.I. & Lee, Y.L. 2007. The development of an e-travel service quality scale. *Tourism Management*, 28(6), 1434–1449
- 9) Kerlinger, F.N. 2003. *Asas-asas Penelitian Behavioral (3th ed)*. Yogyakarta: Gadjah Mada University Press
- 10) Ladhari, Riadh. 2010. Developing e-service quality scales: A literature review. *Journal of Retailing and Customer Services* 17 pp. 464 – 477
- 11) Luhmann, N. 1988. *Familiarity, Confidence, Trust: Problems and Alternatives in Trust*, D. G. Gambetta (ed.), Basil Blackwell, New York, 1988, pp. 94-107
- 12) Luo, Shu-Fang, dan Lee, Tzai-Zang. 2011. The Influence of Trust And Usefulness on Customer Perceptions of E-Service Quality, *Social Behavior and Personality*, 2011, 39(6), 825-838
- 13) Mayer, R.C., and Davis, J.H. 1999. The Effect of the Performance Appraisal System on Trust in Management: A Field Quasi-Experiment, *Journal of Applied Psychology* (84:1), 1999, pp. 123-136.
- 14) McKinney, V., Yoon, K., Zahedi, F.M. 2002. The Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach. *Information Systems Research* Vol. 13, No. 3, September 2002, pp. 296–315
- 15) Eid, M.I. 2011. Determinants of E-Commerce Customer Satisfaction, Trust, And Loyalty In Saudi Arabia. *Journal of Electronic Commerce Research*, Vol 12, No 1.
- 16) Neuner, C. and De Landtsheer, C. 2005. Towards a methodology for evaluating the quality of (public) websites, *The IPSI BgDTransactions on Internet Research*, NY, Frankfurt, Tokyo, Belgrade, 1(1), 57–64.
- 17) Ong, T.S., Hong, Y.H., Teh, B.H., Soh, P.C.H., & Tan, C.P. 2014. Factors that affect the adoption of internet banking in Malaysia. *International Business Management*, 8(2), 55-63.
- 18) Parasuraman, A., Zeithaml, V. A., & Malhotra, A. 2005. ES-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-233.

Effect of e-Service Quality on e-Trust and e-Satisfaction: A Study on Online Learning during the Covid-19 Pandemic

- 19) Rowley, J. 2006, An analysis of the e-service literature: towards a research agenda, *Internet Research*, Vol. 16 No. 3, pp. 339-359.
- 20) Santos, J. 2003. E-service quality: a model of virtual service quality dimensions. *Managing Service Quality: An International Journal*, Vol. 13 No. 3, pp. 233-246.
- 21) Singh, J., Sirdeshmukh, D. 2000. Agency and trust mechanisms in consumer satisfaction and loyalty judgments. *J. of the Acad. Mark. Sci.* 28, 150–167
- 22) Tang, T.W., and Huang, R.T. 2015. The Relationships among Trust, E-Satisfaction, E-Loyalty, and Customer Online Behaviors. *International Journal of Business and Industrial Marketing*. 1(2) pp.16-25
- 23) Ting, Ong Soo., Ariff, Mohd Shoki Md., Zakuan, Norhayati., Sulaiman, Zuraidah, & Saman, Muhamad Zameri Mat. 2016. E-Service Quality, E-Satisfaction and E-Loyalty of Online Shoppers in Business to Consumer Market; Evidence form Malaysia, *IOP Conf. Series: Materials Science and Engineering* 131
- 24) Toots, A. 2006. Explaining Internet service quality in social security agencies using institutional theory, *Information Polity* 11 (2006) 273–282 273, IOS Press
- 25) Vlachos, P.A., Giaglis, G., Lee, Inseong & Vrechopoulos, Adam, P. 2011. Perceived Electronic Service Quality: Some Preliminary Results From a Cross-National Study in Mobile Internet Services, *Intl. Journal of Human–Computer Interaction*, 27 (3), 217–244, 2011
- 26) Wolfinbarger, M., & Gilly, M. C. 2003. eTailQ: Dimensionalizing, measuring, and predicting etail quality. *Journal of Retailing*, 79, 183–198.
- 27) Yang Hao-erl and Tsai Feng-Shii. 2007. General E-S-QUAL Scales Applied To Websites Satisfaction and Loyalty Model. *Communications of the IIMA*. Volume 7 Issue 2
- 28) Zeithaml, V. A., Parasuraman, A., & Malhotra, A. 2002. Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30, 362–375.
- 29) Zha J., Ju F. and Wang L. 2006. Customer Satisfaction in E-commerce: an Exploration of its Antecedents and Consequences, *International Conference on Management of Innovation and Technology*, pp.540-544.
- 30) Zhang, X., & Prybutok, V.R. 2005. A consumer perspective of e-service quality. *Journal of Marketing*, 52, 461–477.
- 31) Zhu, Jerome Dauw-Song & Lin, Chih-Te. 2010. The antecedents and consequences of e-service quality for online banking, *Social Behavior and Personality*, 2011, 39 (6), 825-838

Financial Analysis of Business Feasibility and Maggot Black Souldier Fly Cultivation Development Strategy



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ABSTRACT: This study aims to analyze financial feasibility and develop strategies for developing Black Souldier Fly (BSF) maggot cultivation business. The research location in Omah Maggot Warna Warni, which is located in the village of Puntir Martopuro, Purwosari Pasuruan, was chosen with the consideration of having good prospects for BSF maggot cultivation. Respondents include 4 resource persons who are directly involved in maggot cultivation. The analysis used is a quantitative financial analysis by calculating the value (Net B/C, NPV, IRR, and Payback Period and BEP) with a discount factor (DF) of 11 percent. Sensitivity analysis was used to determine the sensitivity of BSF maggot cultivation to a decrease in production which was conditioned by a 10% to 40% decrease in production. Descriptive analysis with SWOT analysis is used to find strategies for developing Maggot Cultivation Business. The results showed that maggot cultivation was profitable to cultivate. This business is feasible because the NPV and Net B/C values are greater than 1, and the IRR value is higher than the interest rate. Based on the SWOT analysis, it shows that the position of the internal-external matrix of the Omah Maggot Warna Warni maggot cultivation business is in quadrant II or the growth and development strategy with the IFAS factor value of 2.39 and EFAS 3.03. This phase shows that the colorful Omah Maggot maggot cultivation business is undergoing a growth stage and must be developed because it has great potential to develop. The priority of the BSF maggot cultivation development strategy is to improve the quality of maggots, expand network marketing, and increase the use of cultivation technology and collaborate with the local government for the development of the Colorful Omah Maggot maggot cultivation business.

KEYWORDS: Black Souldier Fly, Financial feasibility, SWOT

I. INTRODUCTION

The corona pandemic has an impact on the weakening of the rupiah and the supply of feed raw materials, especially feed additives, is hampered. Increased logistics costs have an impact on adjusted feed prices. The livestock industry players, especially the poultry industry, such as feed mills, have also felt the impact. The need for fish feed for aquaculture production is still very dependent on factory production, most of which raw materials must be imported. The fish feed is sold by the factory at a high price to cover production costs. For small-scale fish farmers, the price of the manufacturer's feed is very burdensome for their production costs. For this reason, the development of independent fish feed using alternative raw materials continues to be encouraged, to be produced in many areas throughout Indonesia. Therefore, feed studies that are currently developing are aimed at finding alternative protein sources by utilizing insects. The use of insects as a protein source has been widely discussed by researchers around the world [1]. According to [2], protein sourced from insects plays an important role in naturally having economic value and being environmentally friendly. Insects are reported to have high feed conversion efficiency and can be reared and mass produced. Insect cultivation is known to reduce organic waste that can pollute the environment. Another advantage is that insect-based protein sources do not compete with humans so they are very suitable for use as animal feed ingredients, including poultry and fish [3]. One of the potential alternative raw materials is maggot which comes from insects that eat organic waste. The ability of the insect called Black Soldier Fly (BSF) is very unique because it can break down waste and produce high protein for fish feed needs. The advantages of maggot cultivation include maggot production technology that can be done easily by the community, and maggot can also be processed into maggot flour (mag meal) so as to reduce feed production costs. The infrastructure used in maggot cultivation is relatively simple, and maggot is able to degrade organic waste into other nutritional materials. Feed raw materials, insect-based products must also be safe from chemical contaminants.

II. REVIEW LITERATUR

Maggot is an organism derived from the Black Soldier Fly (BSF) egg, in the second phase of metamorphosis after the egg phase and before the pupa phase which will later become an adult BSF [4]. Maggot is able to live in tropical and sub-tropical climates so that these non-pest insects have the potential to be developed in Indonesia. As a non-pest insect, the ability of maggot larvae instars to decompose organic waste can be integrated into agriculture and animal husbandry. The life cycle of the *Hermetia illucens* fly has five stages. The five stages are the adult phase, the egg phase, the prepupa phase, and the pupal phase. Of the five stages, the prepupa stage is often used as fish food [5]. A normal BSF female fly is able to produce eggs ranging from 185-1235 eggs [6].

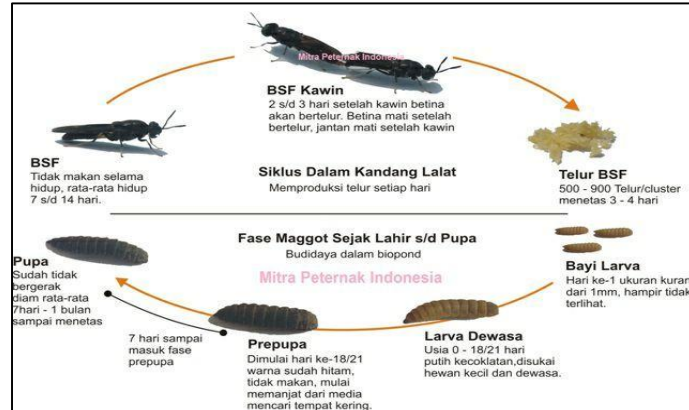


Figure 1. BSF life cycle.

A female takes 20-30 minutes to lay eggs with the number of egg production between 546-1,505 eggs in the form of egg mass [7]. Egg mass weight ranged from 15.8-19.8 mg with individual egg weight between 0.026-0.030 mg. The peak time for laying eggs is reported to be around 14.00-15.00. Female flies are reported to lay eggs only once during their lifetime, after which the female flies die [7]. Within two to four days, the eggs will hatch into first instar larvae and develop up to the sixth instar within 22-24 days with an average of 18 days [8].

III. RESEARCH METHODS

This research was conducted in August 2021 at Omah Magot Warna Warni, which is a BSF maggot cultivation site owned by Mr. Kholis Akbar, located in the village of Puntir Martopuro, Purwosari, Pasuruan, East Java. Data collection is with primary and secondary data. The data analysis method, the first objective, was analyzed quantitatively using financial analysis with a business economic life of 3 years because it is the economic age of the maggot cultivation business [9]. Regional bank interest rates based on data from Bank Indonesia, the bank interest rate used as a reference is the loan interest rate for KUR of 11 percent. According to [10], the tools used to analyze business finances are Gross Benefit Cost Ratio (Gross B/C), Net Benefit Cost Ratio (Net B/C Ratio), Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period (PP) and BEP. The analysis used to answer the second objective is sensitivity analysis which is conditioned to a 10% to 40% decrease in production. For the third purpose, qualitative data was used which was analyzed using the SWOT analysis method.

IV. RESULT AND DISCUSSION

Omah Magot Warna Warni is a BSF maggot cultivation site owned by Mr. Kholis Akbar, located in the village of Puntir Martopuro, Purwosari, Pasuruan, East Java. The area of cultivation is 650 m² with a total of 30 biopons with a size of 2x3 m and a fly cage with a size of 4 x 3 x 3 m. This cultivation was carried out starting in 2018 as an effort to find alternative feed for catfish when the price of factory feed soared due to the pandemic which forced farmers to look for feed substitutes to survive. Mr. Kholis Akbar was previously a catfish breeder with tarpaulin ponds with a total of 8 ponds with a diameter of 3 m containing 10 thousand seeds per pond.

A. Receipt Flow (Inflow)

The revenue stream for BSF maggot cultivation obtained by Omah Maggot Warna Warni occurred in the 1st year. Business revenue comes from the sale of egg phase maggot which is intended for seedlings and larval phase which is used for a mixture of fish feed and animal feed.

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Table 1. Production and Sales Value of BSF Eggs in Grams.

Year	Total BSF egg production (grams)	Price per kilogram (Rp)	Sales value (Rp)
1	5490	5000	27.450.000
2	8100	5000	40.500.000
3	10800	5000	54.000.000
Total	24390		121.950.000

Source: primary data processed, 2021

Table 2. Production and Sales Value of BSF Maggot in Kilograms

Year	Total BSF egg production (grams)	Price per kilogram (Rp)	Sales value (Rp)
1	9250	7000	64.750.000
2	13500	7000	94.500.000
3	13200	7000	92.400.000
Total	35950		251.650.000

Source: primary data processed, 2021

B. Flow Expenditure (Outflow)

Outflow is the cost incurred or the flow of expenses used to finance the business being carried out or the business being run. In the BSF maggot cultivation business, the outflow includes investment costs, fixed costs and variable costs. The flow of costs or expenses reflects the expenses that occur during the life of the project.

C. Investment Fee

Table 3. Details of investment costs in maggot cultivation in Omah Maggot Warna Warni.

No	Type	Volume	Unit	Price	Total price
1	Building	1	unit	Rp 50.000.000	Rp 50.000.000
2	fly cage	4	unit	Rp 250.000	Rp 1.000.000
3	Seeds			Rp 1.000.000	Rp 1.000.000
4	Biopond	8	unit	Rp 187.500	Rp 1.500.000
5	Hatchery	10	unit	Rp 20.000	Rp 200.000
6	Stacking wood	10	unit	Rp 20.000	Rp 200.000
7	Light	5	unit	Rp 20.000	Rp 100.000
8	Electricity	1	unit	Rp 1.500.000	Rp 1.500.000
9	Water pump	1	unit	Rp 2.000.000	Rp 2.000.000
10	pellet machine	1	unit	Rp 2.500.000	Rp 2.500.000
11	Well	1	unit	Rp 1.200.000	Rp 1.200.000
12	Motorcycle	1	unit	Rp 14.000.000	Rp 14.000.000
13	Permissions	3	letter	Rp 500.000	Rp 1.500.000
14	Iron rack	5	unit	Rp 300.000	Rp 1.500.000
TOTAL					Rp 78.200.000

Source: primary data processed, 2021

D. Operating Costs

Costs are costs that are incurred periodically as long as the business is carried out. Operational costs consist of fixed costs and variable costs.

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Fixed cost

Table 4. Fixed Costs in BSF Maggot Cultivation Business.

No	Component Name	Cost Per Year
1	Maintenance	Rp 2.400.000
2	BBM	Rp 6.000.000
3	Building Tax / UN	Rp 200.000
4	Electricity cost	Rp 6.000.000
	Total	Rp 14.600.000

Source: primary data processed, 2021

Variable Cost

Table 5. Variable Costs in Maggot.BSF Cultivation Business

No	Component Name	Cost Per Year
1	Feed cost	Rp 1.800.000
2	Hatching component cost	Rp 1.200.000
3	Employee salary	Rp 24.000.000
	Total	Rp 27.000.000

Source: primary data processed, 2021

Financial feasibility analysis is a method to determine the feasibility of maggot cultivation business. Financial feasibility criteria for maggot cultivation include NPV, Net B/C, IRR and Payback Period. The basic assumptions used in this research are:

1. The colorful Omah Maggot maggot cultivation business lasts for 3 years.
2. The capital used is own capital.
3. The land used for cultivation is private property.
4. The applicable interest rate from 2018 to 2021 is 11% based on bank interest rates.
5. Workers in the maggot cultivation business come from outside the family.
6. The initial year of business is in year 0, namely in 2018 breeders only invest and the production process begins in 2018.

The results of the Financial Feasibility Analysis of the Colorful Maggot Omah Maggot Cultivation Business in Pasuruan resulted in the following business feasibility criteria:

Table 6. Feasibility Criteria for Colorful Omah Maggot Business

No	Criteria	Value	Limitation	Description
1	NPV(DF 11%)	Rp 119.819.978	>0	Layak
2	GROS B/C (11%)	1.67	>1	Layak
3	NET B/C (11%)	2.53	>1	Layak
4	IRR	76%	>11%	Layak
5	PP	2 Year 1 Month	< 3 Year	Layak
6	BEP Unit	3.076 Kg		
7	BEP Rupiah	Rp 21.529.974		

Source: primary data processed, 2021

E. The Sensitivity of Maggot Cultivation in Colorful Omah Maggot

Production Decrease 10%

The production of BSF eggs and maggots has been carried out by creating conditions with a decrease in production of 10%, 20%, 30% and 40%. The next stage is to do a financial feasibility analysis with a DF of 11% and other variables are considered constant.

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Table 7. Criteria for Financial Investment for Maggot Cultivation with 11% DF and 10% Production Decrease.

Criteria	Value	Limitation	Description
NPV	Rp 89.852.127	>0	Layak
Gross B/C	1,5	>1	Layak
Net B/C	2	>1	Layak
IRR	61%	>11%	Layak
PP	2,39	< 3 Tahun	Layak

Source: primary data processed in 2021

Production Decrease 20%

Table 8. Criteria for Financial Investment for Maggot Cultivation with 11% DF and 20% Production Decrease.

Criteria	Value	Limitation	Description
NPV	Rp 59.884.276	>0	Layak
Gross B/C	1,33	>1	Layak
Net B/C	1,77	>1	Layak
IRR	45%	>11%	Layak
PP	2,77	< 3 Tahun	Layak

Source: primary data processed in 2021

Production Decrease 30%

Table 9. Criteria for Financial Investment for Maggot Cultivation with 11% DF and 30% Production Decrease.

Criteria	Value	Limitation	Description
NPV	Rp 29.916.425	>0	Layak
Gtoss B/C	1.17	>1	Layak
Net B/C	1.38	>1	Layak
IRR	29%	>11%	Layak
PP	3.3	= 3 Tahun	Layak

Source: primary data processed in 2021

Production Decrease 40%

Table 10. Criteria for Financial Investment for Maggot Cultivation with 11% DF and 40% Production Decrease.

Criteria	Value	Limitation	Description
NPV	Rp 51.426.30	<0	Tidak Layak
Gtoss B/C	1	=1	BEP
Net B/C	1	=1	BEP
IRR	11%	=11%	BEP
PP	4.23	> 3 Tahun	Tidak Layak

Source: primary data processed in 2021

From the results of the sensitivity analysis with the creation of conditions for a 10% -30% decrease in the production of Colorful Omah Maggot cultivation, it is still feasible to cultivate but in the creation of conditions of 40% decline in production of Colorful Omah Maggot cultivation, it is not feasible to cultivate.

F. Maggot Cultivation Development Strategy in Colorful Omah Maggot Pasuruan

Development strategy is a way designed to make changes that can make a business develop better. The strategy for developing maggot cultivation uses a SWOT analysis. SWOT analysis is the identification of various factors systematically to formulate a strategy which includes internal factors consisting of opportunities and threats and external factors consisting of opportunities and threats Internal Factors for Cultivation of Colorful Maggot Omah Maggot (Hermanto, R. E. (2016).

Financial Analysis of Business Feasibility and Maggot Black Souldier Fly Cultivation Development Strategy

Identification of Internal and External Factors

Table 10. Internal Factors of Colorful Maggot Omah Maggot Cultivation

No	Internal factors	Strenght	Weakness
1	The quality of the seeds produced	S1	
2	Competitive selling price	S2	
3	It's easy to get information on how to cultivate	S3	
4	Easy access to buy	S4	
5	Production capacity		W1
6	Cultivation Technology		W2
7	Limited marketing		W3
8	Simple promotion		W4

Table 11. External Factors of Colorful Maggot Omah Maggot Cultivation

No	Eksternal Faktors	Opportunity	Threats
1	Increasing interest in maggot cultivation	O1	
2	The level of consumer confidence in the seeds produced	O2	
3	Increased purchase demand	O3	
4	Promising market potential	O4	
5	Environmental Safety	O5	
6	Government support	O6	
7	Weather		T1
8	Other animal disturbance		T2
9	Business competition with other cultivators		T3
10	Fresh maggot can't be stored for long		T4

Table 12. Weighting, Rating and Score of Internal Factors

Internal Factors						
Strength		Total	Average	Rating	Weight	Score
1	The quality of the seeds produced	100	4	4	0.14	0.57
2	Competitive selling price	96	3.84	4	0.14	0.57
3	It's easy to get information on how to cultivate	77	3.08	3	0.10	0.32
4	Easy access to buy	79	3.16	3	0.10	0.32
Total Strength				14	0.48	1.8
Weakness						
1	Production capacity	34	1.36	1	0.1	0.1
2	Cultivation Technology	61	2.44	2	0.2	0.4
3	Marketing	36	1.44	1	0.1	0.1
4	Promotion	33	1.32	1	0.1	0.1
Total Weakness		164		5	0.5	0.7
Total Strength + Weakness				19	0,98	2,5

Table 13. Value of Internal Factors and External Factors

Internal Factors	Value
Strength	1,8
Weakness	0,7
Total Strength + Weakness	2,5
Strengths - Weaknesses	1.1

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External Factors	
Opportunity	2,2
Threat	0,8
Total Opportunities + Threats	3,0
Total Opportunity - Threat	1,4

Based on the total score of the internal and external factors of oyster mushroom farming, an IE matrix diagram can be made by looking for the X-axis and Y-axis intersection points. The X-axis intersection point (W-S axis) is obtained from the difference between the total strength and weakness factors, namely +1.07 and the point of intersection of the Y axis (O-T axis) is obtained from the difference between the total opportunity and threat factors, which is +1.43

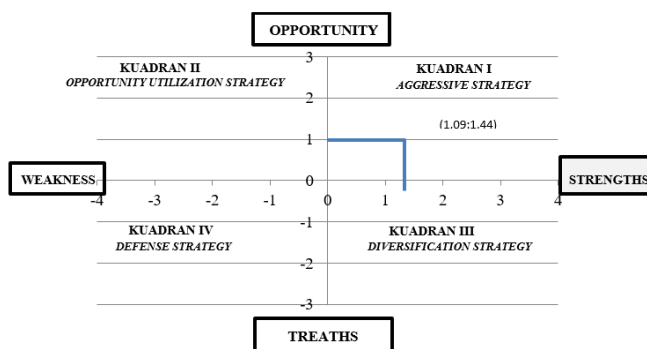


Figure 2. SWOT diagram

The results of the above calculation show that the position of the Colorful Omah Maggot cultivation business is in quadrant I. The existence of this position indicates the maggot cultivation business is in a growing, healthy and advanced condition. Quadrant I is a very profitable situation where the business has opportunities and strengths so that it can take advantage of existing opportunities. The strategy that must be applied in this condition is to support an aggressive growth policy. This allows business owners to expand their business and achieve the best.

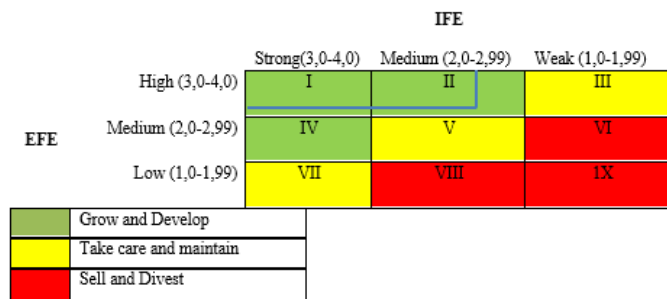


Figure 3. IFAS and EFAS. Diagrams

Based on the picture, it shows that the position of the external internal matrix of the Omah Maggot Warna Warni maggot cultivation business is in quadrant II or in the growth and development strategy with IFAS factor values of 2.39 and EFAS of 3.03. This phase shows that the colorful Omah Maggot maggot cultivation business is undergoing a growth stage and must be developed because it has great potential to develop.

G. Development Strategy

S-O Strategy (Strenghts-Opportunities)

The S-O strategy is a strategy that utilizes all strengths to seize and take advantage of the greatest opportunity. Strategies that can be run with the S-O strategy are:

1. Maintaining the quality of the resulting production to maintain consumer confidence.(S1O2). Good quality of BSF egg and maggot production, which are not easy to rot / die so that they are not good for seeds.
2. Increase education on how to cultivate maggot to increase the number of enthusiasts for maggot cultivation. (S3O1)
3. Maintaining competitive selling prices and increasing production to meet the increasing demand for purchases.(S2O3)
4. Increasing access to buying for consumers by utilizing information technology.(S4-O4)

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W-O Strategy (Wekanesess-Opportunity)

W-O strategy is a strategy that can be applied by taking advantage of existing opportunities to minimize existing weaknesses. Strategies that can be run with the W-O strategy are:

1. Increase production capacity to meet increasing purchasing demand. (W1O1).
2. Participate in training related to technology for cultivation in order to increase production and produce better seeds and maggots. (W2-O2)
3. Participate in training related to technology for cultivation in order to increase production and produce better seeds and maggots. (W2-O2).
4. Increase promotion by utilizing technology to reach a wider market. (W4O4).
5. Establish relationships with local governments to be able to expand the market, not only local but also export markets. (W3O6).

S-T Strategy (Strenghts-Threats)

The ST strategy is a strategy that uses the strengths possessed to overcome threats. The following strategies can be executed with the ST strategy:

1. Anticipating extreme weather by placing fly cages according to temperature and humidity. (S1T1).
2. Install a device such as a wire cover that is placed above the biophone to prevent rats or snakes from entering so as not to interfere with production (S1T2).
3. Maintaining competitive prices to overcome business competition.(S2T3)
4. Improving the quality of production to be able to compete with other cultivators (S1T3).

W-T Strategy (Weknesses-Threaths)

The W-T strategy is a defensive strategy and tries to minimize existing weaknesses and avoid threats. The W-T strategy can be implemented in the following ways, namely:

1. Improve knowledge and technology to anticipate extreme weather so as not to interfere with the BSF breeding process. (W2T1).
2. Increase production capacity by adding fly cages that produce seeds to meet consumer demand so as not to switch to other producers. (W1T3).
3. Utilizing technology with machines that can convert fresh maggot into dry maggot, thereby reducing production shrinkage. (W2T4).
4. Promote maggot products more widely so that maggot is sold immediately. (W4T4).

H. Strategy Formulation

Based on the analysis of internal and external factors, Pasuruan's Colorful Omah Maggot maggot cultivation business with a value of 3.03 and 2.49 is in quadrant II with a growth and development strategy that has a large market opportunity, it means that the maggot cultivation business has a large market opportunity. And has the potential to be developed. The colorful Omah Maggot maggot cultivation business can be developed even better by using the formulation of short-term and long-term strategic plans. Efforts that can be made for the strategic formulation include:

a. Strategic Plans in the Short Term are:

1. Maintaining the quality of the resulting production to maintain consumer confidence.
2. Maintaining competitive selling prices and increasing production to meet increasing purchasing demands.
3. Increase production capacity to meet increasing purchasing demand.
4. Increasing access to buying for consumers by utilizing information technology.
5. Increasing access to buying for consumers by utilizing information technology.
6. Increase promotion by utilizing technology to reach a wider market.

b. Strategic Plans in the Long Term are:

1. Anticipate extreme weather with tools that can monitor temperature and humidity
2. Participate in training related to technology for cultivation in order to increase production and produce better seeds and maggots.
3. Increase production capacity by adding fly cages that produce seeds to meet consumer demand so as not to switch to other cultivators.
4. Utilizing technology with machines that can convert fresh maggot into dry maggot, thereby reducing production shrinkage.

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5. Promote maggot products more widely so that maggot sells quickly.
6. Establishing relationships with local governments to be able to expand the market, not only local but also export markets.

I. CONCLUSION

1. Based on the results of the financial feasibility analysis with an interest rate of 11% that the Pasuruan Colorful Omah Maggot maggot cultivation is feasible because the NPV value > 0 is IDR 119,819,978, the Net B/C value > 1 is 2.53, the Gross value B/C $= 1$ is 2.53, IRR is 67% and the payback period is < 3 years, which is 2 years and 1 month.
2. The results of the sensitivity analysis on the maggot cultivation business of Colorful Omah maggot with the creation of conditions with a production decrease of 10% to 30% and other variables remain the same, the results show that the maggot cultivation business is still feasible, while the creation of conditions with a decrease in the production of 40% is obtained The results show that the maggot cultivation business is not feasible because the NPV < 1 is -Rp.51,426.30, Net B/C < 1 , Gross B/C = 1, IRR = DF is 11% and Payback Period > 3 years is 4 year 2 months. The conclusion for the sensitivity analysis is that the Omah Maggot Colorful maggot cultivation business is sensitive to a 40% decrease in production.
3. The conclusions obtained from the results of the study are that based on the IFAS-EFAS Matrix, the Colorful maggot cultivation business is in quadrant II (the company has positive internal strengths and has positive external threats) which means the maggot cultivation business must be able to maintain right and increase the internal strength that is owned and reduce the external threats that are being experienced for the achievement of company goals that are getting better
4. The results of the SWOT analysis show that the quail breeding business on the Gemini farm is in a white area position and in growth/stability conditions. The strategy implemented is the SO strategy by maintaining product quality to maintain consumer confidence, maintaining competitive selling prices and increasing production to meet demand, and expanding marketing reach to reach a broad market potential.

REFERENCE

- 1) Fauzi, M., & Muharram, L. H. (2019). Karakteristik Bioreduksi Sampah Organik oleh Maggot BSF (Black Soldier Fly) pada Berbagai Level Instar: Review. *Journal of Science, Technology and Entrepreneurship*, 1(2), 134–139.
- 2) Van Huis, A. (2013). Potential of insects as food and feed in assuring food security. *Annual Review of Entomology*, 58, 563–583. <https://doi.org/10.1146/annurev-ento-120811-153704>
- 3) Veldkamp, T., van Duinkerken, G., van Huis, A., Ottevanger, E., Bosch, G., & van Boekel, T. (2012). Insects as a sustainable feed ingredient in pig and poultry diets : a feasibility study = Insecten als duurzame diervoedergrondstof in varkens- en pluimveevoeders : een haalbaarheidsstudie. *Food Chemistry*, 50(January), 192–195.
- 4) Hardini, S. Y. K., & Gandhi, A. (2021). Efficiency Of Feed Cost And Business Feasibility In Catfish Cultivation Using Black Soldier Larvae As Additional Feed. *Journal of the Austrian Society of Agricultural Economics*, 17(02), 303–312.
- 5) Bukhari, A. (2005). *Manajemen Pemasaran dan Pemasaran Jasa*. Bandung: CV. Alfabeta, 2002.
- 6) Rachmawati, R., Buchori, D., Hidayat, P., Hem, S., & Fahmi, M. R. (2015). Perkembangan dan Kandungan Nutrisi Larva *Hermetia illucens* (Linnaeus) (Diptera: Stratiomyidae) pada Bungkil Kelapa Sawit. *Jurnal Entomologi Indonesia*, 7(1), 28. <https://doi.org/10.5994/jei.7.1.28>
- 7) Tomberlin, J. K., & Sheppard, D. C. (2002). Factors influencing mating and oviposition of black soldier flies (Diptera: Stratiomyidae) in a colony. *Journal of Entomological Science*, 37(4), 345–352. <https://doi.org/10.18474/0749-8004-37.4.345>
- 8) Barros-Cordeiro, K. B., B ao, S. N., & Pujol-Luz, J. R. (2014). Intra-puparial development of the black soldier-fly, *Hermetia illucens*. *Journal of Insect Science*, 14(83), 1–10. <https://doi.org/10.1673/031.014.83>
- 9) Oppong, M. (2017). Black Soldier Fly Larvae-Based Fish Feed Production : Financial Feasibility and Acceptability Analysis. 10551617. <http://ugspace.ug.edu.gh/handle/123456789/23632>
- 10) Hermanto, R. E. (2016). Analisis SWOT Terhadap Strategi Pemasaran Layanan SAP Express pada PT. SAP. *Jurnal Metris*, 17, 81-88.

Factors Influencing Consumer Brand Choice Service Tailoring Shop in Thailand, Focusing on Ermenegildo Zegna, Brioni and Local Brand



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ABSTRACT: The study compares foreign and local brands, focusing on Ermenegildo Zegna, Brioni, and local brands, in order to uncover the elements that impact customers' brand choice decisions in Thailand. The study looked at the elements that influence a customer's decision to buy a custom-made suit, in order to figure out what the most important component is. Understanding how Marketing Mix affects customer happiness and purchase decisions is especially important. The second goal is to investigate how brand equity affects sales, with a particular focus on customer brand preferences and market expansion.

The author chose the survey approach for this study, which is a quantitative research. Data was collected at random online through 346 legitimate questionnaires, and data was analyzed using cross tabulation and multinomial logistic regression. The study's findings show that all of the investigated factors, including product, price, location, promotion, brand equity, and customer purchase behavior determinants, have a positive impact on tailoring's customer brand choice decision in Thailand, with some specifications of each factor being found to be significant. Finally, when comparing these three brands, certain results are noteworthy.

KEYWORDS: Tailoring Brands, Customer Brand Choice Decision, 4Ps Marketing Mix, Brand Equity, Customer Purchase Behavior Determinants, Customer Lifestyle

1. INTRODUCTION

1.1 Background

When come to the fashion, it is existed in the earliest century of mankind. At that time, fashion was associated with the aspect of beauty and concerned the expression of physical power through body adornment. The late 19th and early 20th centuries saw the emergence of an addition to male costume, namely the men's suit. It was, like many of its predecessors, an ensemble of jacket, waistcoat and trousers. What made this newcomer special, however, was that all three pieces were made of the same or similar fabric and it had no waist seam, allowing for mass production. Upon its arrival, few imagined the wide recognition this men's costume would enjoy today, as "perhaps the most successful and enduring fashion garment ever invented," replacing most of its predecessors. Tailoring is the art of designing, cutting, fitting, and finishing clothing. The word tailor comes from the French tailor, to cut, and appears in English in the fourteenth century. In Latin, the word for tailor was "sartor," meaning "mending" or "mending," hence the English term "sartorial," which refers to the tailor, tailoring, or bespoke clothing. The term "Bespoke" or "Custom Tailoring" describes garments that are made to measure for a specific customer. Bespoke tailoring signals that these garments are already "taken" and not made on spec. As a craft, tailoring dates back to the early Middle Ages when tailors' guilds were established in major European cities. The beginnings of tailoring can be traced back to the craft of linen armor smiths, who fitted men with padded linen undergarments to protect their bodies from the chafing of chainmail and later plate armor. Men's clothing at this time consisted of loose-fitting tunic and trousers.

What is the different between ready-made suit and Custom-made suit?

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The advantage of custom-made suits is that you may choose the materials used in the manufacturing process as well as the style of the garment. Furthermore, choosing a tailored suit means being able to customize the majority of the suit's features and details, such as fabric, pockets, buttons, single or double breasted, jacket lining and lapels, trouser length and pleats, internal embroidery, and many other details that make the suit truly personalized.

Even if ready-to-wear clothing comes in a variety of models and styles, it is virtually always essential to alter it, at least in terms of the length of the sleeves and pants. As a result, we must constantly keep in mind that the cost of any ready-made suit will include an additional charge for various changes. Because they are fitted to the precise anatomical measurements, made-to-measure clothes fit better than ready-made outfits. The beginning price is comparable to ready-to-wear suits, but depending on the quality of the chosen materials and the level of customization, they can be more expensive.

Ermenegildo Zegna

Ermenegildo Zegna founded its company in 1910 in the Northern Italian town of Trivero with the dream of creating the most beautiful fabrics in the world. Since then it has become one of Italy's best known dynamic family businesses. The company is now run by the third generation, with Gildo as CEO, Paolo as Chairman and Anna as President of Fondazione Zegna. He sourced the highest quality natural fibres directly from their country of origin, imported them to Italy to be expertly woven, and then exported these luxury fabrics while making the Zegna brand known worldwide. Ermenegildo Zegna's legacy, opened its first boutique in Paris in 1980, followed by stores in London and Milan. When the company opened its Beijing boutique in 1991, it became the first luxury menswear brand in China, continuing the entrepreneurial spirit of its founder. Today, Ermenegildo Zegna is the world leader in luxury menswear with a retail network that includes more than 500 stores in over 100 countries around the world. Zegna upholds the founder's heritage by following three principles: defining long-term goals, keeping family ownership to assure continuity, and adhering to a sound ethical commitment codified in a rigorous corporate governance framework.

Brioni

In 1985, Brioni became the first Italian tailoring company to open a school to train new tailors. The four-year school, named after one of the brand's two founders Nazareno Fonticoli Scuolo Superiore di Sartoria, is located at the Brioni factory in Penne and takes students step-by-step through the 220 manufacturing processes required to make a typical Brioni suit. Brioni is perhaps the best known bespoke menswear brand in the world, and for good reason. The Italian clothing manufacturer practically invented the term "power suit" with its broad-shouldered, broad-chested suit style. The suits, made at the company's factory in Penne in southern Abruzzo, are mostly handmade and include as many as 33 proprietary details, from cashmere under the collar (optional) to double-stitched buttonholes and inside lapels not found on a typical bespoke men's suit. True to its motto "to be one of a kind," Brioni continually raises the bar when it comes to offering exclusive fabrics and bespoke services that few other luxury brands can match. The brand is also a big proponent of the three-piece suit, now crafted in cashmere, worsted Vicuna and fine micron wool, many with overlapping micro and macro patterns.

Local brand

Thailand has hundreds of tailors offering their services, and signs all over the city advertising men's suits tailored in 24 hours for 4,000 baht and promoters trying to lure tourists into shops with the promise of cheap bespoke clothing. Sure, it's tempting to get something as cheap as possible, but when you're in the market for tailored clothing, remember that you get what you pay for. You're already saving significantly compared to what you'd pay at home; it's foolish to get a bargain if you risk being unsatisfied. While the cheaper tailors are often very skilled, the cost savings are usually offset by the quality of the material. The selection at the cheaper stores is usually limited to synthetic blends with little, if any, wool and other natural materials. At your first fitting, you pick out the fabrics and the tailor takes all your measurements. If you're not already, you'll be well versed in terms like "flat front," "spread collar," "slim cut," and "notch" as you'll be picking out all the specifications of your suit and shirt. If this is all too confusing, most good tailors can advise you and tell you what looks best on your body, or you can even bring your favorite suit to the consultation.

When you come in for your second fitting, the garment won't be ready yet, but you'll be trying on the rough pieces to check the fit. If you're really in a hurry, or the garment fits perfectly at the second fitting, the tailor is done. But it's always better to try everything on one last time.

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1.2 Research objective

As well, these three brands are located in the around Thailand with the different price and quality. Although, each brand is still able to lead on their potential client who is the first time to visit their store and repeating Customers. Therefore the object of this research is

1. To find out factors that effect on customer's brand choice decision between Ermenegildo Zegna, Brioni And Local brand.
2. To understand Thai cultural of the international brand and local brand.
3. To understand how the customers are effected on marketing mix 4ps, quality, customer behavior in customer's choice of the brand.

1.3 Purpose of study

1. To find out the factor influencing customer choice in buying custom suit of Global and local brand in Thailand.
2. To find out the factors influencing the brand choice decision of tailoring consumers in order to understand what is the most important factor influencing customers' decisions. Specifically, understanding how Marketing Mixed affects customer satisfaction and purchase decision.

1.4 Scope of study

The research is concern with the customer brand choice by focusing on marketing mix(4Ps), brand and buying behavior will be use in this independent study. The researcher used questionnaires as an instrument to survey to collect data and define scope of this study as follow:

1.4.1 Scope of Content

The researcher clarified this study with research descriptions as focusing factors; brand, product, price, place, Promotion, customer behavior and lifestyle of the customer in Thailand. This research aims to determine the factors that influence Thai customers' brand choice decisions by comparing international and local Tailoring brands in Thailand. The tailoring chains compared are Ermenegildo Zegna, Brioni, Local Brand in Thailand. The study applied a quantitative method to collect data through online questionnaires.

1.4.2 Scope of Population

This research included the demographics of Thai customers, ranging in age from under 18 to over 51. The target demographics were collected randomly.

1.4.3 Scope of variable

The study consists of the independent and dependent variables. The independent variables include brand, product, price, place, promotion and customer behavior factors. The dependent variable is Thai customers' brand choice comparing Ermenegildo Zegna, Brioni and Local Brand in Thailand.

1.5 Limitation of study

Research has a limitation as time, since the data collection of this study is via online questionnaires only. Therefore, the results of this study cannot be generalized to other tailoring businesses and cannot be generalized to other brands besides comparing Ermenegildo Zegna, Brioni and Local Brand. However, this study provides useful information for tailoring marketers to improve their business, products or services, and can also use the data to predict customers' brand choice behavior.

1.6 Research question

Since the research topic is what influences Thai customers' choice of custom made suit, a comparison between international and local brand chains is conducted with focus on comparing Ermenegildo Zegna, Brioni, Local Brand in Thailand. Therefore, the research questions are developed based on the research objective, which are designed as follows:

- ✓ What factors that influence on customer's brand choice decision towards tailoring focusing on top three brands: Ermenegildo Zegna, Brioni, Local Brand in Thailand.
- ✓ Do brand, marketing mix of the 4Ps and customer behavior influence customers' brand choice decisions between international (Ermenegildo Zegna, Brioni) and local (Local Brand) tailoring brands in Thailand?

2. LITERATURE REVIEW

This chapter of the literature review examines how customers choose their merchandise and it relates to their decision and perception regarding the clothing of the merchandise and the outcome as making a brand choice decision. In order to understand the behavior, perception and lifestyle of customers in relation to marketing, it is necessary to study these factors by

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learning with Literature Review. In addition, the study of brand equity is another area that can also help in understanding customer decision making. The purpose of this study is to investigate customer perception and preference towards Tailor made suit focusing on brands Ermenegildo Zegna, Brioni, Local Brand. The study aims to focus on the factors that influence customer choice of custom made suit in Thailand along with the relationship of demographic variables. The research mentioned the following factors for this chapter with details;

- Marketing Mix (4Ps)
- Brand equity
- Customer behavior
- Customer life's style
- Choice theory
- Hypothesis
- Theoretical Framework

2.1 Marketing Mix (4Ps)

2.1.1 Product

A product is a thing or service that an industry produces in big quantities in a set number of units. It is possible for a product to be both tangible and intangible. All of the products must match customer demand. Knowing the problem or putting the feature of products or service and unique point of product for consumers is the key to a successful product.

H1o: Product does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H1a: Product does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

2.1.2 Price

Pricing has always been an important part of marketing, only pricing generates money among the traditional marketing aspects. One of the most basic, yet crucial issues facing a firm is what price to charge customers for products and services. Price setting is essentially seen as an optimization problem: setting a price too high can have the impact of indirectly reducing profits through a drop-in market share, while setting a price too low might have the impact of directly reducing earnings through a low profit margin. The most essential premise of marketing, according to Haxthausen (2008), is to fulfill and surpass client needs. One of the customer's expectations is to get a high-quality product at a low cost. Companies must try to deliver items that match all client criteria while being offered at a lower price than equivalent items from competitors, depending on the product and the market.

H2o: Price does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H2a: Price does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

2.1.3 Place

The distribution channel is commonly referred to as "place". Any physical or virtual store can be used as a location. Physical distribution refers to the process of moving things from the manufacturer to the customer. If the product is a business product, a business team will be necessary to communicate with various clients and ensure that the product is available to them. Because distribution has such a large impact on profitability, a company's supply chain and logistics management plan should be effective.

H3o: Place does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H3a: Place does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

2.1.4 promotion

One of the most powerful factors in the marketing mix is promotion. Publicity, public relations, exhibitions, and demonstrations are examples of sales promotion activities. The degree of marketing expenditure on promotion is determined by the marketing manager. When communication raises awareness, it piques clients' curiosity, prompting them to make a purchase decision.

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Different communication methods might be utilized for promotion. Advertising specialties, cash refund offers/rebates, contests and sweepstakes, coupons, patronage awards, point-of-purchase displays, premiums, price packs/cents-off bargains, samples, and trade fairs are all used by businesses to enhance sales.

H4o: Promotion does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H4a: Promotion does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

2.2 Brand equity

There are three steps to managing brand equity. The first step is to introduce yourself. Begin with a high-quality product, then develop a brand image that generates favorable consumer feedback. Elaboration is the next step. At this stage, the goal should be to instill attitude accessibility in the consumer's mind and make the brand easy to recall. The next goal is to boost brand equity by encouraging consumers to engage in direct behavioral experiences and express their attitudes as often as feasible. Fortification is the final stage. The goal is to increase the value of one's brand by extending it to other products. Perceptual fit, competitive leverage, and benefit transfer are all required for successful brand extensions. According to (Aaker 1991), The value that people identify with a brand is known as brand equity. When compared to other brands, it is the consumers' sense of the overall superiority of a product bearing that brand name. Rather than any objective indications, brand equity pertains to the perception of customers (Lassar et al.1995). "The set of associations and behaviors on the part of the brand's consumers, channel members, and parent corporation that allows the brand to earn greater volume or higher margins than it would otherwise earn the brand name and that gives the brand a strong, sustainable, and differentiated advantage over competitors," according to Lance Leuthesser. This definition acknowledges the existence of brand equity as a concept but does not go into detail on the characteristics of brands.

2.2.1 Brand Loyalty

Consumers who are devoted to a brand may be willing to pay extra for it because they believe it offers them something that no other brand can. Brand loyalty leads to greater market share when the same brand is repeatedly purchased by loyal consumers, irrespective of situational constraints. Various studies have acknowledged the importance of consumer brand loyalty to a brand's success and continued expansion. Through word of mouth, existing committed customers introduce the brand to new customers. Customers that are loyal to the company are regarded as extremely important because they provide consistent revenue that might last for a long period. As a result, one of a business entity's key goals is to retain and keep its customers loyal in order to maximize and benefit from client lifetime value. Loyal consumers' switching rates will be reduced, resulting in a higher value for them. As a result, client loyalty is a key component of a company's long-term financial performance. According to Oliver (1999) "Brand loyalty is a deeply held commitment to re buy or re patronize a preferred brand consistently in the future, thereby causing repetitive same brand or same brand set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior". Dick and Basu (1994) looked at different levels of consumer loyalty, claiming that a better indicator of repeat purchases may be found by comparing it to other competitors. They discovered four types of loyalty as a result of this combination.

1. True Loyalty- True loyalty can be achieved by combining a positive attitude with a high level of patronage from the same provider. This is the ideal scenario for any company or service provider that wants to build a loyal consumer base.
2. Latent loyalty - When the number of repeat purchases at the same provider is limited or none at all, but the favorable attitude is significant, this is referred to as latent loyalty.
3. Spurious loyalty - Spurious loyalty occurs when there is no or a weak relative attitude but a high degree of recurring purchases, indicating that there is behavioral but not attitudinal loyalty.
4. No loyalty - No loyalty is a mix of a negative attitude and a lack of purchasing power.

J.M.M. Bloemer, H.D.P. Kasper (1995) defined as True brand loyalty is: (1) a biased (i.e. non-random), (2) behavioral response (i.e. purchase), (3) expressed over time, (4) by some decision-making unit, (5) with respect to one or more alternative brands out of a set of such brands, and (6) is a function of psychological (decision making, evaluative) processes resulting in brand commitment.

2.2.2 Brand Awareness

Brand awareness refers to the likelihood that customers are aware of the product's lifespan and availability. It also gives the brand a competitive advantage. Furthermore, consumer views of pricing fairness are likely to be influenced by brand

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recognition. When a customer is aware of a product's popularity, that brand awareness aids the focal price in competing favorably with alternative prices or the internal reference price.

Customer loyalty is linked to the functions of brand identities in customers' memories, and it may be measured by how effectively they can recognize the brand under different circumstances. Consumers' brand awareness relates to their ability to recall or recognize a brand, or simply if they are aware of it. In general, brand awareness is a broad and nebulous phrase that is intuitively recognized by employees in most businesses. It may be characterized as a tool that focuses on defining and generating a target audience's familiarity and recognizability with a specific brand. Consumer awareness is a tool that businesses employ to influence consumer attitudes toward a brand or company by developing associations and beliefs among a target audience about a company or product.

2.2.3 Brand Familiarity

Brand familiarity is a term that refers to the amount of time a firm has spent developing brand information by interacting with the content of the processing. Another meaning of brand familiarity is a one-dimensional concept that is proportional to the amount of time spent processing information about the brand, independent of the nature or substance of the information processing. As a result, brand familiarity is the most basic level of consumer understanding.

Brand familiarity, according to Baker et al. (1986), is a one-dimensional concept that is proportional to the amount of time spent processing information about the brand, regardless of the nature or substance of the processing. Familiarity appears to be a catch-all term that is related to other relevant categories such as consumer expertise, prior knowledge, and belief strength, though not perfectly. Familiarity appears to be a required, but not sufficient, condition for the development of competence and the ability to successfully perform product-related tasks. It is critical to establish a positive brand association and brand belief in order to determine the success of a consumer's attitude toward a brand or company.

2.2.4 Brand Reputation

Brand reputation is becoming increasingly essential, according to both academics and practitioners. Brands must have a positive reputation in order to be successful and so profitable. One of the most important factors in determining the perceived quality of a brand's products is its reputation. Because the brand adds credibility, consumers anticipate things manufactured today to be of comparable quality to products manufactured previously. Brand reputation is more than just keeping customers happy; it is something a firm earns through time and refers to how different audiences perceive the brand. Companies and brands with a favorable reputation are more likely to attract customers, while brands that continually fail to meet their stated aims or marketing signals will lose their positive reputation—and eventually develop a negative reputation. According to Dowling (2001), a brand's or company's reputation is made up of a mix of trustworthiness, adoration, compassion, respect, and confidence in the organization's current and likely future activities — a mix that can easily be squandered. Brand reliability is helping to advance our understanding of what variables weaken or strengthen a brand, as well as the limits of brand extendibility and the need of establishing a brand portfolio.

2.2.5 Brand perceived Quality

Customers' opinions of product or service quality or superiority are referred to as brand perceived quality. It is solely dependent on the customer's assessment of the product's capacity to meet their expectations. According to this, brand perceived quality stems from recent brand experiences that customers have had with products or services, influencing their decision to purchase such products or services. Furthermore, brand quality encompasses both brand recognition and customer perceptions of the brand. There are two types of elements that influence perceived quality: intrinsic and external qualities. Extrinsic qualities include price, brand name, store, packaging, and production information, among other things. Intrinsic attributes are tied to the physical pieces of a product, whereas extrinsic attributes are not. Perceived quality differs from objective quality in that it is the customer's assessment of a product's overall excellence or superiority.

H5o: Brand does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H5a: Brand does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

2.3 Customer's Brand choice decision

Almost all microeconomic analysis is based on individual decision-making. The conventional economic model of rational decision-making is outlined in these notes. There is a formation of competitive advantage that influences customer decision based on branding and brand-related differentiation. Many studies looked into how customers distinguish and value brands by looking into brand equity, brand personality, and brand extensions. Furthermore, researchers have discovered that customers

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differ not only in their perceptions of brands, but also in their relationships with them (Fournier, 1998; Muniz and O Guinn, 2001).

2.3.1 Consumer's behavior

The customer and the interaction between the company and the customer are central to the marketing philosophy and process. If this is characterized by skepticism and distrust, businesses are unlikely to be able to persuade customers to make the changes necessary to achieve sustainability. Customer behavior is the study of how customers, whether individuals, groups, or organizations, acquire, utilize, and give ideas, commodities, and services to meet their requirements. It relates to a customer's action and determining their purpose for that action. Consumer behavior combines components from psychology, sociology, social anthropology, marketing, and economics, according to Lynn R. Kahle and Angeline G. Close's study. It aids businesspeople in comprehending buyer decision-making processes, both individually and collectively, as well as how emotions influence purchase behavior. It investigates individual consumer factors such as demographics and behavioral aspects in order to better understand client needs.

2.3.2 Consumer's perception

The term "consumer perception" refers to a sensory paradigm of marketing and advertising. It depicts how customers view and process firms or products through five senses until they reach the final degree of purchasing decision. Furthermore, customers' perceptions are influenced by three factors: self-perception, price perception, and benefit perception.

2.3.3 Consumer's purchasing decision

Consumers will have chosen which characteristics are vital for meeting their demands by the time they reach this stage, which is also important. Consumers will have already decided what they want to buy, which can be based on previous experience or advertisements. The marketer must have gone to great lengths to make sure his product is perfect (Frain, 1996). The customer purchase decision-making process, according to Engel, Blackwell, and Miniard (1995), can be divided into five steps: problem detection, information search, alternative evaluation, buy choice, and post-purchase behavior.

H6o: Consumer Behavior does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H6a: Consumer Behavior does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

2.4 Customer's lifestyle

For marketing purposes, a fashion lifestyle aims to reflect the ideals and inspiration of a group or culture. Based on their decisions, experiences, and backgrounds such as social class, nationality, and race, each individual has their own style or identity. According to this fashion lifestyle, the goal is to sell things by sending customers a message that their identity will be supported by the public and the company. People are divided into divisions depending on what they want to do and how they spend their discretionary income, according to the lifestyle marketing concept. Consumers frequently favor certain items, services, and activities over others because they are associated with a particular way of life. As a result, lifestyle-marketing methods aim to position a product by integrating it into an existing consumption pattern.

2.5 Choice Theory

One of the fundamental parts of marketing science is brand choice theory. Almost all marketing decisions contain assumptions – explicit or implicit – about how customers make purchasing decisions and how strategic marketing variables (such as price, advertising, and distribution) influence these decisions. According to Kippax and Crawford (1993), choice theory is based on the notion that all behaviors express an individual's intention to meet their five basic needs in their current situation. And no behavior is the result of an event or a person other than the individual. The utility-maximization approach to choose has several properties that help to explain why it has dominated economic analysis for so long. First and foremost, it has been strongly rooted in the ideals of government policymaking since its inception. Second, empirical studies tend to corroborate many of the choice theory's comparative statics prophesy - the qualitative prophecy about how people's choices change as their environments change. Third, the optimization approach (including utility maximization and profit maximization) has an extremely wide scope. Fourth, the optimization approach provides a compact theory that makes experiential predictions from a relatively scanty model of the choice problem. (Levin & Milgrom, 2004). All behavior, according to Choose Theory, describes an individual's regular endeavor to meet one or more basic natural needs. Accepting this concept requires persons who believe in the stimulus–response theory to set an example. According to this stimulus-response model, someone or something outside the person causes behavior, and the action that follows is a response to that stimulus. People always have authority over the action

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part of behavior, according to the Choice theory, and if they change that element, they cannot avoid affecting the cognitive, feeling, and physiological components as well. People must know that they always have control over the doing component and can choose to do something more important than being dejected in order to get their needs addressed effectively.

2.7 Theoretical Framework

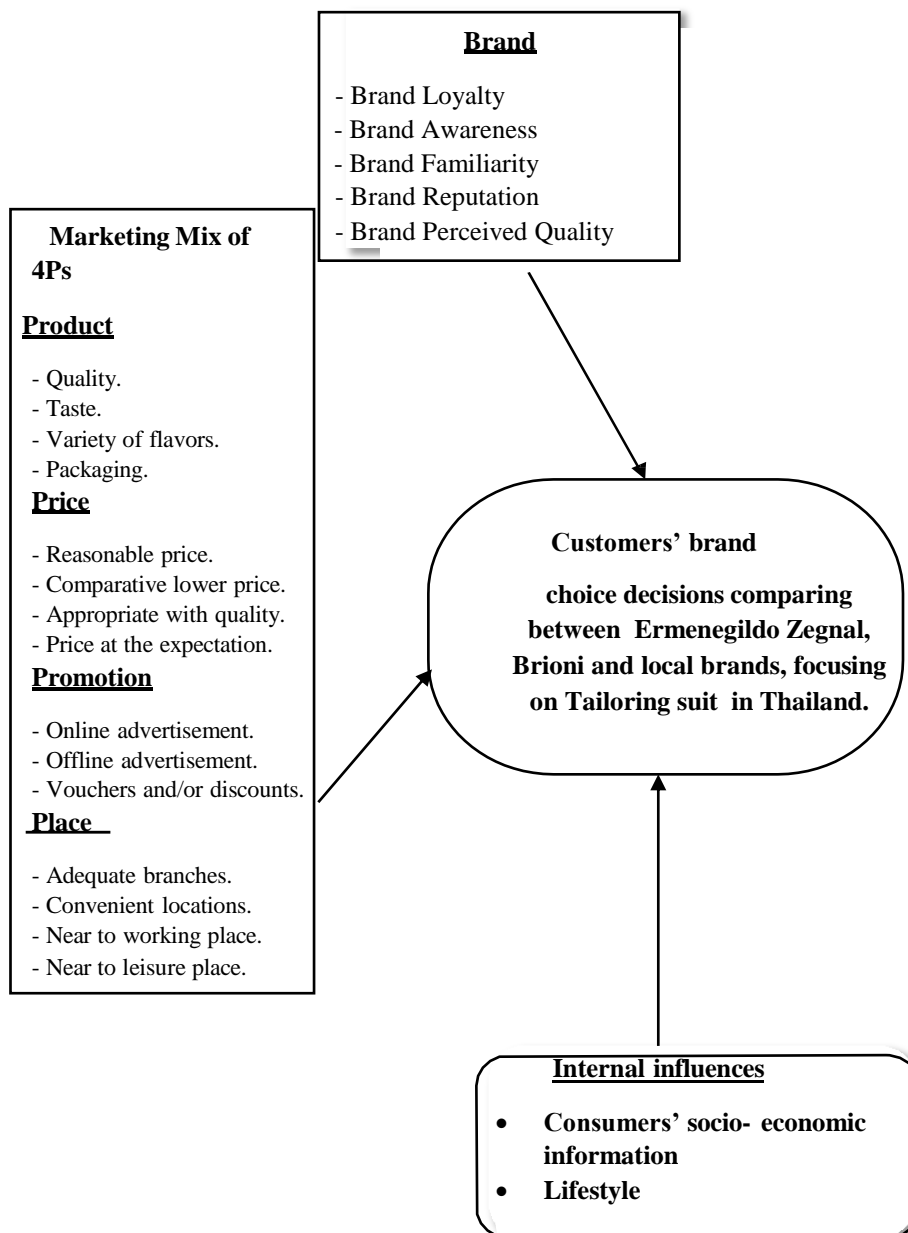


Figure 1: Theoretical Framework

4. FINDINGS AND ANALYSIS

The purpose of this chapter is to show and analyze the results collected from the SPSS data, as well as to provide answers to the research questions. The author will provide the results of a total of 346 respondents who completed the survey form entirely. Further, this chapter presents the results of the data collection which is based upon the result methodology discussed in Chapter 3.

4.1 The analysis of multinomial logistic regression method to explain the significant of general information (7 Likert scale)

The researcher will use multinomial logistic regression to examine data in this section. Multinomial logistic regression is a classification approach that generalizes logistic regression to multiclass issues, i.e. situations with more than two distinct discrete outcomes, as discussed. Given a set of independent variables, it's a model for predicting the probabilities of several

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possible outcomes of a categorically distributed dependent variable (which may be real-valued, binary-valued, categorical-valued, etc.).

Because the dependent variable in this study is nominal or equivalently categorical, meaning that it falls into any one of a set of categories that cannot be arranged in any meaningful way and for which there are more than two categories, multinomial logistic regression is used.

Table 4.1: Hypothesis test: Model Fitting Information

Model Fitting Information				
Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Null	638.050			
Final	491.479	146.570	88	.000

Table 4.2: Hypothesis test: Likelihood Ratio Tests

Likelihood Ratio Tests				
Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Brand	520.272	28.792	14	.011
Product	547.279	55.800	16	.000
Price	501.785 ^a	10.306	14	.739
Place	509.695 ^a	18.215	14	.197
Promotion	523.253	31.774	14	.004
BuyerBehavior	513.631 ^a	22.152	14	.076

From table 4.2, there are 6 factors analyzed in this part:

Dependent variable

Consumer brand choice of Ermenegildo Zegna, Brioni and local brands in Thailand.

Independent variable

H1 Brand

H2 Product

H3 Price

H4 Promotion

H5 Place

H6 Buyer Behavior

From Multinomial Logistic Regression, it shows that those variables whose p-value < .05 (in red), all significantly influence consumer choice in purchasing vehicle. Therefore, we can reject the following null hypotheses (Ho):

H1o: Brand does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H2o: Product does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H3o: Price does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H4o: Promotion does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and

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local brands in Thailand.

H5o: Place does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H6o: Consumer Behavior does not affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

And accept the following alternative hypotheses (H_a):

H1a: Brand does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H2a: Product does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H3a: Price does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H4a: Promotion does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H5a: Place does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

H6a: Consumer Behavior does affect customers' brand choice decisions comparing between Ermenegildo Zegna, Brioni and local brands in Thailand.

5. DISCUSSION

In this chapter, the researcher presents the most relevant aspects of this study, as well as a discussion of the study's findings and recommendations for future research. The major goal of the research is to look at the elements that influence consumer brand choices of tailoring suits in Thailand, specifically Ermenegildo Zegna, Brioni, and local brands. The study was conducted in Thailand from the 15th of January to the 1st of March 2021 for the benefit of business owners, investors, and marketing specialists interested in Thai custom suit consumers.

5.1 Conclusion

5.1.1 Brand Factor

The majority of Tailor made suit shoppers base their choice to buy a tailor item on brand awareness. As we all know, most tailor firms engage with their customers through a variety of methods, but not all of them succeed in attracting client attention and making them aware of their brand. As a result, tailor brands should strengthen their methods for raising awareness among their target or potential clients. If this campaign is successful, it will help the brand stay top of mind with clients, and they will be more likely to return to the same store whenever they need fast fashion.

5.1.2. Product factor

Most tailoring suit clients are aware that most suit brands sell identical items in terms of patterns, fabrics, and stitching quality. As a result, the tailoring industry should consider this to be a weak spot in its business and work to improve it in order to get more sales from the suit market.

5.1.3. Price factor

Customers prefer to buy merchandises at competitive prices in the market, including cheaper prices than other brands with good quality, according to research. As a result, it is critical for the tailoring sector to be aware of and attempt to balance their merchandise's price in order to best satisfy customer expectations.

5.1.4 Promotion factor

Even if there is a large discount, most suit purchasers pay attention to Celebration advertising and season promotions from each brand. The reason for this may be that they want to see what kind of design is used, as well as how the suit fits and looks on the celebrity. Another example is when it comes to wedding season, consumers begin to shop for suits because there will be more fabric and design available. As a result, it is critical for the tailoring sector to be aware of and attempt to balance their merchandise's promotion in order to best satisfy customer expectations.

5.1.5 Place Factor

The majority of Thai tailor suit customers are unconcerned with online ordering. They value a stand-alone business since they can choose their preferred fabric and material for the suit at their leisure. Another reason is that they personally measure your size in their single store.

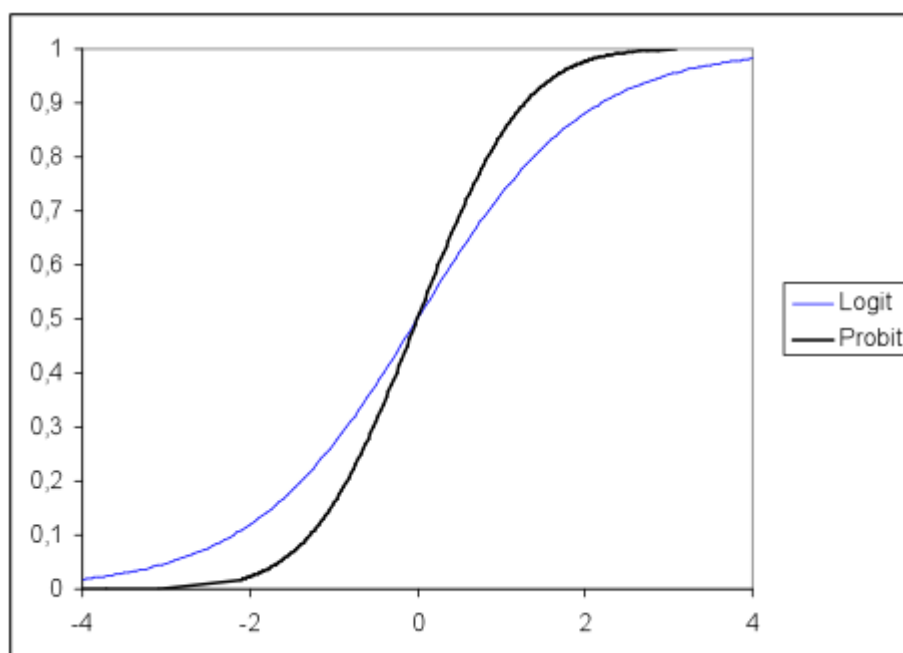
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Why using Multinomial Logistic Regression?

5.2 Multinomial Logistic Regression

When the dependent variable is nominal with more than two levels, multinomial logistic regression is the linear regression analysis to employ. Multinomial Logistic Regression is a type of logistic regression that allows researchers to categorize participants based on the values of a set of predictor variables. It is similar to logistic regression, but it is more straightforward because the dependent variable is not limited to two categories. The researcher can estimate the level of influence of a person's age, gender, and dating status on genre of favored movies using a Multinomial Logistic Regression. As a result, the researcher can target a certain advertising campaign to the people who are most likely to view it. The main concept behind logit is to use a logarithmic function to limit the probability value to a certain range (0,1). This is the log odds (the logarithmic of the odds of $y=1$) in technical terms.

In multinomial regression, a probit model is sometimes used instead of a logit model. The graph below depicts the differences between a logit and a probit model for various values (-4,4). In ordinal regression, both models are typically employed as the link function.



Finger 2; Differences Between Logit and Probit Multinomial Regression Models

However, the logit function is used in the majority of multinomial regression models. Because probit assumes a normal distribution of the probability of the occurrence, but logit assumes a log distribution, the difference between the two functions is often only visible in small samples.

5.3 Recommendation for Future Research

Marketing mix, tailor suit attitude about brand equity, culture variables, and personal elements that influence customer decision toward tailoring brand are among the study's research analysis findings. Even though this study provided useful information for tailoring suit marketing strategy, there are many other areas that need to be investigated further, such as customer expectations toward merchandises, the impact of social factors on customer behavior, and additional opportunities for custom made suit in order to expand and develop businesses. The findings of this study can be used to generate standards, guidelines, and development for future tailoring Suits or related fields. This report was only limited to Thailand, thus future research should include a comparative analysis with other country, as well as more demographic factors for future studies. Furthermore, having a solid understanding of technology and marketing can assist corporations or companies in developing a good business strategy.

REFERENCES

- 1) Alison Matthews David ,14 May 2021 " Tailoring" ;
<<https://fashion-history.lovetoknow.com/fashion-clothing-industry/tailoring>>

Factors Influencing Consumer Brand Choice Service Tailoring Shop in Thailand, Focusing on Ermenegildo Zegna, Brioni and Local Brand

- 2) ROBB REPORT STAFF; Jul 11, 2553 BE "Brioni Tailored Clothing"
< <https://robbreport.com/style/fashion/brioni-tailored-clothing-225651/> >
- 3) Home Page of Ermenegildo Zegna <<https://www.zegna.com/th-en/>>
- 4) Suzanne Nam; 4 May 2021 "Tailor-Made: Custom Suits and Clothing in Bangkok"
<<https://www.hachettebookgroup.com/travel/trip-ideas/tailor-made-custom-suits-and-clothing-in-bangkok/>>
- 5) Johan Alfredsson, Lina Augustsson" 2017.15.05– A FORECASTING MODEL OF THE MEN'S SUIT" Thesis for Master, 30 ECTS Textile Management "THE NEXT WAVE OF THE SUIT-ERA"
"https://www.diva-portal.org/smash/get/diva2:1144629/FULLTEXT01.pdf "
- 6) Phyo Lai Yee Win; 2016 " THE STUDY OF CONSUMER'S BRAND CHOICE DECISION FOR QUICK SERVICE RESTAURANT (QSR) IN YANGON, MYANMAR FOCUSING ON FAST FOOD BRANDS (KFC, PIZZA HUT & SEASONS) "
- 7) Gentleman's café BLOG- 20 July 2018 "Difference between ready-to-wear, made-to-measure and bespoke men's clothing"
- 8) Martin Skitmore & Hedley Smyth 13 Jun 2007 "Pricing construction work: a marketing viewpoint" Pages 619-630 | Received 27 Jul 2006, Accepted 13 Feb 2007, Published online:
- 9) Faruk Ahmeti 6, June 2015 " Factors Affecting Marketing Strategies: Pricing, Channel Structure and Advertising Strategies" : International Journal of Economics, Commerce and Management (IJEEM), Vol. III, Issue
- 10) Meera Singh ; 6 (Sep,-Oct. 2012)" Marketing Mix of 4P'S for Competitive Advantage" IOSR Journal of Business and Management (IOSRJBM) ISSN: 2278-487X Volume 3, Issue, PP 40-45 www.iosrjournals.org
- 11) Youjae Yi and Hoseong Jeon 2003" Effects of Loyalty Programs on Value Perception, Program Loyalty, and Brand Loyalty" First Published July 1, 2003 Journal of the Academy of Marketing Science; 31; 229
- 12) E Tabaku, M Zerellari –, 2015 "BRAND LOYALTY AND LOYALTY PROGRAMS; A LITERATURE REVIEW" Romanian Economic and Business Review – Vol. 10, No. 2- rebe.rau.ro
- 13) Oliver, Richard. 1999. "Whence customer loyalty?" Journal of Marketing, 63,: 33-44.
- 14) Dick, Alan. S. and Basu, Kunal. 1994. "Customer loyalty: toward an integrated conceptual framework". Journal of the Academy of Marketing Science, 22: 99–113.
- 15) Jose M.M. Bloemer- Hans D.P. Kasper "The complex relationship between consumer satisfaction and brand loyalty" Journal of Economic Psychology Volume 16, Issue 2, July 1995, Pages 311-329
- 16) Shirin, Artyom; Puth, Gustav. 2011-11-30 "Customer satisfaction, brand trust and variety seeking as determinants of brand loyalty"
- 17) Emine Sarigöllü 31 January 2014 " How Brand Awareness Relates to Market Outcome, Brand Equity, and the Marketing Mix"
- 18) Hong-Youl Ha, Helen Perks, 02 December 200 " Effects of consumer perceptions of brand experience on the web: brand familiarity, satisfaction and brand trust " Academic Paper
- 19) William Baker, J. Wesley Hutchinson, Danny Moore, and Prakash Nedungadi (1986) ,"Brand Familiarity and Advertising: Effects on the Evoked Set and Brand Preference", in NA - Advances in Consumer Research Volume 13, eds. Richard J. Lutz, Provo, UT : Association for Consumer Research, Pages: 637-642.
- 20) Cleopatra Veloutsou, Luiz Moutinho - "Brand relationships through brand reputation and brand tribalism" Journal of Business Research Volume 62, Issue 3, March 2009, Pages 314-322
- 21) Cleopatra Veloutsou, Luiz Moutinho "Brand relationships through brand reputation and brand tribalism"
- 22) University of Glasgow, Department of Management, The Gilbert Scott Building, Glasgow, G12 8QQ, Scotland, United Kingdom
- 23) Pantea Foroudi "Influence of Brand Signature, Brand Awareness, Brand Attitude, Brand Reputation on Hotel Industry's Brand Performance" International Journal of Hospitality Management Volume 76, Part A, January 2019, Pages 271-285
- 24) Haoqiang Zhu- 2016 "FACTORS INFLUENCING CUSTOMER DOUGHNUT BRAND CHOICE DECISION IN THAILAND, FOCUSING ON MISTER DONUT, DUNKIN' DONUTS AND KRISPY KREME DOUGHNUTS"
- 25) Mariya Kaufman -1989 "Managing brand equity" PH Farquhar - Marketing research, - academia.edu
- 26) Chieng Fayrene Y.L., Goi Chai Lee, "CUSTOMER-BASED BRAND EQUITY: A LITERATURE REVIEW" Researchers World, 2011 - researchgate.net
- 27) Leuthesser, L. (1988). Defining, measuring and managing brand equity: A Conference Summary. (pp. Pages 88-104). Cambridge: MA: Marketing Science Institute

Factors Influencing Consumer Brand Choice Service Tailoring Shop in Thailand, Focusing on Ermenegildo Zegna, Brioni and Local Brand

- 28) Mr. Mukesh B. Ahirrao¹ , Dr. D. S. Pati “Customer Based Brand Equity: A Review of Literature” - International Journal of Creative Research ..., 2017 - researchgate.net
- 29) Paisit Klomkongthong - 2016 “A STUDY OF CONSUMER CHOICE DECISION IN SHOPPING AT COMMUNITY MALL AMONG K- VILLAGE, J-AVENUE AND RAIN HILL ON SUKHUMVIT ROAD, THAILAND”
- 30) Kippax, S., & Crawford, J. (1993). Flaws in the theory of reasoned action. The theory of reasoned action: Its application to AIDS-preventive behavior, 253-269.
- 31) Catarina Peneda de Oliveira , Bruno Miguel Sousa “Green Marketing as a Positive Driver Toward Business Sustainability” 2020 - igi-global.com
- 32) Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1995). Consumer behavior (8th ed). New York: Dryden Press.
- 33) Levin, J., & Milgrom, P. (2004). Introduction to Choice Theory. Retrieved from <http://web.stanford.edu/~jdlevin/Econ>, 20202.

Socio-Economic Challenges Affecting Construction Women Labourers (WCLs) in The Nigerian Construction Sector (NCS)



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ABSTRACT: Women constitute about half of the population of Nigeria and thus a critical mass in the human capital of the country. They make significant contributions to social and economic development of the society, yet they are never appreciated nor supported by public or private institutions. Recently there have been a growing number of women in construction labour work in the Nigerian Construction Sector (NCS) - an area hitherto exclusively preserved of the male folks. This study investigates aspects of social and economic conditions of women construction labourers (WCLs) in Ondo State Southwest Nigeria. Convenience and Snowball sampling were used to sample 101 WCLs. Simple descriptive statistics was used to analyze the data. The result indicates that most WCLs are low in education and skills hence they mostly participate in supportive roles that are energetic. The WCLs are exposed to multiple risks due to poor Health, Safety and Environment (HSE), welfare and social protection of Nigerian Construction Contractors (NCCs) in the informal construction sub sector of the NCS. The study recommends for the improvement and enforcement of HSE standards, welfare package and training in the NCS.

KEYWORDS: Nigerian Construction Sector, Nigerian Construction Contractors, Women Construction Labourers, economic and social challenges

INTRODUCTION

Globalization has had a dramatic impact on employment relation and work arrangement around the world. It has particularly had significant negative effects on weak and vulnerable economies and on women and children within them (Carr, 2004). Globalisation has also led to significant growth of the informal sector in developing economies which led to a corresponding rise in informal employment. In many sub-Saharan African countries virtually all female non agricultural labor force works in informal employment. This has resulted in a growing 'feminisation of labour' which has brought about a visibility for the women worker which did not exist before (Jhabvala & Sinha, 2006, 2007). According to Charles (1993), more than half of the workforce are women who do over 60% of the work in the world. And earn 10% of the world's income owning only about 1% of the world's resources. Globally, women have been gaining economic equality with men but gender inequality continues to be an issue within the market force. Women are downside in having access to labour markets and most times are not as free as men to choose the kind of activities or sectors where they would prefer to work (ILO, 2009).

Both gender work within specific profession or trades and attain different levels which conform to societal expectations of their gender. In terms of occupation there is the conventional gender split in the pattern of various sectors of employment. In terms of hierarchy, women representation in most sectors reduces with increase in rank (Dainty, 1998). Thus women are crowded into 'job ghetto' of low paid work of junior and supporting positions (ILO, 2009). In more recent study, Jwsshaka and Amin (2020), affirmed that women are more into the informal sector where vocational occupations like catering and fashion designing are areas where women prefer to venture into despite being professionally qualified. This is however leading to the shortage of professionals in the industry. The women gender is overrepresented in subsistence agriculture, domestic chores and work such as sowing (Gregson et al., 1997; Jwsshaka & Amin, 2020). Men carry on dominating while women keep working harder to demonstrate their potential in male-dominated industries. Women are also often disadvantaged in terms of the share of vulnerable employment (i.e. unpaid family workers and own-account workers) in total employment. Women are mostly in the informal sector characterised by insecure and poor quality employment, low skill, income and productivity and no social security

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and pension system despite the exposure to shocks and risks (Jhabvala & Sinha, 2006, 2007). Women who are fortunate to obtain formal employment are most times not paid the same remuneration as their male colleague which may be as a result of discrimination (ILO 2009). In spite of the knowledge and contribution of women of women in the society, they are still disregarded or underestimated. Women have the lowest Human Development Indicators (HDI) in health, nutrition, maternal mortality, fertility and education (HDR, 1998). With the restrictions women face generally, women empowerment and gender equality advancement is not only a fundamental Millennium Development Goal (MDG), but also pivotal to realizing the goal of full and productive employment and decent work for all and virtually all other goals (ILO, 2009).

Engaging and retaining more women, is a key priority for solving the construction sector's labour shortage (Gurjao, 2006). In Nigeria, the Structural Adjustment Programmes (SAPs) in 1986 combined with rapid population growth and rural-urban migration resulted in high number of joblessness in the built-up cities SAPs led to the contraction of the formal sector, a non commensurate growth of the informal economy and a phenomenal growth of unskilled women labourers in the urban economy (Faruqee, 1994; Aladekomo, 2004). Considering the high level of urban poverty among women and the lack of regulation of the informal economy there is the need for an investigation into the activities of unskilled women construction labourers (WCLs) in the informal construction sector. In contrast to the extant literature focus on skilled and technical women in construction, this study investigates the socio-economic conditions of CWLs in the Nigerian Construction Sector (NCS) using Akure, the Ondo state capital as a case study.

THE FEMALE GENDER

Gender-induced discriminations have played a major part in the lives of women in poor socio-economic situation in Africa. In traditional African societies, the responsibility of women are substantially maternal, conjugal and domestic services including food crops production, food preparation, fetching firewood, water, shopping for household needs (Oppong & Abu, 1987; Agberia, 1996; Ogbuigwe, 1996; Ajayi & Olotuah, 2005). Thus, marriage and fertility are women's primary source of esteem and dignity within their families and groups (Nosike, 1996). Women who are married are actually regarded as the property of their husband and they do not inherit land or resources. Also, divorce is firmly disallowed and the custody of the children is automatically given to the husband. Women work at home and family farms are unpaid for (Sa'ad, 2001). Women mostly take part in tasks that are tedious and unsafe (Okunribido, 2000). Women in the rural area mostly work in peasant agriculture and generally do the harvest and processing activities themselves (Igbeka, 1993). Women make use of locally fabricated handheld tools and implements in agriculture which are difficult, heavy and injurious to operate and originally designed for the men (Adegbite, 1994; Udry, 1995).

Women are known to be highly industrious and enterprising but mostly engages in home-based informal activities (Jwasshaka & Amin, 2020). Women play the triple roles of reproduction, production and home management. These are not measured in economic terms, thus policymakers have no recognition of the contributions of women to the national economy (Moser, 1985; Amali, 1989). Indeed, Nigerian institutions are highly gendered, family institutions involve strict gender norms on marriage, divorce, child custody and inheritance, which all appear to be biased against women (Van Staveren & Odebode, 2007). Gendered practices are social construct and are as such informed by the values and norms of societies. The discriminatory practices against women have for long hindered the full development of their potentials which have prevented equal socio-economic participation leading to a high rate of poverty among women (Olotuah & Ajayi, 2008). As at 2006, Adeyemi et al. (2006), compared the participation of men and women in construction industries in Nigeria and only 16.3% of the workforces were women. Of the 16.3%, half of the women were employed as labourers in the industry, 37.5% as administrative staff while 10% were management staff and 2.5% represented skilled women. However, within the construction industry, the population of women now represents only 0.2% of those in the construction profession. (Jimoh et al. 2016). According to Jwasshaka and Amin (2020), out of this population, most of the women are engaged as helpers or labourers, Administrative staff or catering staff. Women constitute about half of Nigeria's population (NPC, 2006). According to Akomolafe and Moammad (2015) there are less than six million women employed in Nigeria which account for 22% of the work force. Therefore, their effective participation is critical to any genuine national development programme (Adeyemo, 1984; Nkom, 1988; Folorunso, 2000; Oganwu & Omotor, 2000; Jwasshaka & Amin, 2020). The active participation of women in development process is dependent upon myriad socio-economic and political factors which include religion, education, marriage, residence, parental support and public policy (Aboribo et al., 2000).

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In Nigeria, traditional values favour men with up to four wives, as they exclusively inherit properties, have automatically have access to the custody of children and these men rarely assist in domestic work and care for the children. These provide the institutional foundation for the highly gendered family norms, glorifying masculine beliefs, rules and practices, while denigrating what is regarded as feminine (Van Staveren & Odebode, 2007). Women disadvantages have been linked to low level of skills and crowdedness in the informal economy. The informal economy is characterized by relatively high unemployment, high-income insecurity, low and irregular earnings, poor labour standards and social security and protection (Van Staveren & Odebode, 2007). Women have less job opportunities and are faced with wage discrimination even when qualified for the job. The low participation and increase in the rate of poverty among women can be traced to downside position in education (Olotuah & Ajayi, 2008). An increased participation in labour force as well as a greater earnings by women could result in an increased enrolment in schools for children, including girls, which will in turn lead to increase in educated girls who grow up to become female role models (Aguirre et al., 2012). Most forms inequality encountered by women in Nigeria has its root in education (Federal Office of Statistics, 1996). To improve the situation, women should be given adequate opportunities for education like men as well as access to extension services. Women access to credit should also be improved since lack of capital has resulted in inefficiency. Additionally, there is the need for cultural reorientation in Nigerian societies and the eradication of all impediments against women (Adeyemo, 1984; Oppong & Abu, 1987; Stephen, 1992; Olotuah & Ajayi, 2008).

THE CONSTRUCTION SECTOR (CNS) AND GENDER

In Nigeria, the CNS accounted for 9.8% of the Gross Domestic Product (GDP) growth rate in the third quarter of 2020 (National Bureau of Statistics, 2020). In 2013, the industry contributed 3.12% to the GDP (NBS, 2013). It also accounts for almost 70% of the nation's fixed capital formation and employs approximately 8million people, which represents about 25% of Nigeria's workforce (Ogunsemi, 2015). Perhaps the more important contribution of the CNS to the socio economic growth is its direct and indirect contribution to employment. Construction work being fragmented and sometimes unorganised accommodates many workers particularly the unskilled labour. Because of its impact on the labour market the CNS attracts a great deal of attention in any political, economic, and social debate (Lavender, 1996). The CNS operations are highly mobile and construction works are carried out on site with projects having fixed-term, rather than continuous. Many construction workers are employed full-term for only the duration of a project unlike other industries. Because of the instability of construction employment, workers move among contractors from time to time (Uwakweh & Maloney, 1991). The increasing informal employment and subcontracting of labour has not had a favourable impact on the level of social protection which makes construction one of the very dangerous occupations. Research across the globe shows that construction workers have a higher tendency to die from accidents during work than others who are not into construction. In the developing economies, the risks associated with construction work are about 3 to 6 times greater (ILO, 2001).

The construction labour market is presently facing a skills shortage (MacKenzie et al., 2000; CITB 2002). More recently, Jwasshaka and Amin (2020), emphasised that CNS is running out of employee due to the non-participation and non-involvement of women who despite possessing the required skill and knowledge choose career in catering, dress making or care giver rather than construction. Odubiyi (2018) however referred to this choice of women as not diversifying but devastating because of the negative effect it has on the progress of the Nigerian construction industry. Ginige, Amaratunga and Haigh (2007), also noted that the problem of skill shortage is due to the inability of the industry to attract young women to take a career in construction. This is a result of the unattractiveness of the industry for women due to the various challenges they face in the industry. This has made construction workers retention become a top priority (Yankov & Kleiner, 2001).

The unwillingness of women to participate in the sector significantly reduces the labour pool from which the CNS can employ (Gale, 1992; Clark & Wall, 1998; Gritziyis & Stoll, 2002). This unwillingness may be due to many reasons including reasons related to the apparent male domination in workplaces; flexible work hours; and the believe that it involves hard physical tasks which requires strength that the female gender may not have (Gale & Skitmore, 1990). Amaratunga et al., (2006) identified the challenges faced by women in entry and retention as knowledge of the career, culture, working environment, training courses for male, recruitment practices and family commitments. Jimoh, et al (2016) and Akinsiku and Ajala (2018) noted that construction industry is mostly male dominated because the works carried out requires physical strength which women may not have and they are faced with other challenges such as long working, commitment to family and self-confidence. The physical strength of men, that is the 'macho' culture has given the CNS a negative social image and confrontational relationships (Barthorpe et al., 1999; Strategic Forum, 2002). Salman, Miranda and Amos (2014) identified male dominance, socio-cultural issues, work and life balance, unfair perception of women's capabilities and slow career progression as the most common

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challenge women face in construction. Many female workers envisaged to leave the sector because of frustrations as a result of abuse and verbal harassment (Dorsey & Minkarah, 1993). There is also a lack of child care facilities, promotion prospects and maternity leave that affect the female gender (Sommerville et al., 1993). So therefore, women within the industry are compelled to choose between having a career and having a family (Dainty et al., 2000a).

Women Construction Labourers (WCLs)

Using data from the International Labour Organization, Aguirre et al. (2012) estimated that globally 812 million women out of the 865 million women that have the capability to contribute to national economies live in emerging and developing nations of which Nigeria is one. The believe is that women do not have the ability to make successful career in construction due to the numerous demands of the industry. This prejudice may not be unconnected to age-long traditions, customs, values and beliefs prevailing among the different cultures in Nigeria. Women are treated as subordinates to men, they are excluded from formal education; a general belief in a low level of female intelligence; non-recognition of unmarried women and classification of some economic activities as exclusive preserve of men (Orubuloye, 1987; Sokomba, 1990; Oruwari, 1992; Okewole, 1997). Recently however, women legal status has changed greatly with a rising increase in female students' enrollment in the engineering and built environment degree programmes in the Nigerian tertiary institutions. This change has enable women to improve in the participation in various economic activities including construction (UNESCO, 1995; Adeyemi et al., 2004). Also, the industry is putting efforts into making the working conditions of the CNS attract more competent construction workers particularly women. There are compelling women labour problems in the CNS such as the need: to increase the number of qualified women joining the CNS; to improve the level of qualified women in the CNS; and to advance the health and safety standard of the CNS for women (Gilbert & Walker, 2001).

A growing body of literature focuses on gender in the NCS. Labeodan (1992) noted that the bulk of CWLs are below the age of 50 years; about 60 percent are married with an average of four children; about 70 percent never had formal school; mostly involved in unskilled support roles; earn meager income, utterly dissatisfied with job and pay; about 90 percent are full time construction workers and have been in the sector for at most 10 years; majority travel between 3 and 6 km daily to reach construction site; prefer buying and selling trades; health and safety issues; few prefer to go back to school. Adeyemi et al., (2004) in their finding observed that women are underrepresented in the NCS. Kehinde and Okoli (2004) affirmed that there are considerable career opportunities for career women in the NCS, though some of these pose serious conflict with their roles as wives/mothers, which therefore affects their career advancement in such fields. Sodunke (2005) observed that the level of participation of women in professional and managerial positions in construction is insignificant due to: the hazard and risks involves; difficulties in combining career with family responsibilities and the vertical segregation by sex in the NCS. The findings of Ishola (2006), showed that women face significant social and economic problems ranging from non-acceptability, low pay due to belief that they contribute less to the manpower output and others.

Similar findings have been reported in other jurisdictions. Nandal (1995) noted that over 76 per cent of the CWLs are illiterate and the working hours are long and could be up to 14 hours a day. SEWA (2000) concluded that 68 percent of the CWLs work as head loaders; 90 per cent are unskilled labourers, while 10 per cent work as semi-skilled labourers; the average daily wages of the female workers are substantially lower than the male workers. 65 per cent of the women's families had been in construction work for many generations. Most CWLs had issues with low health and safety standards. Priya (2002) noted that CWLs have to combine household work with site work; cover a distance of up to 10 km to get to work site; some have infants and children less than 6 years old; suffer abuse and harassment from co-workers and subcontractors; some of their husbands are alcoholic and wife beaters. Reddy (2003) finds that only 31.13 percent of CWLs expressed no satisfaction about their work and wages; 50 percent are forced to continue as CWLs in order to earn their daily bread; while 18.6 percent are neither happy nor unhappy; and almost all will stop work if their husband could get a permanent job. Nandal (2006) concluded that the problems faced by CWLs in the CNS are job discrimination, low wage rates, lack of payment for holidays, long hours under poor working conditions, lack of sufficient rest and underemployment and a total lack of job security and social security benefits. According to Jhabvala and Sinha, (2006) majority of the Indian women are forced into destitution and labour job out of natural contingencies; or loss of breadwinner or death of husband and unforeseen events such as crop failure or livestock loss through diseases or a general market crash.

Socio-Economic Challenges Affecting Construction Women Labourers (CWs) in The Nigerian Construction Sector (NCS)

METHODOLOGY

Research Design: the study adopts the survey design using questionnaire. Questionnaire help in getting the required information about a specific problem in a way that the analysis and interpretation of the data will show a better understanding of the problem (Trochim, 2008).

Sampling: Convenience and snowball sampling were used for the study. The convenience sampling is used to survey the CWs on construction sites or at their meeting points. From information obtained from these women, snowball is used to access more women at their residence. Self administered questionnaires were used to get needed information from one hundred and one (101) CWs in their different locations using convenience and snowball sampling. Snowball sampling is use when there is no direct access to sufficient people in a study. Convenience and snowball sampling were used because of the unavailability of a register of the CWs in the study area which could have served as the sampling frame for random sampling.

The Study area: Akure is a metropolitan city and administrative capital of Ondo State in southwest Nigeria. The city has a population of about 3.5 million people (NPC, 2006) with a projection of about 1.2 million people added by 2016. Half of this population are however female (NPC, 2006). The people are of the Yoruba ethnic nationality. The study is centered on CWs in Akure metropolis of Ondo state of Nigeria. There are at least nine (9) meeting points of construction workers in Akure metropolis. They include -Oluwatuyi Quarters, Oke Aro, Oke Ijebu, Plaza Junction, Aule, Road Block, Karakata Maronu Junction, Odo -Ikoyi Iso onifufu, Ondo road opposite Agip filling station and Green Park Idanre junction.

Method of Data Collection: The study collected primary data with the aid of a structured questionnaire. The questionnaire was designed with questions on aspects of social and economic characteristics of CWs and was divided into four sections; the first section dwells on the background information, which is to collect data on the general characteristics of the respondents. This includes such questions as the age of the respondent, the academic qualification, location of site, marital status. The second section dwells on the reasons why women go for labourer work. The third section centres on level of participation of women in site works and the fourth dwells on the peculiar challenges faced by WCLs.

Data Analysis: Raw data from field work were processed and thereafter analysed. Descriptive statistical techniques were used for the analysis. Descriptive statistics are used to present quantitative description in a manageable form. It reduces lot of data into simple summaries. It also provides a powerful summary that may enable comparison across people or other units. Descriptive statistics used include frequency and percentages to capture the prevalence of aspects of social and economic conditions of CWs.

RESULT AND DISCUSSION

The age of the majority (62 %) of the CWs range between 25 and 40 years, showing that the women are mainly in their productive age. According to Todaroc (1989) the active labour force in any nation is constituted by people between ages 15-64 years. Majority (73%) of the CWs are either uneducated or just elementary education. A large number of the CWs (62 %) are singles, separated, divorced or widows. In other words, most of the CWs are not married; hence they have to work as labourers to earn a living. For the family history of the CWs, a good number of them are from single parentage (40%), polygamy (19%) and Orphans (8%) as shown on table 1.

Table 1. Background Information

Age	Percent (%)	Education	Percent (%)	Marital	Percent (%)	family type	Percent (%)	No of children	Percent (%)
15-20	3.0	no formal education	32.0	Single	7.0	Polygamy	19.0	None	9.0
20-25	8.0	Primary education	41.0	Married	48.0	single parent	40.0	2	22.0
25-30	26.0	Secondary education	23.0	Divorced	7.0	Monogamy	30.0	4	43.0
30-40	36.0	Drop out	3.0	Widow	19.0	Orphan	8.0	5	15.0
Others	28.0	any other	2.0	Separate	20.0	Others	4.0	6-8	12.0
Total	101.0	Total	101.0	Total	101.0	Total	101.0	Total	101.0

The study shows that 85 percent of the responding CWs are full time labourers. This may be due to the fact that most of them are uneducated and unskilled; hence finding a reputable job is hard in an increasingly competitive Nigerian economy, where even graduate unemployment is frightening. Most CWs have between two and eight children (91%). For the primary reasons for unskilled job, most of the women (86%) claim they have to cater for their children and to get food on the table (10 %).

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Considering the fact that most of the CWLs have no husbands, the most important reason given by the women for engaging in construction labour job is taking care of their children. This is a serious social economic challenge since feeding and educating children are considered expensive in the Nigerian economy. Moreover, for the secondary reason, most of them (64 per cent) claim that they are engaged as CWLs because of the lack of other types of job as shown in table 2. Most of the reasons for the growth of the informal sectors and women construction labourers are global and relate to the collapse of the economy since the 1980s and subsequent adoption of painful economic reform programme in most LDCs (Labeodan, 1992; Faruqee, 1994; Nandal, 1995; SEWA, 2000; Priya, 2002; Reddy, 2003; Aladekomo, 2004; Nandal, 2006; Ishola, 2006; Jhabvala & Sinha, 2006 etc.).

Table 2. Social Factors on women construction workers

Mode of empl	Percent (%)	No of children	Percent (%)	Primary reason	Percent (%)	Secondary reasons	Percent (%)
Fulltime	85.0	None	9.0	children	86.0	lack of sponsor	35.0
part time	15.0	2	22.0	Medical	2.0	lack of job opportunity	64.0
Total	100.0	4	43.0	payment of debt	1.0	Family type	2.0
		5	15.0	house rent	1.0	Total	101.0
		6-8	12.0	Food	11.0		
		Total	101.0	Total	101.0		

Given the fact that construction jobs are not stable (Anumba et al., 2004), most women engage in other trades including agriculture (34%) tailoring (31%) food catering (20%) hair dressing (14%) and weaving (1%) to augment and provide income during construction downtime. For most construction sites surveyed the number of CWLs on site range between 5 and 23 women. This compared closely with construction men labourers which are between 4 and 25 men depending on the nature of work being handled. The number of hours spent per day varies between 5 and 12 hours depending on the nature of work, location of site or number of labourers employed for the work as described in table 3. This is considered to be very stressful (Labeoden, 1992). This agrees with ILO, 2012 and Campbell & Ahmed, 2012, that women dominate the informal sector, characterized by vulnerability in employment status, a low degree of protection, mostly unskilled work, and unstable earnings

Table 3. Activities and participation of construction women

other trades	Percent (%)	No of women labourers	Percent (%)	No men labourers	Percent (%)	hours per day	Percent (%)
Hair dressing	14.0	0-5	12.0	0-4	16.0	5	2.0
Cookery	20.0	6-11	29.0	5-10	9.0	6	2.0
Cloth weaving	1.0	12-17	15.0	16-20	51.0	7	16.0
Tailoring	31.0	18-23	45.0	21-25	24.0	Others	79.0
Agriculture	34.0	Total	101.0	Total	100.0	8	2.0
Total	101.0					Total	101.0

From table 4, the CWLs are by far more involved in concrete work (97 %) they help transport concrete from the mixing point to point of placement (SEWA, 2000). The study shows that 66 percent claim employers or site mangers highly accept women for job. 70 percent claim male co-workers highly accept them on site. 89 percent claim that sexual harassment is rare between co-workers.

Table 4. Activities and social interaction of women workers

aspect involved	Percent (%)	acceptance by employer	Percent (%)	acceptance by co-workers	Percent (%)	sexual abuse	Percent (%)
Blocklaying	1.0	Highly acceptable	66.0	Highly acceptable	70.0C	None	89.0
Excavation	2.0	Moderately acceptable	35.0	moderately acceptable	31.0	Rape	1.0
concrete work	97.0	Total	101.0	Total	101.0	Extra marrital affair	11.0
Total	101.0					Total	101.0

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Table 5 indicates that all the entire respondents (100%) agree that there are no protective health and safety facilities like helmets, booth, hand gloves, goggle, shoes and safety belts and overall etc. 95 percent insists there are no medical and welfare facilities, including toilets, baths, canteens and no first aid treatment available for them. 86 percent of the respondents claim that the job site are hazardous to the health of women particularly mothers. Virtually all sites have no provision for creche and are therefore not baby friendly. The informalization of the CNS has meant a drastic fall in adherence to regulation and procedure (Wells, 1999).

Table 2. Provision of welfare facilities

provision for safety materials	Percent (%)	medical facilities	Percent (%)	Mother pregnancy	Percent (%)	Crèche	percent
None	100.0	None	95.0	Highly effective	9.0		
		first aid	3.0	moderately effective	34.0		
		Toilet	1.0	not effective	2.0		
		Bathroom	2.0	not allowed on site	55.0		
		Total	100.0	Total	100.0		

The study also indicates that most women (95%) believe the no provision of medical and welfare facilities slow down their pace of work. 85 percent said construction labour causes body pain and fatigue. 59 percent said they face economic difficulties, 30 percent claim they are socially unaccepted in the society and 11percent asserts that the job has no real positive impact on their poverty level due to low wages (see table 6). These findings agree with Labeodan (1992); SEWA (2000); Nandal (2006) and Cambel & Ahmed (2012).

Table 6.Challenges on women construction workers

medical challenges	Percent (%)	Health of labour	Percent (%)	Economic challenges	Percent (%)
slows down the pace of work	76.0	Fatigue	13.0	Poverty	11.0
reduction in work	22.0	Psychological effect	5.0	economic imbalance	59.0
Others	3.0	Pains	83.0	Unacceptability in the society	31.0
Total	101.0	Total	101.0	Total	101.0

Health Safety and Environment (HSE) of labourers does not matter to the NCCs. The NCCs hardly make any provision for welfare facilities including water for drinking and washing, toilets, bathrooms and canteens. Even where any of these facilities are available they are of substandard quality. The NCCs have no facilities for crèches for the children. The CWLs are not eligible to get the maternity benefits since employment is informal. Moreover, NCCs are not ready to compensate employee(s) having injuries and they are not covered by insurance and social security. The WCLs can hardly cater for their up keeps, including feeding, accommodation and school fees of their children. No holiday or leave policy is majority of the NCCs. The conditions of CWLs in Akure, Ondo state are hardly different from what is obtainable in other jurisdiction like (Nandal, 1995, 2006; SEWA, 2000). Most of these findings agree with the ILO (2001) that most countries do face challenges in monitoring and enforcement mechanisms for HSE of construction workers. This is due to a combination of ignorance, low levels of organization among the workers and deliberate negligence by employers. The increasing informal employment and outsourcing of labour in the CNS has had a negative impact on the level of social protection of construction workers. There is evidence from many countries that employers do not pay into social security funds for workers who are on temporary contracts. Construction however remains one of the most dangerous occupations.

CONCLUSION AND RECOMMENDATION

From the findings, the following conclusions can be drawn: the welfare of CWLs is very poor, in terms of their safety, health and holidays etc. The work is characterised by women with no education or at best primary school and have got many children. Most of the CWLs are poor, single parent or with weak, absent or uncaring husband and thus have to provide for the upkeep of their children. To ameliorate the situation, the study recommends that: There should be a standard scale for the wage of laborers; there should be welfare facilities and amenities on sites. there should a drastic change in Health and Safety and Environment

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(HSE) policy of NCCs ,there is need for protection and medication for laborers on site ; there is need for education and skill development; there is need for some form of social security for the informal sector especially CWLs; furthermore free education in form of scholarship should be awarded to the poor and vulnerable children; government should organise poverty alleviation programmes and give out short term loan to women for personal businesses or entrepreneurship; free health care services should be given to women generally because of hazards exposed to; the aged should also be catered for as it was discovered from research that women up to 60 years and above are involved in unskilled construction work.

REFERENCE

- 1) Aboribo, R. I., Opara, J. A & Nosike, A. N. (2000). Women and Development in Nigeria: A Contemporary Perspective, *African Journal of Social and Policy Studies*, 1(2): 73–79.
- 2) Adegbite, A. A. (1994). Analysis of hand anthropometric data on Nigerian females in relation to hand tool design; A case study of Gari processors, unpublished B.Sc. project, University of Ibadan, Nigeria
- 3) Adeyemi, A.Y., Ojo, S. O., Aina, O. O. & Ayangade, J. A. (2004). "Construction process rationalization strategies or sustainable mass housing delivery in Nigeria", *Proceedings of XXXII-IAHS World Housing Congress, Trento*
- 4) Adeyemi, A. Y., Ojo, S. O., Aina, O. O & Olanipekun, E. A. (2006). Empirical Evidence of Women under-representation in the Construction Industry in Nigeria. *Journal of Women in Management Review*, 21(7), 567 — 577.
- 5) Adeyemo, A (1984). Woman in Rural Areas: A Case Study of Southwestern Nigeria, *Canadian Journal of African Studies / Revue Canadienne des Études Africaines*, 18(3), 563-572
- 6) Agapiou A. and Dainty A.R.J. (2003). "Client-led approaches to increasing participation of women and ethnic minorities in the construction workforce: A framework for change". *Journal of Contract Procurement* 9(PT 2): 4-16
- 7) Agapiou, A. (2002). "Perceptions of gender roles and attitudes toward work among male and female operatives in the Scottish construction industry", *Construction Management and Economics* 20(8): 697-705
- 8) Agberia, J.T. (1996). 'The Role of Women in the Development of Nigerian Pottery Art: Abatan and Kwali as Paradigm of Two Traditions', in Yomi Oruwari (ed.), *Women, Development and Nigerian Environment*, pp. 156–62. Ibadan: Vantage Publishers
- 9) Aguirre, D., Leila, H., Christine, R. & Karim, S. (2012). *Empowering the Third Billion. Women and the World of Work in 2012*, Booz and Company.
- 10) Ajayi, M. A. & Olotuah, O. A. (2005). 'Violation of Women's Property Rights within the Family', *Agenda*, No. 66, *Gender-Based Violence Trilogy*, 1(1): 58–63.
- 11) Akomolafe, M. A & Mohammed, M. A. (2015). Gender Barrier in Construction Industry: A Review of Women Involvement, *International Journal Modern Management Science*, 4(1), 10-21
- 12) Aladekomo, F. O. (2004). Casual Labour in a Nigerian Urban Center, *Journal of Social Science* 9(3), 207-213
- 13) Amali, E. (1989). 'The Role of Women in Agricultural Development Process', *Development Studies Review*, 2(1 & 2): 50–57
- 14) Amaratunga, D., Haigh, R., Lee, A., Shanmugan, M. & Elvitigala, G. (2006) *Construction Industry and Women: A Review of the Barriers*. In: (Eds) Amaratunga, D., Shanmugan, M., Haigh, R., and Vrijhoef, R. *Proceedings of the 6th International Post Graduate Research Conference. Delft Technical University, the Netherlands, 6th-7th April, 2006*, 559-571
- 15) Anumba, C., Dainty, A., Ison, S. & Sergeant, A. (2004). the utilisation of GIS in the construction labour market planning process, *proceedings COBRA 2004 at Leeds 7-8 September*
- 16) Bagilhole, B. M., Dainty, A. R. J. & Neale, R. H. (1995). Innovative personnel practices for improving women's careers in construction, In: *Proceedings of 11th ARCOM Conference, September 18-20, York*
- 17) Barthorpe, S, Duncan, R & Miller, C. (1999). A literature review on studies in culture: A pluralistic concept. In Ogunlana, S.O. (Ed.) *Profitable Partnering in Construction Procurement*, Spon, London, pp. 533-542
- 18) Benneth, J. F., Davidson, M. J. & Gale, A. W. (1999). Women in construction: a comparative investigation into the expectations and experiences of female and male construction undergraduates and employees, *Women in Management Review*, 14 (7), 273-91
- 19) Boman, M. (1996). Forging better links between industry, education and community: women in engineering perspective, In: *Proceedings of IIR Conference on Women in Engineering, May 8±9, Sydney*

Socio-Economic Challenges Affecting Construction Women Labourers (Cwls) in The Nigerian Construction Sector (NCS)

- 20) Callaway, A. (1964). Nigeria's Indigenous Education: The Apprentice System: ODU. *Journal of West African Studies*, 1(1), 62-79
- 21) Callaway, A. (1979). The Urban Informal Sector, Paper Presented at the National Conference on Manpower Constraints to Nigeria's Economic Development 29 January to 1 February
- 22) Campbell, D. & Ahmed, I. (2012). The Labour Market in Developing Countries, Retrieved October 29 from http://www.iza.org/conference_files/worldb2012/campbell_d2780.pdf.
- 23) Carr, M. (2004). *Chains of Fortunes: Linking Women Producers and Workers with Global Markets*, London: Commonwealth Secretariat
- 24) Census of India (2001). New Delhi: Government of India
- 25) Charles, N. (1993). Gender divisions and social change, Harvester Wheatsheaf
- 26) CIB (1996). *Tomorrow's team: women and men in construction*, CIB Working Group 8 Report, Thomas Telford, London.
- 27) CITB-Construction Skills (2004b). CITB-Construction Skills, Norfolk, available online: www.citb.co.uk/equal-ops/statistics
- 28) Clark, L., & Wall, C. (1998). UK construction skills in the context of European developments, *Construction Management and Economics*, 16(5), 553-67
- 29) Clarke, L. (2004). *Women in construction*, Bruxelles, CLR/Reed Business Information
- 30) Construction Industry Board (1996). *Tomorrow's Team: Women and Men in Construction*. Thomas Telford, UK
- 31) Construction Industry Training Board (CITB) (2004). *Trainee Numbers Survey*, CITB, Bircham Newton
- 32) Construction Industry Training Board Construction Skills, (2002). *Employers Skills Needs Survey 2002*, www.citb.org.uk/research/pdf/empl-skill-need-survey-2002
- 33) Dainty, A., Bagilhole, B. & Neale, R. (2000a). A grounded theory of women's under achievement in large UK construction companies, *Construction Management and Economics* 18, 239-250
- 34) Dainty, A. R. J. (1998). A grounded theory of the determinants of women's under achievement in large construction companies. PhD. thesis, University of Loughborough
- 35) Dainty, A. R. J., Bagilhole, B. M. & Heale, R. H. (2001) "Male and female perspective on equality measures for the UK construction sector", *Women in Management Review*, 16(6), 297-304
- 36) Dainty, A. R. J., Bagilhole, B. M. & Neale, R. H. (2000). A grounded theory of women's career underachievement in large UK construction companies. *Construction Management and Economics* 18(2), 239-250
- 37) Dainty, A. R. J., Bagilhole, B. M., Ansari, K. H. & Jackson, J. (2004). Creating equality in the construction industry: an agenda for change for women and ethnic minorities, *Journal of Construction Research*, 5(1), 75-86
- 38) Davies, R. (1979). *Informal Sector or Subordinate mode of Production: A Model*, In R. Bromley and C. Gerry (eds.), *Casual Work and Poverty in Third World Cities*. New York: Wiley
- 39) Dorsey, R. W. & Minkarah, E. C. (1993). *Women in construction*, In: *Proceedings of CIB W65, Trinidad, West Indies*
- 40) EOC (2005a). *Facts about Men and Women in Great Britain 2005*, Equal Opportunities Commission
- 41) EOC (2005b). *Then and now: 30 Years of the Sex Discrimination Act. How has life changed for women and men since 1975?*
- 42) Fapohunda, J. (1985). *The Informal Sector of Lagos*, Ibadan: University Press Ltd
- 43) Faruquee, R. (1994). *Nigerian: ownership abandoned in Hussein, I. & Faruquee, R. (eds.) adjustment in Africa: lessons from country case studies*. Washington, DC: World Bank
- 44) Federal Office of Statistics (1996). *Socio-economic Profile in Nigeria*. Lagos: Federal Office of Statistics
- 45) Fielden, S. L., Davidson, M. J., Gale, A. W. & Davey, C. L. (2000). Women in construction: the untapped resource, *Construction Management and Economics*, 18(1), 113-21
- 46) Fielden, S. L., Davidson, M. J., Gale, A. W. & Davey, C. L. (2001). Women, equality and construction, *Journal of Management Development*, 20(4), 293-304
- 47) Folorunso, I. (2000). 'Women Empowerment and the Development of Nigeria in the 21st Century', *African Journal of Social and Policy Studies*, 1(2), 126-30
- 48) Gale, A.W. (1991). What is good for women is good for men: theoretical foundations for action research aimed at increasing the proportion of women in construction management", in Barret, P. and Males, R. (Eds), *Practice Management: New Perspective for the Construction Professional*, Chapman and Hall, London

Socio-Economic Challenges Affecting Construction Women Labourers (Cwls) in The Nigerian Construction Sector (NCS)

- 49) Gale, A. W. (1992). The construction industry's male culture must feminize if conflict is to be reduced: the role of education as a gatekeeper to a male construction industry", in Fenn, P. and Gameson, R. (Eds), *Construction Conflict: Management and Resolution*, F.N. Spon, London, pp. 416-27
- 50) Gale, A.W. (1994). "Women in non-traditional occupations: the construction industry", *Women in Management Review*, 9(2), 3-14
- 51) Gale, A.W. & Skitmore, M. (1990). Women in the construction industry: A discussion on the findings of the two recent studies of the construction industry sector". In: "Subject I, Management of the building firm. *Building Economics and Construction management* 6, 209-221
- 52) Gerry, C. (1978). *Petty Production and Capitalist Production in Dakar: The Crisis of the Self employed*. *World Development*, 6, 1147-1160
- 53) Gilbert, G. L. & Walker, D. H. T. (2001). Motivation of Australian white-collar construction employees: a gender issue? *Engineering, Construction and Architectural Management*, 8(1), 59-66
- 54) Ginige, K., Amaratunga, D., & Haigh, R. (2007). Gender stereotypes: A barrier for career development of women in construction. In: *Built Environment Education Conference*, University of Salford, Manchester, UK.
- 55) Government of India (1988a). *Shramshkati: Report of the National Commission on Self -Employed Women and Women in the Informal Sector*, New Delhi
- 56) Government of India (1988b). *Survey of Socio-Economic Conditions of Women in Unorganized Industries*, Labour Bureau Ministry of Labour, New Delhi
- 57) Greed, C. (2000). "Women in the construction professions: achieving critical mass", *Gender, Work and Organization*, 7(3), 181-96
- 58) Gregson, S., Zhuwau, T., Anderson, R. M. & Chandiwana S. (1997). The early socio-demographic impact of the HIV-1 epidemic in rural Zimbabwe. *SAfAIDS News*, 5, 2-5
- 59) Gritziotis G. & Stoll P. (2002). *Construction Labour Market Information*, www.caf-fca.org.
- 60) Guisinger, S. & M. Irfan. (1980). "Pakistan's Informal Sector". *Journal of Development Studies*, 16, 412- 426
- 61) Gurjao, S. (2006). *Inclusivity: The Changing Role of Women in the Construction Workforce*, Chartered Institute of Building Report (CIOB).
- 62) Hakim, C. (1996). *Key issues in women's work: Female Heterogeneity and the Polarisation of Women's Employment*. Glasshouse, UK.
- 63) Hibbett, A. & Meager, N, (2003). Key indicators of women's position in Britain: Findings from a recent comprehensive study of women in Britain commissioned by the Women and Equality Unit. *National Statistics: Labour Market Trends*, 111(10), 9
- 64) Hillebrandt, P. M. (1985). *Economic Theory and the Construction Industry*, The Macmillan Press, London, p. 12.
- 65) *Human Development Report (1998)*. Published for the United Nations Development Programme (UNDP), New York: Oxford University Press
- 66) Igbeka, J. C. (1993). Some ergonomic studies of Nigerian women in agricultural processing, in C. Annevelink, R. K. Oving and H. W. Vos (eds), *XXV CIOSTA CIGR V Proceedings (The Netherlands, Wageningen Pers, Wageningen)*, 183 – 189
- 67) ILO, (International Labour Organisation) (1972). *Employment, Incomes and Equality in Kenya*, Geneva: International Labour Office
- 68) ILO, (2001). *The construction industry in the twenty first century: Its image, employment prospects and skill requirements*, Tripartite Meeting on the Construction Industry in the Twenty-first Century: Its Image, Employment Prospects and Skill Requirements Geneva, 2001
- 69) ILO, (2010). *Occupational Safety and Health Management in the construction sector 13 – 24 September Turin, Italy*
- 70) ILO, (2009). *Global employment trends for women: March 2009 / International Labour Office*. - Geneva: ILO
- 71) ILO, (2012). *Employment and Gender Differences in the Informal Economy*, PowerPoint presentation, Geneva.
- 72) Iro M. I. (1976). The Main Features of a Working Life Table of the Female Labour Force in Nigeria, *Journal of the Royal Statistical Society*, 139(2), 258-264
- 73) Iro, M. I. (1974). A working life table for males of rural Nigeria: *American Statistical Association Social Statistics Section*, pp. 340-345.
- 74) Isaacs, B. (2001). Mystery of the missing engineers: a solution, *Journal of Professional Issues in Engineering Education and Practice*, 127(2), 85-91

Socio-Economic Challenges Affecting Construction Women Labourers (Cwls) in The Nigerian Construction Sector (NCS)

- 75) Jhabvala, R & Sinha, S (2007). Liberalization and the Woman Worker, www.sewa.org
- 76) Jhabvala, R & Sinha, S. (2006). Social Protection for Women Workers in the Informal Economy, *Comparative labor law & Policy Journal* 27(2).
- 77) Jimoh, R. A., Oyewobi, L. O., Adamu, A. N. & Bajere, P. A. (2016). Women Professionals' Participation in the Nigerian Construction Industry: Finding Voice for the Voiceless. *Organization, Technology and Management in Construction*, 8, 1429-1436. <https://doi.org/10.1515/otmcj-2016-0005>
- 78) Jwasshaka, S. K. & Amin, N. F. (2020). Gender Discrimination in Building Construction Industry in Nigeria: Threat to Achieving Goal-5 of Vision 2030. *World Journal of Engineering and Technology*, 8, 33-41.
- 79) Kehinde, J. O. & Okoli, O. G. (2004). Professional Women and Career Impediments in the Construction Industry in Nigeria, *Journal Professional, Issues in Engineering Education and Practice*, 130(2), 115-119
- 80) Labeodan, O. A. (1992). Women in the Informal House-Building Industry in Nigeria, *Habitat International*, 16(1), 17-24
- 81) Lavender, S. (2000). *Management for the Construction Industry*. Longman & CIOB.
- 82) Lavender, S. (1996). *Management for the Construction Industry*, Longman, Harlow.
- 83) Lingard, H. & Sublet, A. (2002). The impact of job and organizational demands on marital or relationship satisfaction and conflict among Australian civil engineers, *Construction Management and Economics*, 20(6), 507-21
- 84) MacKenzie, S, Kilpatrick, A. R & Akintoye, A (2000). UK Construction Skills Shortage Response Strategies and an Analysis of Industry Perceptions. *Construction Management and Economics*, 18, 853-862
- 85) Mazumdar, D. (1976). The Urban Informal Sector, *World Development*, 4(8), 655-679.
- 86) Moser, C. O. N. (1985). *Housing Policy and Women: Towards a Gender-Aware Approach*, DPU Gender and Planning Working Paper No. 7 Draft document commissioned by Habitat, Nairobi, Kenya
- 87) Moser, C. O. N. (1978). Informal sector or Petty Commodity Production: Dualism or Dependence in Urban Development, *World Development*, 6, 1041- 1064
- 88) Nandal, S. (1995). *Cultural Pattern and Economic Participation of Women*, Radha Publications, Delhi
- 89) Nandal, S. (2006). Women workers in unorganized sector: A study on construction industry in Haryana, *International Journal of Development Issues*, 5(2), 119-132
- 90) National Bureau of Statistics (2013). <http://nigerianstat.gov.ng/>
- 91) National Bureau of Statistics (2020). Retrieved from www.nigerianstat.gov.ng On 11th March, 2021
- 92) New York Times (November 26, 2007). *New York's Construction Boom Puts More Women in Hard Hats*.
- 93) Nkom, S. A. (1988). *Special Programmes for Rural Women*, Working Group paper at the DFRRRI workshop held at Durbar Hotel, Kaduna Nigeria
- 94) Nosike, A. N. (1996). 'Violence Against Women and Sustainable Development: A Contemporary Perspective', in Yomi Oruwari (ed.), *Women, Development and the Nigerian Environment*, pp. 53–62. Ibadan: Vantage Publishers.
- 95) NPC (2006). *Nigerian Census 2006*, federal government of Nigeria.
- 96) Odubiyi, T. B. (2018). Nigerian Professional Female Construction Workers in Vocational Occupations: Diversification or Deviation? *Organization, Technology and Management in Construction: An International Journal*, 10, 1696-1703.
- 97) Oganwu, P. I. & Omotor, D. G. (2000). 'Nigerian Rural Women in Sustainable Development: A Socio-Economic Perspective', *African Journal of Social and Policy Studies*, 1(2): 64–67.
- 98) Ogbuigwe, A. E. (1996). 'Sustainable Development in Nigeria: The Role of Women', in Yomi Oruwari (ed.), *Women Development and the Nigerian Environment*, pp. 69–74. Ibadan: Vantage Publishers.
- 99) Ogunsemi, D. R. (2015). *Value for Money in Construction Projects: The Quantity Surveyor's Quest*, being Inaugural Lecture Series 71 at the Federal University of Technology, Akure.
- 100) Okewole, I. A. (1997). Women's access to and control of housing accommodation in urban centres of the south-west zone of Nigeria: an assessment, *Proceedings of a National Symposium on the House in Nigeria*, Ile-Ife, Nigeria, pp. 93-6
- 101) Okunribido, O. O. (2000). A survey of hand anthropometry of female rural farm workers in Ibadan, Western Nigeria, *Ergonomics*, 43(2), 282 – 292
- 102) Olotuah, A. O. & Ajayi, M. A. (2008). Repositioning Women in Housing Development in Nigeria, *Indian Journal of Gender Studies*, 15: 101
- 103) Oppong, C. & Abu, K. (1987). *Seven Roles of Women: Impact of Education, Migration and Employment on Ghanaian Mothers*. Geneva: ILO.

Socio-Economic Challenges Affecting Construction Women Labourers (Cwls) in The Nigerian Construction Sector (NCS)

- 104) Orubuloye, O. (1987). "Values and costs of daughters and sons of Yoruba mothers and fathers", in Oppong, C. (Ed.), *Sex Roles, Population and Development in West Africa*, Heineman Educational Books Inc., Portsmouth, NH, pp. 86-90
- 105) Oruwari, Y. (1992). "The role of women in housing finance: a case study of Port Harcourt, Nigeria", Paper presented at the Fifth International Research Conference on Housing, Montreal
- 106) Priya, S. K. H. (2002). *Violence Against Women Construction Workers in Kerala, India*, Charities Aid Foundation, Delhi, India, Prepared for the Global Network for Women's Advocacy and Civil Society
- 107) Pyke, J. (1993). *Women in Building; The Missing 51%*. Australian Government Publishing Service, Canberra
- 108) Reddy, A. (2003). *A Socio-Economic Profile of the Construction Workers of Hyderabad City* in Anita Banerji, Raj Kumar Sen (ed.), *Women and Development*
- 109) Sa'ad, A. (2001). "Traditional Institutions and the Violation of Women's Human Rights in Africa: The Nigerian Case." In *African Women and Children. Crisis and Response* edited by Apollo Rwomire. Westport: Praeger,
- 110) Schmitz, H. (1982). "Growth Constraints on Small-Scale Manufacturing in Developing Countries: A Critical Review". *World Development*, 10(6): 429-450
- 111) Sethuraman, S. V. (1977). "The Urban Informal Sector in Africa". *International Labour Review*, 166(3), 343-352
- 112) SEWA (2000). *Labouring Brick by Brick: A Study of Construction Workers*, June retrieved on November, 20, 2010 www.sewa.org
- 113) Sinclair, A. (1998). *Doing Leadership Differently*. Melbourne University Press, Australia
- 114) Sodunke, A (2005). Unpublished Bachelor of Technology thesis, the Federal University of Technology Akure , Ondo State
- 115) Sokomba, M. T. (1990). "The participation of women in design and construction of housing stock in Nigeria", *Proceedings of the Nigerian Indigenous Building Materials Symposium, Ahmadu Bello University, Zaria, Nigeria*, pp. 213-37
- 116) Somerville, J., Kennedy, P. & Orr, L. (1993). *Women in the UK construction industry*, *Construction Management and Economics*, 11, 4
- 117) Squirchuk, R. (1996). *Women working in non-traditional roles: responses in corporate Australia*. In: *Proceedings of IIR Conference on Women in Engineering May 8-9, Sydney*
- 118) Stephen, M. (1992). *Poverty, Population and the Environment*, Background Paper No. 23, *World Development Report*. Washington, DC: World Bank.
- 119) Strategic Forum (2002). *Rethinking Construction: Accelerating Change*, Strategic Forum for Construction, London
- 120) Tan, W. (2004). *Practical Research Methods*, Singapore: Prentice Hall Pearson Education South Asia
- 121) Todaroc, M. P. (1989). *Economic Development in the Third World*, UK: Longman.
- 122) Trochim, W. M. (2006). *The Research Methods Knowledge Base*, (2nd Edition). Accessed on 20th November 2019, at <http://www.socialresearchmethods.net/kb>
- 123) Udry, C. (1995). *Gender, Agricultural Production and the Theory of the Household*, Department of Economics, Northwestern University, Evanston, IL 60208.
- 124) UNESCO (1995). *Nigeria women in science and technology profession, report on the national survey on science and technology potential of Nigerian women*, Macmillan, London
- 125) Uwakweh, B. O. & Maloney, W. F. (1991). *Conceptual model for manpower planning for the construction industry in developing countries* *Construction Management and Economics*, 199 1 , 9, 45 1-465
- 126) Van Staveren, I. & Odebode, O. (2007). *Gender Norms as Asymmetric Institutions: A Case Study of Yoruba Women in Nigeria*, *Journal of economic issues*, 61(4)
- 127) Weeks, J. (1975). "Policies for Expanding Employment in the Informal Sector of Developing Countries", *International Labour Review*, 111, 1-13
- 128) Wells, J. (1999). *The informal sector and the construction industry*, in *Managing Construction Industry Development in Developing Countries*, Report on the First Meeting of the CIB Task Group 29, Arusha, Tanzania, 21 - 23 September, CIB, Rotterdam, pp. 111-23.
- 129) Yankov, L. & Kleiner, B. H. (2001). *Human Resource Issues in Construction Industry*. *Management Research News*, 24(3/4), 101-105

Determination of Company's Value: A Study with Investment Opportunity as a Moderator Variable



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ABSTRACT: This research focuses on the state of a company's valuation, which is always changing. The utilized variables to estimate firm value include free cash flow and interest rates, both of which have a positive relationship with company's value. The second purpose is to investigate the current situation of investment opportunities in industrial companies that are similarly highly volatile. The availability of free cash flow indicates the interest rate has a positive relationship with the investment opportunity set. An explanatory research design is used in this study, which aims to examine the correlation between variables. The manufacturing companies that were listed on the Indonesia Stock Exchange between 2013 and 2018 are the focus of this study. Thus, data were collected from 612 units using a purposive sampling technique. The findings reveal that whereas free cash flow has a strong positive indirect effect on company value via mediating the investment opportunity set, interest rates have a negative and minor indirect effect on firm value via mediating the investment opportunity set.

KEYWORDS: Firm Value, Investment Opportunity Set, Free Cash Flow, Interest Rate, Dividend Policy, Managerial Ownership

I. INTRODUCTION

For investors, firm value is an important term because it is used by the market to appraise the company as a whole. Company's value and investor confidence are always in line. This is because the high stock price reflects investors' positive views of the company's future prospects. Shareholders can be rewarded with constantly rising stock prices if a company's stock price is consistently rising.

The rise and fall of stock prices on the stock market is a fascinating subject to be discussed recently. The global economic crisis of 2008 had a substantial influence on Indonesia's capital market, as seen by a 40-60% drop in stock values from their peak in 2008 (Kompas, 2008). The act of releasing shares by foreign investors in need of liquidity triggered this phenomenon, which was amplified by the participation of domestic investors who also released shares in groups. This condition is thought to have an impact on the company's worth.

Meanwhile, company management sometimes tends to give dishonest reports if the company does not achieve high profits as expected [1]. Shareholders and managers are at odds as a result of this situation. This conflict of interest emerges as a result of asymmetric information, in which managers have complete access to financial data while shareholders have not. Agency costs are sustained by the company due to conflicts of interest caused by asymmetric information [2].

The objective of this study is to emphasize the state of a company's value, which is constantly changing. Free cash flow and interest rates, which have a positive link with company value, are among the variables used to determine firm value. The second goal is to look into the state of the investment opportunity set in manufacturing firms that are also subject to variations. This is indicated by the presence of free cash flow, and the interest rate has a positive link with the investment opportunity set. With this study, it is believed that shareholders will have more complete information to assess a company's ability to make profits. In order to attract more investors and increase the company's performance, the company should also focus more on what variables can boost the company's success.

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II. LITERATURE REVIEW

A. *Corporate Values: Concepts and Theories*

The worth of the company (value of the firm) is a condition that a company has reached as an indication of public faith in the company after passing through a series of actions over several years, from the company's inception to the present. Increasing the company's worth is a success that fulfills the wishes of the owners, because as the company's value rises, so does the owners' well-being.

Firm value is critical since it reflects a firm's performance and can influence investors' perceptions of that company. A strong company value will lead the market to believe in the business's current situation or future prospects [3]. The price of shares traded on the stock exchange is a measure of company value for companies that issue shares in the capital market. The higher a company's stock price, the higher its value, which has an impact on the owner's financial well-being. The greater a company's stock price, the higher its value, which has an impact on the company's owner's wealth. Tobin'Q can be used to determine the value of a company.

The main indicator of a company's worth can be measured from a variety of perspectives. When examined from a certain perspective, this signifies that the company's value is regarded to be good. Free cash flow, interest rate, investment opportunity set, dividend policy, and managerial ownership are all indicators of firm value. Dividend policy and managerial ownership both have a moderating effect.

B. *Free Cash Flow and Investment Opportunity Set*

After the company has invested all of its cash in fixed assets, new products, and working capital required for corporate operations, free cash flow is cash flow that is available for distribution to all principals and debt owners. The term "cash flow" refers to the amount of money that is really available for distribution to investors. Increasing a company's cash flow is one approach for management to make it more valuable [4]. Investment alternatives provide potential for expansion, but organizations may not always take use of them. Companies who do not take advantage of investment possibilities incur higher costs than the value of the opportunity lost. Free cash flow has a considerable impact on the number of investment alternatives available [5]. The following hypothesis is presented based on this explanation:

H1: Free Cash Flow's Impact on the Investment Opportunity Set

C. *Interest Rate and Investment Opportunity Set*

Interest rate changes cause minor changes in investment demand. As interest rates rise, the projected return on an investment falls significantly. However, if variables other than the interest rate change, investment demand is predicted to shift. The relationship between interest rates and investment is negative, indicating that the lower the interest rates, the more investments will be made, and the higher the interest rates, the fewer entrepreneurs will invest [6]. The following are the hypotheses offered in this study:

H2: The interest rate has an impact on the selection of investment opportunities.

D. *Free Cash Flow and Company Value*

The company's free cash flow offers a lot of advantages when it comes to increasing the company's value. These advantages include boosting the welfare of shareholders and managers through dividend distribution and using firm operational financing as a source of internal capital. A study shows that free cash flow has a significant positive effect on firm value [7]. The results of Muhardi's research are in accordance with the results which show that free cash flow has a negative and significant effect on firm value [9]. However, some studies have shown different results that free cash flow has a significant negative effect on stock prices, because the availability of high free cash flow allows moral hazard to management, so it can reduce firm value [8]. The findings of this study back up the agency theory, particularly the free cash flow theory, which states that larger free cash flow has a negative influence on company value and increases the risk of corporate cash flow abuse. The company's strong free cash flow will imply that it is healthier, since it has free cash on hand, showing that it is in good shape. Free cash flow has a considerable beneficial effect on firm value [10] [11]. The following are the hypotheses offered in this study:

H3: Free cash flow has an impact on the value of a company.

E. *Dividend Policy Plays a Moderate Role in the Effect of Free Cash Flow on Company Value*

Free cash flow, on the other hand, might create a conflict of interest between shareholders and managers [12] [13]. To increase the link between free cash flow and firm value, dividend policy is required. A signaling function is the role of dividend policy in efforts to reduce conflict between principal and agent. The following hypothesis is formed based on the findings of prior studies in accordance with agency theory:

H3.1: The link between Free Cash Flow and Firm Value is strengthened by dividend policy.

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F. Managerial Ownership Moderates the Effect of Free Cash Flow on Company Value

The existence of a conflict of interest between shareholders and managers as well as asymmetric information causes agency costs to be incurred by the company so that in the long term it reduces the company's financial performance. This information inequality causes moral hazard and adverse selection by management. Management assumes that the contract they entered into with the company did not work as expected. This condition creates asymmetric information between managers and shareholders regarding the use of free cash flow so that it has the potential to cause a conflict of interest and have an impact on company performance. Efforts to reduce conflicts between principals and agents are by having a role in the managerial ownership structure as a monitoring function. The role of managerial ownership is expected to increase firm value.

H3.2: Managerial Ownership strengthens the relationship between Free Cash Flow with Company Value

G. Interest Rate and Firm Value

Research shows that high interest rates affect the present value of the company's cash flows, so that existing investment opportunities are no longer attractive [14]. This makes investors no longer interested in investing which results in a decrease in stock prices and a decrease in company value. This study is in line with the interest rate variable that has a negative and significant effect on firm value [15]. Rising interest rates will encourage people to save and be lazy to invest in the real sector. The increase in interest rates will also be borne by investors, namely in the form of an increase in interest costs for the company. People do not want to risk making investments with high costs, as a result investment will not develop. Many companies experience difficulties in maintaining their lives, and this causes the company's performance to decline. The decline in company performance can result in a decrease in stock prices, which means the value of the company will also decrease. Thus interest rates have a significant effect on firm value. [16]

H4 : There is an influence of interest rates on firm value

H. Dividend Policy plays a role in moderating the effect of interest rates on firm value

If interest rates increase, investors are more interested in investing their funds in the banking sector and reduce investors' interest in investing their funds in the capital market [17]. So if the demand for shares decreases, the share price decreases and the company value also decreases, as a signal for investors to invest. Therefore, dividend policy and managerial ownership are needed to strengthen the relationship between interest rates and firm value. The hypothesis that is built based on previous research and signaling theory is formulated as follows:

H4.1: Dividend Policy strengthens the relationship between Level Interest Rate with Firm Value

I. Managerial Ownership Moderates the Effect of Interest Rates on Firm Value

Increasing managerial ownership helps to link the interests of managers and shareholders towards better managers making decisions and increasing firm value [18][19]. With managerial ownership, managers in managing the company are more careful in making decisions because they share the consequences of the decisions taken when they want to increase the value of the company. The hypotheses built based on previous research and monitoring theory are formulated as follows:

H4.2: Managerial Ownership strengthens the relationship between Interest Rates and Firm Value

J. Free Cash Flow, Investment Opportunity Set and Firm Value

Free Cash Flow reflects the company's discretion to invest, excess retained earnings are invested in the future. Investor confidence in the company, which is accompanied by investment decisions, gives a positive signal for the company's growth in the future. This increases the value of the company. The hypothesis that is built based on previous research is formulated as follows:

H5: There is an indirect effect of Free Cash Flow on Company Value

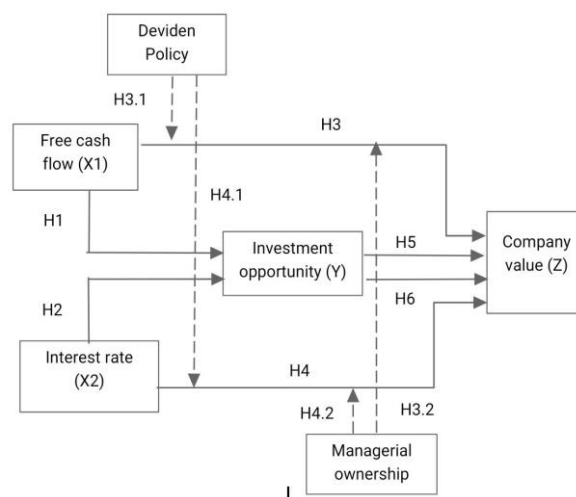
K. Interest Rate, Investment Opportunity Set and Firm Value

The interest rate has a role as a controller for investors to set investment opportunities. When interest rates are high, it influences investors to invest their funds in stocks that provide high returns with low risk. Conversely, when interest rates are low, it influences investors to invest funds in the form of shares to provide higher yields even with a high level of risk. High interest rates increase the cost of capital borne by the company and cause the return on an investment to increase [20]. The hypothesis is as follow:

H6: There is an indirect effect on interest rates to Company Value

The following empirical research model is presented to determine the direct or indirect effect of free cash flow, interest rate on firm value moderated by dividend policy, and managerial ownership, based on the theoretical basis and empirical studies regarding firm value, free cash flow, interest rates, investment opportunity sets, dividend policy, and managerial ownership, as well as previous studies. As a result, the empirical research model is as follows:

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L. Research empirical model

III. METHODOLOGY

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A. Research Design

This study employed an explanatory research design, which tries to evaluate a theory or hypothesis in order to enhance or even refute the existing research theory or hypothesis. This quantitative approach tries to collect information, data, and knowledge about topics that are not quite known.

B. Population and Sampling Procedure

Manufacturing companies that have been listed on the Indonesia Stock Exchange (IDX) for six years, from 2013 to 2018, are the population of interest, with purposive sampling being employed to obtain a representative sample.

C. Analysis Techniques

Panel data regression is the analysis technique utilized in this work, which combines time series data with cross section data to create panel data, which consists of numerous individual units observed over a period of time. There were 102 cross sections (manufacturing enterprises) in this study, with the same time series (from 2013 to 2018) or 6 (six) periods.

D. Robustness Test

Normality, multicollinearity, heteroscedasticity, and autocorrelation tests are used to examine the conventional assumptions in the first stage. The empirical data used in this study reveals that the research model met all of the assumptions, allowing for the interpretation of the panel data regression equation.

E. Hypothesis testing

The F test was performed to examine if the independent variables (X) had a significant effect on the dependent variable (Y) at the same time. Meanwhile, a t test was employed to assess the significance of the independent variables' (X) influence on the dependent variable (Y). Multiple regression analysis is used to determine whether there is a relationship between the three independent variables (X1), Market Capitalization (X2), Company Size (X3), Free Cash Flow (X3), Dividend Policy (X4), and Interest Rate (X5), and the non-independent variable (Y), the company's value.

Hypothesis test	Coefficient	Std. Error	t value	Sign
Constant	0.2823	0.007652	36.89638	0.0000
X1	- 0.0002	1.89E-05	- 8.391543	0.0000
X2	0.0490	0.013167	3.719586	0.0002
X1*M1	-7.70E-05		- 0.315349	0.7526
X1*M2	0.000831		2.211168	0.0275
X2*M1	-7.70E-05		- 0.315349	0.7526
X2*M2	0.000831		2.211168	0.0275
R Square	0.4067			

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Adjusted R Square	0.2864			
F Statistic	3.3807			
F statistic significance	0.0000			

a. Dependent Variable: TOBINS'Q

Based on statistical parameters, the t-statistics of free cash flow (X1) is 8.391543, which is greater in the t-table of 1.645 at a significance of 0.05 or a significant probability value of 0.00 is smaller at 0.05, indicating that the decision H01 is rejected, clearly showing that free cash flow has a significant effect on the value company. Meanwhile, the interest rate (X2) has a t-statistic of 3.719586, which is bigger in the t-table of 1.645 at a significance of 0.05 or a significant probability value of 0.00 is smaller at 0.05, rejecting the decision H04, means that interest rates have a significant impact on company value.

When the effect of free cash flow and interest rates is moderated by dividend policy (M1) and managerial ownership (M2), the t-statistic of dividend policy (M1) is 0.315349, which smaller on the t-table of 1.645 at a significance of 0.05 or a significant probability value of 0.7526 greater than 0.05, thus the decision H3.1 is accepted, indicating that the dividend policy does not moderate the relationship between Free Cash Flow and Firm Value. The decision H3.2 is rejected because the t-statistic of managerial ownership (M2) is 2.211168, which is greater in the t-table of 1.645 at a significance of 0.05 or a significant probability value of 0.0275 is smaller at 0.05, implying that managerial ownership moderates the relationship between Free Cash Flow and the company's value. Similarly, the influence of interest rates on business value when regulated by dividend policy and management ownership.

Hypothesis test	Coefficient	Std. Error	t value	Sign
Constant	- 0.0891	0.153967	- 0.57873	0.5630
X1	0.0405	0.020164	2.00954	0.0450
X2	- 0.0649	0.072053	- 0.90081	0.3681
Y	- 0.3527	0.067437	- 5.22956	0.0000
R Square	0.8442			
Adjusted R Square	0.8122			
F Statistic	26.4143			
Significance F Statistic	0.0000			

a. Dependent Variable: TOBINS'Q

Table 2 shows that free cash flow has a considerable positive effect on firm value via the intervening variable, namely the set of investment opportunities. As a result, the collection of investment opportunities can be used as an intervening variable to examine the impact of free cash flow on company value.

Table 2 shows that the interest rate has no substantial effect on company value because of the intervening variable, namely the collection of investment alternatives. Furthermore, the investment opportunity set variable has a negative impact on firm value. As a result, using the set of investment options as an intervening variable to examine the impact of interest rates on firm value is ineffective.

IV. RESULTS AND DISCUSSION

Six points became the findings in this investigation, and they addressed all of the hypotheses that had been created previously. The findings are explained in the following way:

1. Free cash flow has a strong negative impact on the investment opportunity set (IOS), which implies that it limits investment opportunities and makes it difficult to forecast the company's growth after growing with the IOS. High debt is used to balance the occurrence of agency costs that come with high free cash flow, especially for enterprises with poor investment prospects. High debt is used to offset the occurrence of agency expenses that come with high free cash flow.
2. Because of the high cost of capital to invest, interest rates have a large positive effect on the investment opportunity set (IOS). High rates boost investment opportunities. Interest rate changes cause minor changes in investment demand. As the interest rate rises, the expected return on an investment falls rapidly. However, if variables other than interest rates change, investment demand is predicted to shift. The interest rate on the loan is the most important component in determining the cost of investment. The higher the loan's interest rate, the more expensive the investment.
3. The impact of free cash flow on the value of a company. Free cash flow has a significant negative impact on company value, implying that unhealthy free cash flow is used in manufacturing companies, resulting in a decrease in company value. This is

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because each and economizing on operating cash and cash investment carried out on target in accordance with the budget and work program that has been determined by each department on operating cash in the form of cash receipts and cash disbursements, as well as investment cash and financing cash, can improve the effectiveness of cash management. High free cash flow promotes agency conflict and lowers company value, indicating that it has a major negative impact on firm value.

When the relationship between free cash flow and firm value is regulated by dividend policy, the association between free cash flow and firm value does not improve. This suggests that when the dividend policy is regulated, the magnitude of the Free Cash Flow of manufacturing businesses in Indonesia from 2013 to 2018 cannot boost the company's worth. This is because a company's dividend policy determines whether profits are given as dividends to shareholders or are maintained in the form of retained earnings for future investment financing. If profits are distributed as dividends, the company's retained earnings will be reduced, as would the overall sources of internal funds or internal financing.

When free cash flow is tempered by managerial ownership, the relationship between free cash flow and firm value is strengthened. This suggests that the magnitude of manufacturing businesses' free cash flow in Indonesia from 2013 to 2018 can boost the company's value. This managerial ownership acts as a company's internal monitoring function, reducing agency expenses and minimizing conflicts between management and shareholders.

4. Rates of interest have a substantial beneficial impact on the value of a company. This means that the interest rate isn't a direct determinant in investors' decisions to put their money into equities. Other aspects that investors consider while deciding whether or not to invest in a firm. Investors believe that the high interest rate will keep inflation at a distance. Interest rates have a strong beneficial effect on business value, according to the findings of this study. The interest rate is not a direct issue that investors should consider when deciding whether or not to invest in equities. If they put their money in the company, investors look at other variables that can be a good predictor. Investors are more concerned about the company's long-term viability. This contradicts the idea that interest rates have a substantial negative influence on company value because high interest rates lead investors to move their capital to other instruments such as bonds and other securities, allowing firm value to continue to be used to measure market performance. As a kind of return, investors are awarded shares and returns on a variety of assets.

When interest rates are regulated by dividend policy, the effect of interest rates on company value is negligible. This means that when the high interest rate of manufacturing businesses in Indonesia from 2013 to 2018 is regulated by dividend policy, the company's worth is not increased since dividend policy cannot be utilized to encourage investment activities of companies with a positive net present value. Managerial ownership has a large effect on business value, which moderates the effect of interest rates on company value.

5. The availability of a model update based on the study framework's findings, specifically the indirect effect of Free Cash Flow on Firm Value with the Investment Opportunity It has a considerable favourable effect when used as a mediating variable. When a corporation has made all of the necessary investments and capital to maintain the continuity of its operations, the company's free cash flow is given to investors.
6. With the investment opportunity set as a mediating variable, the indirect influence of interest rates on firm value is examined. According to the conclusions of this study, the indirect influence of interest rates on company value has a negligible negative impact on firm value. People are more likely to save when interest rates rise, and they are less likely to invest in the actual economy. The expense of rising interest rates is passed on to investors in the form of higher interest charges for the company. People do not want to take the danger of making high-risk investments, thus they do not develop.

V. CONCLUSION

The company's Free Cash Flow employed for investment opportunities has no limitations, according to the conclusions of this study. The company's condition is very dynamic, and its growth is good because global economic growth is also good at 4.8 percent, and the nature of Free Cash Flow as an alternative source of funds for investment opportunities, so the indirect effect of Free Cash Flow through the Investment Opportunity Set is significant positive for the company. Free Cash Flow that would otherwise be distributed as dividends to shareholders is diverted for investment opportunities. Instead, stockholders will get a "stock dividend," which will improve their ownership status.

REFERENCES

- 1) Basil, A. "Dividend behaviour and smoothing new evidence from Jordanian panel data", *Studies in Economics and Finance*, 26(3), 182–197, 2009.

Determination of Company's Value: A Study with Investment Opportunity as a Moderator Variable

- 2) Jensen, M. C. "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers", *The American Economic Review*, 76(2), 323–329, 1986.
- 3) Yulianti, Atika & Diyani, Lucia. "The Effect of Firm Size, Financial Ratios and Cash Flow On Stock Return", *The Indonesian Accounting Review*, 8, 229, 2018
- 4) Brigham Houston. 2010. *Dasar-Dasar Manajemen Keuangan* (11th ed.). Salemba Empat. Jakarta.
- 5) Lusiana, R., Mufidah, F., & Habibah, N., "Pengaruh Tingkat Free Cash Flow Terhadap Investment Opportunity Set Pada Perusahaan Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia", *The Asia Pacific Journal Of Management Studies*, 3(2), 2016.
- 6) Hadi, S. "Analisis Faktor-Faktor Yang Mempengaruhi Investasi Swasta Di Jawa Tengah", *Jurnal Ekonomi Dan Kebijakan*, 1(1), 2008.
- 7) Rofizar, H., & Arfan, M., "Nilai Perusahaan dalam Kaitannya dengan Arus Kas Bebas dan Pertumbuhan Perusahaan (Studi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia)", *Jurnal Telaah Dan Riset Akuntansi*, 6(1), 14–30, 2013.
- 8) Murhadi, W. R. "Studi Kebijakan Deviden: Anteseden dan Dampaknya Terhadap Harga Saham", *Jurnal Manajemen Dan Kewirausahaan*, 10(1), 1–17, 2008.
- 9) Arieska, M., & Gunawan, B. "Pengaruh aliran kas bebas dan keputusan pendanaan terhadap nilai pemegang saham dengan set kesempatan investasi dan dividen sebagai variabel moderasi", *Jurnal Akuntansi Dan Keuangan*, 13(1), 13–23, 2011.
- 10) Ni, Y., Huang, P., Chiang, P., & Liao, Y. "Cash Flow Statements and Firm Value: Evidence from Taiwan." *Quarterly Review of Economics and Finance*, 71, 280–290, 2019.
- 11) Nguyen, D. D., & Nguyen, A. H. "The Impact of Cash Flow Statement on Lending Decision of Commercial Banks: Evidence from Vietnam", *Journal of Asian Finance, Economics and Business*, 7(6), 85–93, 2020.
- 12) Oprea, R. "Free Cash Flow and Takeover Threats: An Experimental Study.", *Southern Economic Journal*, 75(2), 2008. <http://www.jstor.org/stable/27751389>.
- 13) Yudianti, N. 2003. The effect of investment opportunity set and earnings management to the relationship between free cash flow and shareholder value. Disertasi, Sanata Dharma University, Indonesia.
- 14) Sujoko dan Ugy Soebiantoro. "Pengaruh Struktur Kepemilikan Saham, Leverage, Faktor Interen dan Faktor Ekstern Terhadap Nilai Perusahaan", *Jurnal Manajemen Dan Kewirausahaan*, 1(1), 2007.
- 15) Tandelilin, E. 2010. *Portofolio dan Investasi: Teori dan aplikasi*. Kanisius.
- 16) Sarfraz Hussain, Abdul Quddus, Pham Phat Tien, Muhammad Rafiq and Drahomíra Pavelková. "The moderating role of firm size and interest rate in capital structure of the firms: selected sample from sugar sector of Pakistan", *Investment Management and Financial Innovations*, 17(4), 341-355, 2020.
- 17) Setiani, R. "Pengaruh Keputusan investasi, keputusan pendanaan, dan tingkat suku bunga terhadap nilai perusahaan pada perusahaan otomotif yang terdaftar di bursa efek indonesia", *Jurnal Manajemen*, 2(01), 2013.
- 18) Zamzamin, Zaminor & Haron, Razali & Othman, Anwar. "Hedging, managerial ownership and firm value", *Journal of Asian Business and Economic Studies*, 2021
- 19) Permata, I. S., Nawasih, N., & Indriati, T. (2018). Free Cash Flow, Kinerja Internal, Dan Pengaruhnya Terhadap Nilai Perusahaan. *Liquidity*, 7(1), 63–69. Permata, I. S., Nawasih, N., & Indriati, T. (2018). Free Cash Flow, Kinerja Internal, Dan Pengaruhnya Terhadap Nilai Perusahaan. *Liquidity*, 7(1), 63–69.
- 20) Mulya Ningsih, Meidiana., et.al. (2019). Pengaruh Suku Bunga, Struktur Modal, dan Ukuran Perusahaan Terhadap Nilai Perusahaan: Studi Empiris Pada Perusahaan Di Indonesia. *Jurnal Riset Akuntansi Dan Keuangan*, 7 (1), 97–110.

Mechanism Effect *Corporate Governance* and Characteristics Company on Disclosure *Intellectual Capital* on Registered Pharmaceutical Companies on the Indonesia Stock Exchange



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ABSTRACT: The purpose of this study was to analyze the effect of the mechanism corporate governance and company characteristics to disclosure intellectual capital in pharmaceutical companies listed on the Indonesia Stock Exchange in 2015-2020. The population of this study were pharmaceutical companies listed on the Indonesia Stock Exchange in 2015-2020. The sample in this study was 6 pharmaceutical companies which were determined through purposive sampling. This study analyzes the company's annual report using the method content analysis. Data analysis was carried out by classical assumption test, hypothesis testing and multiple regression analysis methods. The results of this study indicate that the size of the board of commissioners, the number of meetings of the board of commissioners, and profitability have an effect partially or simultaneously on disclosure intellectual capital. Meanwhile, independent commissioners, audit committees, number of audit committee meetings, company size, and leverage has no partial or simultaneous effect on disclosure intellectual capital.

KEYWORDS: corporate governance, company characteristics, and intellectual capital.

INTRODUCTION

In this era of globalization, companies are increasingly faced with the rapid development and changes in knowledge and technology. This condition becomes a challenge and a threat to competition and the existence of the company. According to Kuryanto (2008) there is now a phenomenon that occurs in society which is marked by a shift in the type of industrial or service society to the type of knowledge society. These conditions encourage companies to look for strategies that can be used to overcome these problems. The conventional strategy of the company's attention to physical assets disclosed in the financial statements cannot be used properly. Physical assets are deemed unable to provide more value to the company without proper and proper management by the company's human resources.

Therefore, According to Kuryanto (2008) companies must now change their business strategy from a business based on labor (*labor based business*) to knowledge based business (*knowledge-based business*). Knowledge-based companies apply the concept of knowledge management in charge of seeking information on how to select, manage, and utilize resources efficiently. The use of science and technology appropriately will be able to help companies achieve or maximize competitive advantage. Increased role *knowledge* as a vital asset for the company to identify and manage it in the form of *intangible assets* become increasingly important. However, this is not matched by clear reporting and identification in current traditional accounting practices (Rahardian, 2011). Thus, the company's financial statements become less informative. Therefore, the current accounting model must be expanded to cover the entire scope *intangible assets*.

One of the approaches used in assessment and measurement *intangible assets* is *intellectual capital* which has become the focus of attention in various fields, including management, information technology, sociology, and accounting. Intellectual capital is identified as a unit of several types *intangible assets* which can improve company performance and value creation within the company (Ulum, et al 2008). *International Federation of Accountants* (IFAC) defines *intellectual capital* as a synonym of *intellectual property* (intellectual property), *intellectual assets* (intellectual assets), and *intellectual knowledge* (knowledge assets). This capital can be interpreted as capital based on the knowledge owned by the company. Furthermore *International Federation of Accountants* (IFAC) also estimates that currently 50-90 percent of the firm's value is determined by upper management *intellectual capital* not management of fixed assets.

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Intellectual capital defined as knowledge resources in the form of employees, customers, processes, or technology that can be used to help create value and increase the company's competitive advantage (Fitriani 2012). Strategic role *intellectual capital* namely as a company's potential to increase competitive advantage that is not necessarily owned by other companies or difficult to imitate by other competing companies. Resource *intellectual* with all knowledge and the technology under its control is able to anticipate and adjust to all forms of uncertain situations that can threaten the existence of the company. These conditions are useful for increasing the value of the company through profit creation, *strategic positioning* (market share, leadership, and reputation), technological innovation, customer loyalty, cost reduction, and increased productivity (Fitriani 2012:2). Disclosure of financial and non-financial information presented in the annual report. This is regulated in Indonesia, namely Bapepam Kep 134/BL/2006 which states the company's obligation to issue an annual report.

Practices and disclosure of information *intellectual capital* is a logical consequence of the implementation of the concept *Good Corporate Governance* which states that companies need to pay attention to the interests of *stakeholders* by establishing active cooperation in accordance with regulations. Thus, the company gets the benefit of being able to maintain and maintain the long-term viability of the company. *Corporate Governance* includes a set of relationships between company management, the board of commissioners, shareholders, and *stakeholders* other. Structure and mechanism in *Corporate Governance* can be used to monitor fraudulent corporate management actions. Companies that apply the principles *good corporate governance* in its business activities, it will be more transparent and responsible in providing information that does not only comply with existing regulations or laws, but also material and relevant information for the benefit of the company. *stakeholders*. One of the important information needed by *stake holders* namely information about *intellectual capital*. *Stakeholders* requires information on how to master the knowledge or technology owned by the company to create value and increase competitive advantage.

Research on disclosure practices *intellectual capital* and the influence of company characteristics on disclosure practices *intellectual capital* in the annual report of public companies it is interesting to do in the Indonesian context for several reasons, as stated by Suhardjanto and Wardhani (2010) as follows:

1. With the launch of a government program on providing tax incentives for companies conducting research and development processes (*Research and Development*) since 2003, it is expected to increase the company's attention to the importance of *intellectual capital*, which ultimately on voluntary disclosure *intellectual capital*.
2. Based on a global survey conducted by Price Waterhouse Coopers and Taylor Associates in 1998, it was found that information about *intellectual capital* company is 5 out of 10 types of information needed *user*.

Disclosure research *intellectual capital* What is interesting to do is that based on data on the Indonesia Stock Exchange, it can be seen that 60% of companies in Indonesia with the characteristics of *low-IC intensive industries*, even though currently economic development no longer relies on physical assets, but rather on the importance of information and knowledge (*knowledge*) and the greatness of human resources in an organization (Wardhani, 2013). Based on Soewarno's (2011) research on companies listed on the Indonesia Stock Exchange, it is proven that *intellectual capital* has an important role in improving organizational or company performance. Importance *intellectual capital* in. In order to improve the company's performance, it needs to be supported by disclosure *intellectual capital* by the company. However, disclosure *intellectual capital* regarding information *knowledge* and the greatness of HR has not been widely disclosed in *annual report* companies in Indonesia so that companies lose the important values that exist within the company, especially now that the government has launched its implementation *good corporate governance* one of which is the company must be transparent to the users of financial statements.

Based on this background, the writer wants to research and find out (1). Does the size of the board of commissioners affect disclosure *intellectual capital* ?, (2). Does the number of board of commissioners meeting affect disclosure *intellectual capital* ?,

(3). Does the independent commissioner affect disclosure *intellectual capital*?, (4). Does the audit committee affect disclosure *intellectual capital* ?, (5). Does the number of audit committee meetings affect disclosure *intellectual capital* ?, (6). Does company size affect disclosure? *intellectual capital* ?, (7). Is *leverage* affect disclosure *intellectual capital* ?, (8). Does profitability affect disclosure *intellectual capital* ?, (9). Is the size of the board of commissioners, number of board of commissioners meetings, independent commissioners, audit committees, number of audit committee meetings, company size, *leverage*, and profitability affects disclosure *intellectual capital* ?

THEORITICAL REVIEW

The relationship between the size of the board of commissioners and disclosure intellectual capital

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Based on agency theory, the board of commissioners can function as the highest controlling tool for the company. The board of commissioners is tasked with monitoring the actions of managers so that incidents such as fraud can be prevented. Monitoring actions taken can reduce agency costs by emphasizing managers to disclose information about *intellectual capital* relevantly and accurately. It aims to align the interests between the agent and the principal (Fitriani, 2012).

With the larger the size of the board of commissioners of a company, the supervisory and control performance will be better and more effective so that it will increase disclosure *intellectual capital*.

The relationship between the number of board of commissioners meeting with disclosure intellectual capital

Agency theory explains that *agency problem* occurs because of differences in interests between the principal and the agent. To avoid this, the company needs to hold a board of commissioners meeting. The board of commissioners meeting is a medium for communicating and coordinating with the board of commissioners to make decisions regarding company policies. In the meeting it will be determined the effectiveness of the supervisory mechanism that has been implemented or will be implemented (Widagdo and Chariri, 2014). With frequent meetings of the board of commissioners, it is hoped that supervision and control will be better and more effective so that it will increase disclosure *intellectual capital*.

Independent commissioner's relationship with disclosure intellectual capital

Independent commissioners are members of the board of commissioners who do not have financial, management, share ownership and or family relationships with other members of the board of commissioners, directors and or controlling shareholders or other relationships that may affect their ability to act independently. One form of independent commissioner's control is to request disclosure of information *intellectual capital* sufficient from the management. Disclosure *intellectual capital* can be used as a means for companies to manage harmonious relationships with *stake holders* his. In addition, through disclosure *intellectual capital* expected to provide a positive value for the company (Setianto and Purwanto, 2014).

Audit committee relationship with disclosure intellectual capital

The audit committee is tasked with assisting the board of commissioners in carrying out their supervisory duties. The audit committee functions as a management control tool to prevent fraudulent actions such as presenting inaccurate and relevant information. The audit committee's role is to control resources and consulting experts in relation to the need to demonstrate their responsibilities. The role of the audit committee has evolved over the years in order to meet the challenges of the ever-changing business, social and environmental world.

Legitimacy theory is closely related to reporting *intellectual capital* and use of methods *content analysis* to measure the breadth of reporting *intellectual capital* (Purnomosidhi, 2005). With the role of the audit committee, it is expected to have a greater responsibility in overseeing disclosure practices *intellectual capital*. An effective audit committee must improve internal control and act to reduce *agency cost* and as a powerful control tool to increase disclosure *intellectual capital* which has more value for the company (Ariyudha, 2010).

The relationship between the number of audit committee meetings and disclosure intellectual capital

Audit committee meetings hold meetings with various audit committees with various expertise. Coordination in the audit committee meeting discusses strategies and evaluation of the implementation of tasks such as supervision of financial statements, internal control, and supervision of good corporate governance. With the increasing frequency of audit committee meetings, it can improve coordination and improve the implementation of information monitoring *intellectual capital*, both in terms of quality and quantity, this is in accordance with the theory of legitimacy (Fitriani, 2012).

Relationship between company size and disclosure intellectual capital

The larger the size of the company, the higher the demand for information disclosure compared to smaller companies. By making disclosures *intellectual capital* more broadly, information asymmetry between shareholders and managers can be reduced. Shareholders will certainly have broader knowledge about the condition of the company, including about the prospects for creating company value in the future (Purnomosidhi, 2005). By reducing the information asymmetry between shareholders and managers, the agency costs incurred to monitor the performance of managers are also reduced. Therefore, to reduce agency costs, larger companies will certainly be motivated to make disclosures *intellectual capital* more broadly.

Connection leverage with disclosure intellectual capital

According to Purnomosidhi (2005) there is a potential to transfer wealth from *debt holders* to shareholders and managers in companies whose level of dependence on debt is very high, causing agency costs (*agency cost*) tall one. Companies with high leverage have an incentive to disclose more information. Companies with *leverage* The high value will also get the attention of

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creditors to ensure that the company does not violate the debt agreement. To reduce agency costs and information asymmetry between managers and creditors, the company will make wider disclosures, including disclosures *intellectual capital*. Thus, the higher *leverage* company then disclosure *intellectual capital* disclosed in the annual report more and more.

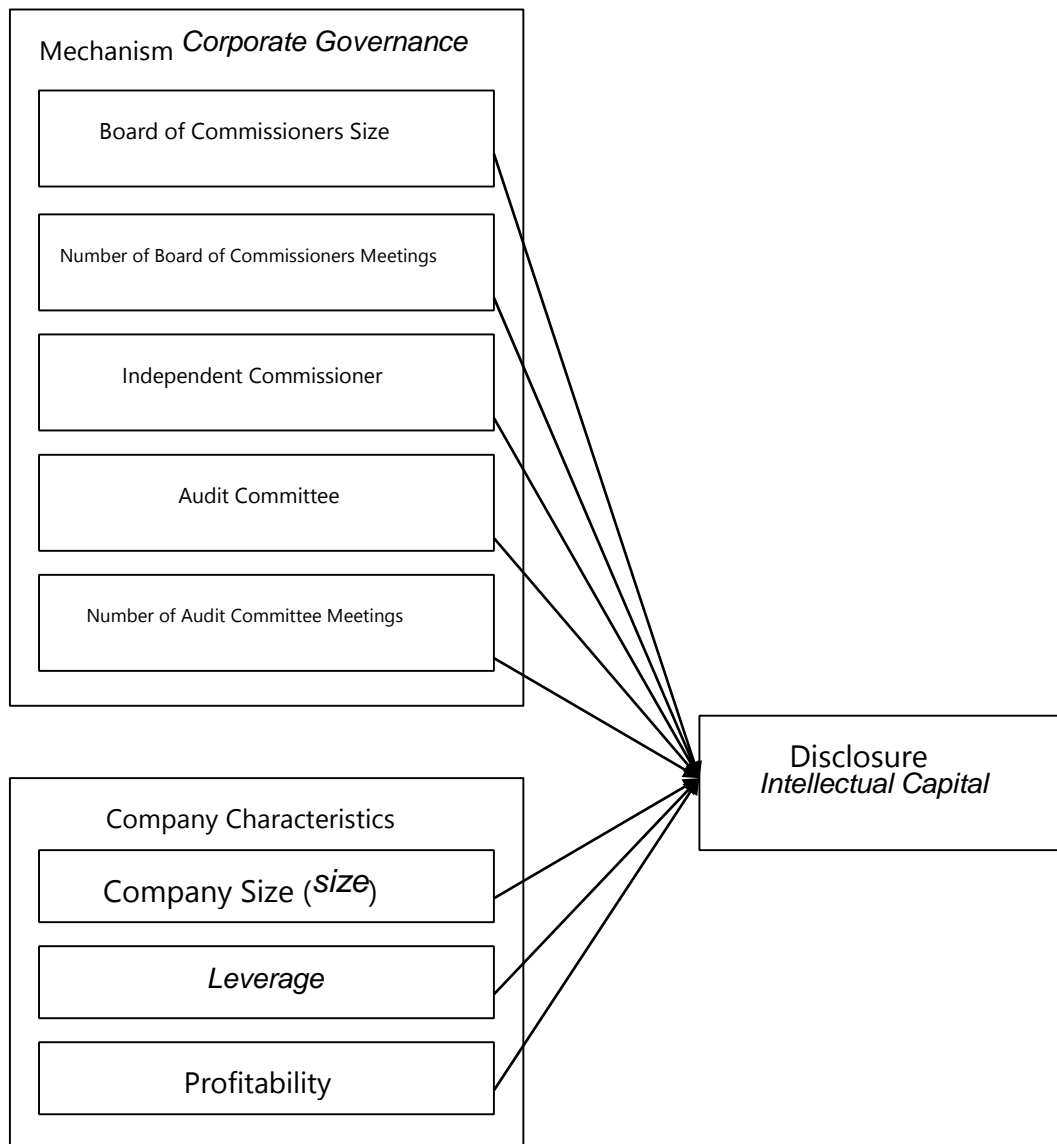
Relationship between profitability and disclosure intellectual capital

Profitability is a performance indicator carried out by management in managing wealth which is indicated by the profit generated. The calculation of this profitability ratio is useful for knowing the level of profit generated in one period, knowing the current year's profit position with the previous year, and knowing the progress of profits from time to time. Based on signal theory, companies that have high profitability can use disclosures *intellectual capital* to differentiate it from other less profitable companies. In addition, through these signals the company can show that profitability may be the result of investing in *intellectual capital* and companies will use disclosure *intellectual capital* to signal significant use in this form of investment (Setianto and Agus Purwanto, 2014). Thus, the higher the company's profitability, the company will disclose more information about *intellectual capital*.

RESEARCH METHOD

Research Approach

This research is a quantitative research approach. In this study, the effect of the mechanism *corporate governance* and company characteristics to disclosure *intellectual capital* in pharmaceutical companies. The conceptual framework for quantitative research is stated in Figure 2



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Hypothesis:

H1: The size of the Board of Commissioners has a positive effect on the disclosure of Intellectual Capital.

H2 : The number of meetings of the Board of Commissioners has a positive effect on the disclosure of Intellectual Capital.

H3 : Independent Commissioner has a positive effect on the disclosure of Intellectual Capital.

H4 : The Audit Committee has a positive effect on the disclosure of Intellectual Capital.

H5 : The number of Audit Committee meetings has a positive effect on the disclosure of Intellectual Capital.

H6: Firm size has a positive effect on the disclosure of Intellectual Capital.

H7: Leverage has a positive effect on the disclosure of Intellectual Capital.

H8: Profitability has a positive effect on the disclosure of Intellectual Capital.

H9: The size of the board of commissioners, number of board of commissioners meetings, independent commissioners, audit committees, number of audit committee meetings, firm size, leverage, and profitability have a positive effect on Intellectual Capital disclosure.

Research Object

The population used in this study were all pharmaceutical companies listed on the Indonesia Stock Exchange in 2015-2020. Sample selection using *purposive sampling* with criteria (1). Pharmaceutical companies that are listed on the Indonesia Stock Exchange and do not exit (*delisting*) in 2015-2020, (2). Pharmaceutical companies that publish and publish annual reports in 2015-2020 in full on the Indonesia Stock Exchange, (3).

Pharmaceutical companies disclosing information *intellectual capital* in the 2015-2020 annual report on the Indonesia Stock Exchange, (4). Pharmaceutical companies that have complete data related to research variables. From the criteria above, the sample that meets the criteria produces 6 pharmaceutical companies, for six years of observation from 2015 to 2020 so that a total sample of 36 company annual reports is obtained.

Data analysis technique

The technique used in this research with a quantitative approach is to test hypotheses one to nine that have been stated previously by using a regression approach. The regression model used can be formulated with the following equation:

$$ICD\ Index = +_1UKOM_i + _2RAKOM_i + _3COMIN_i + _4UKA_i + _5RADIT_i + _6Size_i + _7ROE_i + _8Leverage_i + \epsilon_i$$

The interpretation of the test results on the nine hypotheses proposed in this study is explained as follows:

Table 1. Hypothesis Testing Results

Description	Results	Information
Hypothesis 1: The size of the board of commissioners has a positive effect on disclosure <i>intellectual capital</i>	Accepted	0.001 < 0.05
Hypothesis 2: The number of board of commissioners meetings has a positive effect on disclosure <i>intellectual capital</i>	Accepted	0.002 < 0.05
Hypothesis 3: Independent commissioners have a positive effect on disclosure <i>intellectual capital</i>	Rejected	0.309 > 0.05
Hypothesis 4: The audit committee has a positive effect on disclosure <i>intellectual capital</i>	Rejected	0.065 > 0.05
Hypothesis 5: The number of audit committee meetings has a positive effect on disclosure <i>intellectual capital</i>	Rejected	0.445 > 0.05
Hypothesis 6: Firm size has a positive effect on disclosure <i>intellectual capital</i>	Rejected	0.761 > 0.05

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Hypothesis 7 : <i>Leverage</i> positive effect on disclosure <i>intellectual capital</i>	Rejected	0.483 > 0.05
Hypothesis 8 : Profitability has a positive effect on disclosure <i>intellectual capital</i>	Accepted	0.000 < 0.05
Hypothesis 9 : Board of commissioners size, number of board of commissioners meetings, independent commissioners, audit committee, number of board of commissioners meetings, company size, leverage, and profitability has a positive effect on disclosure <i>intellectual capital</i>	Accepted	0.000 < 0.05

Source: Processed Data

FINDINGS

The effect of the size of the board of commissioners on disclosure intellectual capital

From the results of the research data obtained information that the size of the board of commissioners has a significant effect on disclosure *intellectual capital*. The results of this study support the research of Fitriani (2012) which states that the size of the board of commissioners has an effect on the disclosure of intellectual capital. The large size of the board of commissioners in a company leads to good communication and coordination between board members, so that the board of commissioners carries out their functions in accordance with Law no. 40 of 2007. Thus, the larger the size of the board of commissioners of a company, the easier it will be to supervise the actions of managers so that incidents such as fraud can be prevented.

The effect of the number of board of commissioners meeting on disclosure intellectual capital

From the results of data research, information is obtained that the number of board of commissioners' meetings has a significant effect on disclosure *intellectual capital*. In the meeting of the board of commissioners, it is determined the effectiveness of the supervisory mechanism that has been implemented or will be implemented. With frequent meetings of the board of commissioners, it is hoped that the supervisory and control mechanisms will be better and more effective. The results of this study do not support the research of Fitriani (2012) with the title Effect of Structure *Corporate Governance* Regarding Intellectual Capital Disclosure which states that the more frequent meetings of the board of commissioners are held, it can slow down the decision-making process, causing inefficiency in the supervisory function and having an impact on decision-making regarding company policies.

The influence of independent commissioners on disclosure intellectual capital

From the results of the research data obtained information that the independent commissioner has no significant effect on disclosure *intellectual capital*. In this study, the average independent commissioner was 46.66% (already exceeding the minimum limit stipulated in the IDX Regulation dated July 21, 2001, which is 30% of the total number of commissioners). This condition is caused by the non-optimal independent commissioners of a company when the number is relatively large, so the monitoring and *internal control* expected top management did not go well. The results of this study support the research of Arifah (2012) which states that the proportion of independent commissioners has no effect on disclosure *intellectual capital*, due to the ineffective function of the independent commissioner in the company as a monitoring tool.

Effect of audit committee on disclosure intellectual capital.

From the results of the research data obtained information that the audit committee has no significant effect on disclosure *intellectual capital*. This is due to Bapepam regulation no. KEP 29/PM/2004 which states that every public company is required to have an audit committee consisting of at least one independent commissioner and 2 (two) other members from outside the company, causing the existence of audit committees in companies in Indonesia to only meet regulatory requirements. and avoid existing sanctions so that it has not been effective in carrying out its functions. The results of this study support the research of Fitriani (2012) which states that the audit committee has no effect on intellectual capital disclosure. However, the results of this

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study do not support the research of Ariyudha (2010) and Arifah (2012) which states: that the size of the audit committee has a significant effect on disclosure *intellectual capital*.

The effect of the number of audit committee meetings on disclosure intellectual capital

From the results of data research, information is obtained that the number of audit committee meetings has no significant effect on disclosure *intellectual capital*. This is not in accordance with the statement of the Indonesian Audit Committee Association (IKAI) which states that the frequency of audit committee meetings is carried out at least 2 times in 1 month so that a minimum of 24 meetings is required a year. The results of this study support the research of Fitriani (2012) which states that there is no effect between the number of audit committee meetings and disclosures *intellectual capital*. However, it is different from Ariyudha's research (2010) which states that the frequency of audit committee meetings has a positive effect on intellectual capital disclosure. both in terms of quality and quantity.

The effect of firm size on disclosure intellectual capital

From the results of the research data obtained information that the size of the company has no significant effect on disclosure *intellectual capital*. This is because companies do not realize that the biggest asset to show their company is by disclosing *intellectual capital*. Or the company realizes the importance *intellectual capital* but few companies are able to maximize *intellectual capital* his. To maintain the competitive advantage that has been owned, the company reduces the area of disclosure in an effort not to give a signal to competitors. That is, when large companies have employees (*employees*) with good skills and innovation skills, competing companies will be interested in recruiting these employees in exchange for higher salaries. This study does not support the research of Suhardjanto and Wardhani (2010) which states that company size has a significant effect on disclosure *intellectual capital*, the larger the size of the company, the higher the level of information disclosure *intellectual capital*.

Influence leverage against disclosure intellectual capital

From the results of research data obtained information that *leverage* does not have a significant effect on disclosure *intellectual capital*. This study supports the research of Suhardjanto and Wardhani (2010) which states that *leverage* does not affect the level of disclosure *intellectual capital*. Level *leverage* high is not in line with *intellectual capital* disclosed, because the company wants to maintain the image, good name, and reputation of the company so that the ratio management is not optimal *leverage* not widely known by external parties. *Leverage* does not affect disclosure *intellectual capital* because management wants performance to be assessed as good, so the company reduces the level of disclosure so as not to be in the spotlight of the public *debt holders*.

The effect of profitability on disclosure intellectual capital

In this study profitability as the company's ability to generate profits in a certain period. Profit is often one of the measures of company performance. Where when the company has a high profit means its performance is good and vice versa. The profitability ratio in this study uses the ROE formula (*Return on Equity*). This study supports the research of Suhardjanto and Wardhani (2010) which states that profitability affects the level of disclosure *intellectual capital*. The level of company profitability, which is indicated by ROE, has a significant effect on the level of company disclosure in financial statements *annual report*. With the greater the company's profitability, the company's financial capabilities are increasing. Disclosure of information is not without costs, therefore, with the improvement of the company's financial capabilities, the level of disclosure will increase *intellectual capital*.

CONCLUSION

The size of the board of commissioners has a significant effect on disclosure *intellectual capital*. The larger the size of the board of commissioners, the more effective the supervisory mechanism is due to good communication and coordination between board members, thereby reducing agency costs and increasing disclosure. *intellectual capital*. The number of board of commissioners meetings has a significant effect on disclosure *intellectual capital*. The existence of a board of commissioners meeting as a medium of communication and coordination with board members to determine decision-making regarding company policies and improve supervisory and control mechanisms to be better and more effective.

Independent commissioners have no significant effect on disclosure *intellectual capital*. With the existence of a relatively large independent commissioner in a company, the duties and authorities to supervise management are not optimal, causing non-optimal conservatism in disclosure of *intellectual capital*. The audit committee has no significant effect on disclosure *intellectual capital*. With the existence of an audit committee, its duties and functions are only to ensure that processes related to financial reporting disclosures run in accordance with generally accepted accounting principles, thereby minimizing agency costs. However,

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the role of the audit committee does not have a greater responsibility in overseeing disclosure practices *intellectual capital* which has more value for the company.

The number of audit committee meetings has no significant effect on disclosure *intellectual capital*. The lack of a number of audit committee meetings conducted by the company can lead to less than optimal audit committee meetings, so that coordination in meetings discusses strategies and evaluation of the implementation of tasks such as supervision of financial statements, internal identification, and supervision of corporate governance is less than optimal and can affect disclosure. *intellectual capital*. Firm size has no significant effect on disclosure *intellectual capital*. The larger the size of the company, the higher the level of disclosure information *intellectual capital*.

This is because the bigger the company, the greater the attention or spotlight of stakeholders. *Leverage* does not have a significant effect on disclosure *intellectual capital*. Level *leverage* high is not in line with *intellectual capital* disclosed, because the company wants to maintain the image, good name, and reputation of the company so that the ratio management is not optimal *leverage* not widely known by external parties.

Profitability has a significant effect on disclosure *intellectual capital*. With the greater the company's profitability, the company's financial capabilities are increasing. Disclosure of information is not without costs, therefore, with the improvement of the company's financial capabilities, the level of disclosure will increase *intellectual capital*.

Data Availability

The data is taken from using secondary data, where the author does the distribution data on research topics discussed in pharmaceutical companies. Besides that, the author uses other secondary data in the form of journals, books and other references related to the research topic discussed by the researcher.

Conflict of interest

The author declares that there is no conflict of interest regarding the publication of this paper

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REFERENCES

- 1) Arifah, Dista Amalia. 2012. The Effect of Corporate Governance Mechanisms on Disclosure of Intellectual Capital: In IC Intensive Companies. Indonesian Journal of Accounting and Finance Vol.9,No.2.
- 2) Ariyudha, Anantya. 2010. Effect of Corporate Governance Mechanisms on Intellectual Capital Disclosure Level. Dipenogoro Journal of Accounting. Vol 3, No.1.
- 3) Azizah, Nur. 2013. The Influence of Intellectual Capital and Industry Type on Firm Value With Corporate Governance as Moderating Variable. Essay. Faculty of Economics, Airlangga University.
- 4) Efandiana, Ludita. 2011. Analysis of Factors Influencing Intellectual Capital Performance in Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX). Essay. Faculty of Economics and Business, Dipenogoro University, Semarang.
- 5) Fitriani, Ayu Erika. 2012. Effect of Corporate Governance Structure on Capital Disclosure Intellectual (Study on Financial Companies Listed on the Indonesia Stock Exchange in 2012). Dipenogoro Journal of Accounting. Vol 3, No.3.
- 6) Ghozali, Imam. 2007. Application of Multivariate Analysis with SPSS Program. Semarang: Diponegoro University Publishing Agency.
- 7) Herlina, Silvia. 2012. Interlectual Capital Interaction on Strategic Business Unit Performance Merpati Maintenance Facility Surabaya-East Java. Essay. Faculty of Economics, University of Muhammadiyah Sidoarjo.
- 8) Kuryanto, Benny and M. Syafruddin. 2008. The Effect of Intellectual Capital on the Company's Financial Performance. Proceedings of SNA XI. Pontianak.

Mechanism Effect *Corporate Governance* and Characteristics Company on Disclosure *Intellectual Capital* on Registered Pharmaceutical Companies on the Indonesia Stock Exchange

- 9) National Committee on Governance Policy. 2006. General Guidelines for Good Corporate Governance in Indonesia. Jakarta.
- 10) Mahardika, Eloking Surya Sekar, Muhammad Khafid, and Linda Agustina. 2014. The Influence of Ownership Structure, Size, And Age Of The Company On Intellectual Capital Performance. *Accounting Analysis Journal* 3(1): 100-108.
- 11) Nugroho, Elfianto. 2011. Analysis of the Effect of Liquidity, Sales Growth, Working Capital Turnover, Company Size, and Leverage on Company Profitability (Study of Manufacturing Companies Listed on the IDX in 2005-2009). Essay. Faculty of Economics and Business, Dipenogoro University, Semarang.
- 12) Purnomosidhi, B. 2005. Empirical Analysis of the Disclosure of Intellectual Capital in Public Companies on the JSE. *Journal of Themes*, 6(2), 111-149.
- 13) Puspitasari, Maritza Ellanyndra. 2011. The Influence of Intellectual Capital on Business Performance in Manufacturing Companies Listed on the Indonesia Stock Exchange. Essay. Faculty of Economics and Business, Dipenogoro University, Semarang.
- 14) Rahardian, Ariawan Aji. 2011. Analysis of the Effect of Intellectual Capital on Company Performance; An Analysis With Partial Least Squares Approach. Essay. Faculty of Economics, Dipenogoro University, Semarang.
- 15) Setianto, Adi Putro and Agus Purwanto. 2014. Analysis of Factors Affecting Disclosure of Intellectual Capital (Empirical Study of Companies Listed in the "Kompas 100 Index" 2010-2012). *Dipenogoro Journal of Accounting*. Vol.3, No.4.
- 16) Soewarno, Noorlailie. 2011. The Influence of Intellectual Capital on Financial Performance With Size, Type of Industry and Leverage As Moderating Variables. *Economic Magazine Year XXI, No.2 August 2011*. PP 167-186
- 17) Srirahayu, Puji. 2013. The Effect of Good Corporate Governance and Financial Performance Mechanisms on Earnings Management in Manufacturing Companies That Have Go Public on the Indonesia Stock Exchange. Essay. Faculty of Economics, University of Muhammadiyah Sidoarjo.
- 18) Sugiyono. 2008. *Business Research Methodology*. Bandung : CV Alfabeta.
- 19) Suhardjanto, Djoko and Mari Wardhani. 2010. The Practice of Intellectual Capital Disclosure of Companies Listed on the Indonesia Stock Exchange. *JAAI*. Vol 14, No.1, 71-85.
- 20) Tarenta, Claudia Vinsa Geraldiana. 2014. The Effect of Auditor Type, Company Growth, Institutional Share Ownership and Profitability on Intellectual Capital Disclosure of Manufacturing Companies Listed on the Indonesia Stock Exchange 2010-2011 Period. Thesis. Faculty of Economics, Airlangga University.
- 21) Ulum, Ihyaul, Imam Ghozali, and Anis Chariri. 2008. Intellectual Capital and Financial Performance Company; An Analysis with Partial Least Squares Approach. XI National Accounting Symposium. Pontianak: Tanjungpura University.
- 22) Wardhani, Agung Sri. 2013. The Effect of Company Characteristics on Intellectual Capital Disclosure (ICD) in Companies Listed on the Indonesia Stock Exchange. Thesis. Faculty of Economics, Airlangga University.
- 23) Widagdo, Dominikus Octavianto Kresno and Anis Chariri. 2014. The Effect of Good Corporate Governance on Company Performance. *Dipenogoro Journal of Accounting*. Vol.3, No.3. www.idx.co.id. Retrieved 23 March 2015.

CSR Shifting to HSR? A Critical Analysis of Future Trends



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ABSTRACT: In the past few years a shift is seen in the use of Corporate Social Responsibility (CSR) to a Human Social Responsibility (HSR) approach. This is based on the idea that a business has its employees as a resource and not just a beneficiary of the CSR practices of this business, and that employees are the sustained element of CSR as they can impact its objectives and scope with ease due to interaction with management and community at the same time. This research reviews literature related to both areas and the reasons such shift is seen in different business industries, and how HSR is handled by employees at different levels of the organization, as well as the limitations related to HSR.

KEY WORDS: CSR, HSR, Stakeholders, Sustainability

INTRODUCTION

In today's changing economies, employees and consumers are becoming more conscientious than before about helping companies that believe they are good. Good enterprise has been categorized for the past couple of decades as being social responsible aside from financially sound. Corporate Social Responsibility (CSR) is considered by many as the tool that is used by different large corporate to direct funds and available resources towards important themes of concern to customers and other stakeholders. As the majority of smaller entities are shifting attention to CSR, they started focusing more on using more relatable terminologies as these are yet to be called (Corporate). The focus is now on human role in the social responsibility process, and hence, Human Social Responsibility.(HSR) is the new buzz that everyone is talking about (Lechuga et al, 2018).

HSR focuses on the idea that people are the center of any organization and doing good to community does not relate to contributing millions of dollars to different social activities, rather it could be done on a narrower scale depending on size of business and the current and future needs of society. So social responsibility is now applied based on doing more for the community; so even if it is small, it still counts (Diaz et al 2018). The most important asset that a business already has is its employees and customer base, which both can serve as the new motivating tool to steer social responsibility and at the same time be able to carry discussions and partnerships which are formed internally and externally and which can add value both to business and community (Dumont et. al, 2017, Shen et. al, 2018).

Most of the literature nowadays focus on the use of Human Resources Management and Development practices to motivate employees to participate and even lead social responsibility activities, where feedback from employees is an essential input for decisions related to CSR (Lechuga et al, 2018). In other words, investing in HR beyond monetary terms can sustain CSR activities, which would be linked to people who will continue to work on the company and feel important to the corporate image as well as the overall community wellbeing. If the entity believes in the idea that every team member is important to guide the business social activities, then CSR would be directed by HSR which is based on employees being actively engaged in and aware about community needs (Dumont et. al, 2017, Shen et. al, 2018). So now these businesses can be doing good by both their employees and community at the same time (Shen et. al, 2018).

This paper critically reviews literature on both CSR and HSR through focusing on three main areas: (i) literature on CSR, (ii) literature on HSR, and (iii) the different views and themes about shifting CSR to HSR. The main idea is to show that if the business relies on HSR to drive CSR of the business, employees would come and initiate and even lead CSR activities which creates an environment which is consistent and true to the business vision. The contribution of this paper is evident in gathering, analyzing, and explaining the need for such a shift from conventional CSR to a more realistic, yet reliable and sustainable HSR.

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LITERATURE REVIEW OF CSR

CSR is yet to develop and improve during the near future. Although roots of CSR are traced back to early 1950's (Bettina, 2012). It has been linked to many areas of research, and was investigated from different points of views, and within different settings. The following table summarizes the shift of theoretical perspectives on CSR during the past 60-70 years¹:

Bowen (1953) and McGuire (1963)	Ethics and social obligation of a business to its society as well as a tool to control business activities (ethical identity)
Freidman (1970) and Johnson (1971)	Self-awareness of business and business interest are cornerstones of CSR contributions to society
Carroll (1979), Freeman (1984), and Frederick (1987)	Applying theories (mainly Stakeholder's theory) and measuring models for CSR (Quantifying CSR and its impact)
Wood (1991) Frederick (1994) and Carroll (1999)	Links to strategic management, competitive advantage, and measurement procedures for CSR
McWilliams et. al, (2006) and Carroll and Shabana (2010)	Global reporting and sustainability concepts introduced for CSR
Diaz et. al (2018) and Newman et. al (2016)	CSR and HR discussions, measurements and relationships

Based on this, it is seen through extensive review of literature that the definition of CSR kept changing based on the concepts and philosophies discussed at different times. Researchers all agree on the business responsibility to meet society demand, where pressure by different stakeholders is the main motivation for the majority of CSR activities within a certain construct (Berber et. al, 2014). Also, it is evident in the literature that a business responsibility goes beyond social activities, as these have the responsibility to report on such activities and encourage both internal and external parties to join the process (Diaz et al 2018). Decision makers have to be aware about what CSR is, and how it could be measured and reported to interested groups.

The literature also suggests that the motivation for CSR is evident in the mutual relationship between a business and its society, where this 'ethical contract' is a binding agreement for the business to support efforts that promote overall society wellbeing (Shen et. al, 2016). Fighting against poverty, supporting charities, environmental protection initiatives, and even reducing unemployment rates are all a small part of what a business is expected to perform as part of this contract (Ehnert, et. al, 2016). On the other hand the society is expected to help direct CSR activities to where they feel most satisfied, and should reward these businesses by engaging in profitable activities including: buying their products, rendering their services, investing capital, and even financially and non-financially participating in these activities (Berber et. al, 2014)

The changing and evolving nature of the topic is reflected in the increased amount of literature of this area (McWilliams et. al 2006). Many countries started to change the CSR perspective and initiated different concepts related to CSR. For example, the European Union (EU) started to develop their concept in early 2000's through their strategy for the upcoming decades, where they related HR to CSR and explained how it should be developed through education, training, equal opportunities, and sustainable development efforts (Bettina, 2012). Nowadays, many companies are paying more attention to CSR as a way of attracting qualified employees, where literature suggested that sound CSR is more attractive to employees (Turban and Greening 1997, and Kim and Park 2011).

Social responsibility literature also classified the main areas of focus to include: responsibility towards making profits, responsibility towards stakeholders, and responsibility towards the community in general (Shen et. al, 2016). Where Carroll (2016) classified CSR through a pyramid, where it started at the base with economic responsibilities (creating profit, then participating with community to achieve CSR). The second level included legal responsibilities (obeying laws, regulations, and rules on both national and international levels). The next level related to a superior ethical responsibility (must be moral, just, and fair and not cause any harm). The highest level of CSR pyramid is that of philanthropic responsibilities (giving back to society, and improving quality of community). Most literature followed this pyramid view and even modified some levels and measured these in terms of reporting, and some literature also focused on investigating which are the areas of focus based on this pyramid by different types of business (Kim and Park, 2011, and Berber et. al, 2014).

In recent years a shift is seen in the literature towards linking CSR to other areas within and outside the business research areas. One of the most recent areas gaining more attention is how it links to HRM and strategic planning, as well as how it should be

¹ Organized by author

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based on human resources rather than philosophy of management, or expectations of society (Diaz et. al 2018, and Newman et. al, 2016). The literature also suggested a shift from discussing concepts to measurement and quantification of the impact of CSR on different organizational aspects including image, profitability, customer satisfaction, customer retention, employee behavior and satisfaction, and even stakeholders motivations for engaging in CSR (Diaz et. al, 2018, Dumont et. al, 2017, Shen et. al, 2018, and Lechuga et. al, 2018).

As suggested by the above literature, CSR is not a subject of economic concern only, rather it is linked to other concepts and constructs that positively correlate and affect companies' ability to become social responsible and to sustain such image. The following parts explain how CSR discussion evolved into the area of HSR by explaining what HSR is and how it is linked to a business process of building and sustaining a social identity. The reason behind focusing on this area is related to the actual assets a business own, and the ability to use that outside the work sitting through engaging the employees at different levels in CSR activities. This would add a lot to a business on both internal and external levels, as the employees would benefit from such initiatives and taking up a leading role on such efforts, and breaking the routine of day to day duties, and at the same time present a better image of the business to outsider stakeholders. Many companies nowadays include CSR initiatives and participation in their performance appraisal process for employees to encourage them to think outside the box and become creative, and invest this through CSR channels that would benefit all.

LITERATURE REVIEW OF HSR

There seems to be a scarcity of highly skilled and motivated employees in many business industries today. This created a problem for HRM, where these try to solve this problem through what is known as 'war for talent' and try to present good image to public in general and employees in specific (Crane & Glozer, 2016, Aryles et. al, 2021). The literature suggest that it is essential for any business to consider both internal and external resource that could help secure a good stock of talented employees, where a business should align its activities to expectations of those employees, including having some socially valued characteristics (Albinger & Freeman, 2000, and Bettina, 2012). The literature focused on the fact that this should be a part of the offerings to attract large number of skilled employees for a long term, as practitioners and researchers both agree on the need to shift attention from employee cost perspective into employee value-added perspective (Ehnert, 2009). Most sustainable HRM efforts nowadays focus on the idea that skilled employees can sustain business through their personal initiatives that engage others in the same business and even some community members, as successful recruitment can aid in moving CSR efforts even beyond employees' obligation towards duties and responsibilities, and take it to a higher level of ethical, self-generated commitment (Ehnert, 2009, and Crane & Glozer, 2016).

Many researchers acknowledge that human capital is the main resource any business owns, whether small or big, and that a business should consider the employee role and opinion about CSR activities, as they are more engaged and aware about community needs and expectations (Bansal, 2005, and Montiel, 2008). These employees can direct a business social efforts towards economic, and noneconomic areas that benefit the community at the highest level possible. They can even initiate CSR events that attract local partners to participate which insures even a higher level of acceptance by society. CSR is merely a strategy, although not incorporated into HR strategy, but can help a business objectives' by using HR. Most recent research even focused on the impact of CSR on HR perception of the business including: satisfaction, commitment, and organizational citizenship (Santana et. al, 2020, Aryles et. al, 2021).

The previous literature also focused on two important aspects of HSR. The first is related to business responsibility towards its employees, and the second focused on using HR management as a way of achieving CSR objectives. The business responsibility towards its employees focuses on the idea that employees 'just like any other stakeholders' should be targeted with CSR activities. A business must meet the employees needs and expectations, where it could develop a response strategic CSR plan based on their employees' perceptions. (Bansal, 2005, and Santana, 2020). The literature suggest that many used this as a means to justify employee interaction and participation in CSR activities, where they can work on achieving their own needs by using company resources (including other employees), and where the company can rest assure that whatever CSR strategy being adapted is supported by its stakeholders (Aryles et. al, 2021). Top management can later on extract feedback easily from employees as a way of controlling and modifying their CSR strategy in the future (Crane & Glozer, 2016, and Shen et. al, 2018).

On the other hand, the business can use its HR to achieve CSR objectives, where it could direct all its resources to achieving these objectives by preparing a strategy that includes HR as well as other economical and noneconomic resources in order to achieve overall sustainability.

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CSR vs HSR: shifting views

Good business nowadays relies heavily on CSR activities when implementing their strategies, as these realized that this would lead to financial success (Aryles et. al, 2021, Lee et. al, 2018). Companies even invest in good relationship to other stakeholders as this is considered the key factor that would benefit or harm their strategy. Employees are one of the most important stakeholders who are agents in the implementation of a business strategy, and it is they who view CSR activities and can evaluate its impact (Rudkin et.al, 2018). Recent literature suggest that a learning organization is one that uses its employees (among other resources) as an input for its CSR strategy, and that the wellbeing of these workers is a priority of the business in order to maintain good relationship with these agents (Aryles et. al, 2021). Although some literature (for example, Rudkin et.al, 2018) suggest that sometimes the sustainability of workers is not a part of most business strategies, still, there still room to quickly develop such strategies that would enable workers to become leaders in the process of implementing CSR practices, as these would help the business sustain its resources and develop positive and strong ties with the other stakeholders (Salvini et. al, 2018, and Lopez et. al, 2018).

Recent literature highlights the psychology of sustainability as a key factor for employee wellbeing through CSR. Researchers stressed the fact that CSR is a way of responding to demand for health and other requirements perceived important by employees to improve their performance (Perez et al, 2018). Researchers agree that usually workers themselves report dissatisfaction with working condition, company policy, and even CSR practices that do not meet their expectations (Crizzle et. al 2018). Such a feedback is considered a positive sign for loyalty, as openness of employees about such issues show their interest in continuing their work in that business. However, they seek certain CSR practices within and outside their work environment to keep on performing well for the company. For example, during COVID 19, protecting the health, safety, and lifestyle of employees were included in many corporate strategies, which reflected on employees being more flexible towards working online, working hours, and even travelling for whatever emergencies their employers faced (Aryles et. al,2021). So being socially responsible is not hard to see, and it does not require a lot of money to implement. If a company can spare sometime to look into employee's suggestions, feedback, and rates of participation in CSR activities, they would be better off handing the CSR responsibilities to workers who can lead CSR implementation, and even innovate new, much cheaper methods of doing good to society (Aryles et al, 2021, and Lopez et. al, 2018).

A business can dictate, or even just guide the workers in implementing CSR practices (Lopez et. al, 2018). They can provide them with suitable funding, materials, or any other resources needed to implement these activities. On the other hand, employees would lack no motivation nor insights on how to do things, as they are more aware about the strategy, and have already participated in a way or another in preparing and approving it (Giunchi et. al, 2019). CSR would become the responsibility of workers, and hence HSR would excel as the new strategy to steer the CSR efforts of the business (Diaz et. al, 2018, Dumont et. al, 2017).

The literature suggests that additional work is needed in this area, especially when discussing conflict of interest between the business and employees, between employees and other stakeholders, and between employees themselves (Giorgi et. al, 2020, and Dumont et. al, 2017). Another concern in the literature is there still remains a gap between what is being theorized and what is being operationalized. Although HSR is growing and many think it is the 'new buzzword' that would sustain the business efforts and market its image as 'socially' oriented, the strategies implemented by businesses are way far from this notion, as top management still reacts negatively to delegation of authorities to lower level management, and staff employees when related to company social image (Arelis et. al, 2021). The problem is also evident in the fact that top management thinks of employees as other stakeholders who they should provide them with some satisfaction through good salaries, suitable benefit plans, and good working conditions. They believe that if required, they can follow management instructions and guidance to implement CSR within and outside the business setting only, but not lead such strategy for the entire company (Shao et. al, 2019, and Sari, et. al, 2020).

Concluding remarks

Any business should be able to adapt to its changing environment. This is a known sign of sustainability of its operations. The recent literature suggest that there should be a move of CSR into an HSR strategy, as this would lead to magnified impact of CSR on different stakeholders. Employees would be willing to spend more time and effort to implement CSR and contribute more to business objectives, as well as increasing their productivity. The HSR would also direct CSR practices towards areas of concern to employees and other stakeholders, including current and potential customers, potential investors, governmental agencies, and others. The game that all companies are competing in nowadays is to secure good image for their business, and then to sustain it for as long as possible, and employees are considered a determinable success factor for such a game. A business should apply HSR and help direct CSR efforts through training, directing, and motivating its employees to take initiatives to lead CSR practices into new areas of interest, and by suggesting new methods of reaching stakeholders' satisfaction in general. A lot of work is still needed

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in this area, especially field research of top management attitudes towards delegating HSR leading role to lower level management, and its acceptance of HSR strategy as an alternative to CSR general business strategy. Also work in the future can focus on how to decrease conflict between employees when deciding on HSR practices in order to get as many as possible to participate and implement suitable HSR practices.

REFERENCES

- 1) Albinger, H. S., & Freeman, S. J. (2000). Corporate social performance and attractiveness as an employer to different job Seeking populations. *Journal of Business Ethics*, 28, 243-253.
- 2) Arelys L.C., Gil-Lacruz A.I., Saz-GilM I. (2021). Stakeholder engagement, CSR development and Sdgs compliance: A systematic review from 2015 to 2021. *Corp Social Responsibility and International Management*. 2021;1–13. wileyonlinelibrary.com/journal/csr
- 3) Bettina, L. (2012). The relevance of corporate social responsibility for a sustainable human resource management: An analysis of organizational attractiveness as a determinant in employees' selection of a (potential) employer. *Management Revue*, ISSN 1861-9916, Rainer Hampp Verlag, Mering, Vol. 23, Iss. 3, pp. 279-295, http://dx.doi.org/10.1688/1861-9908_mrev_2012_03_Lis
- 4) Berber, N.; Susnjar, G.S.; Slavic, A.; Baosic, M. (2014) Relationship between Corporate Social Responsibility and Human Resource Management—As new management concepts—In Central and Eastern Europe. *Eng. Econ*. 2014, 25, 360–369
- 5) Bansal, P. (2005). Evolving sustainably: A longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26, 197-218
- 6) Bowen, H. R. (1953). *Social responsibilities of the businessman*. New York: Harper & Row.
- 7) Carroll, A. B. (1979). A three-dimensional conceptual model of corporate social performance. *Academy of Management Review*, 4, 497-505
- 8) Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business and Society*, 38, 268-296.
- 9) Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, 12, 85-105.
- 10) Carroll, A.B. (2016). Carroll's pyramid of CSR: taking another look. *International Journal of Corporate Social Responsibility*. <https://jcsr.springeropen.com/articles/10.1186/s40991-016-0004-6/>
- 11) Crane, A., & Glozer, S. (2016). Researching corporate social responsibility communication: Themes, opportunities and challenges. *Journal of Management Studies*, 53(7), 1223–1252. <https://doi.org/10.1111/joms.12196>
- 12) Diaz-Carrion, R.; López-Fernández, M.; Romero-Fernandez, P.M. (2018) Developing a sustainable HRM system from a contextual perspective. *Corp. Soc. Responsibility Environmental Management*. 2018, 25, 1143–1153
- 13) Dumont, J.; Shen, J.; Deng, X. (2017). Effects of Green HRM Practices on Employee Workplace Green Behavior: The Role of Psychological Green Climate and Employee Green Values. *Human Resource Management* 2017, 56, 613–627
- 14) Ehnert, I. (2009). *Sustainable human resource management: A conceptual and exploratory analysis from a paradox perspective*. Contributions to Management Science. Physica, Springer: Heidelberg.
- 15) Frederick, W. C. (1987). *Theories of corporate social performance*. Business and Society: Dimensions of Conflict and Cooperation. Lexington
- 16) Frederick, W. C. (1994). From CSR1 to CSR2. *Business and Society*, 33, 150-164.
- 17) Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- 18) Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*, September 13, 32-33.
- 19) Giorgi, G., Leon-Perez, J. M., Montani, F., Fernandez-Saliner, S., Ortiz-Gomez, M., Ariza-Montes, A., Arcangeli, G., & Mucci, N. (2020). Fear of non-employability and of economic crisis increase workplace harassment through lower organizational welfare orientation. *Sustainability*, 12(9), 3876. <https://doi.org/10.3390/su12093876>
- 20) Giunchi, M., Vonthron, A.-M., & Ghislieri, C. (2019). Perceived job insecurity and sustainable wellbeing: Do coping strategies help? *Sustainability*, 11(3), 784. <https://doi.org/10.3390/su11030784>
- 21) Johnson, H. L. (1971). *Business is contemporary society: Framework and Issues*. Belmont.
- 22) Kim, S.-Y., & Park, H. (2011). Corporate social responsibility as an organizational attractiveness for prospective public relations practitioners. *Journal of Business Ethics*, 103, 639-653.
- 23) Lechuga S.M.P.; Martínez M.D.; Jorge, L.M.; Madueño, H.J. (2018) Understanding the link between socially responsible human resource management and competitive performance in SMEs. *Pers. Rev.* 2018, 47, 1211–1243.

CSR Shifting to HSR? A Critical Analysis of Future Trends

- 24) Lopez-Fernandez, M., Romero Fernández, P.M., Aust, I. (2018) Socially Responsible Human Resource Management and Employee Perception: The Influence of Manager and Line Managers. *Sustainability* 2018, 10, 4614.
- 25) McGuire, J. B. (1963). *Business and society*. New York: McGraw-Hill. *Journal*, 40, 658-672.
- 26) McWilliams, A., Siegel, D. S., & Wright, P.M. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, 43, 1-18.
- 27) Montiel, I. (2008): Corporate social responsibility and corporate sustainability. *Organization & Environment*, 21, 245-269.
- 28) Newman, A., Miao, Q., Hofman, P.S., Zhu, C.J. (2016) The impact of socially responsible human resource management on employees' organizational citizenship behaviour: The mediating role of organizational identification. *Int. J. Human Resource Management*. 2016, 27, 440–455
- 29) Rudkin, B., Danson Kimani, S., Ullah, R. A., & Syed, U. F. (2019). Hide-and seek in corporate disclosure: Evidence from negative corporate incidents. *Corporate Governance*, 19, 158–175. <https://doi.org/10.1108/CG-05-2018-0164>
- 30) Salvini, G., Dentoni, D., Ligtenberg, A., Herold, M., & Bregt, A. K. (2018). Roles and drivers of agribusiness shaping climate-smart landscapes: A review. *Sustainable Development*, 26(6), 533–543. <https://doi.org/10.1002/sd.1897>
- 31) Santana, M., Sánchez, R.M., and Pasamar, S. (2020). Mapping the link between Corporate Social Responsibility (CSR) and Human Resource Management (HRM): How is this relationship measured? *Sustainability* 2020, 12, 1678; doi:10.3390/su12041678 www.mdpi.com/journal/sustainability
- 32) Sari, W. P., Ratnadi, N. M. D., Lydia, E. L., Shankar, K., & Wiflihani. (2020). Corporate social responsibility (CSR): Concept of the responsibility of the corporations. *Journal of Critical Reviews*, 7(1), 241–245. <https://doi.org/10.31838/jcr.07.01.43>
- 33) Shao, D., Zhou, E., Gao, P., Long, L., & Xiong, J. (2019). Double-edged effects of socially responsible human resource management on employee task performance and organizational citizenship behavior: Mediating by role ambiguity and moderating by pro-social motivation. *Sustainability*, 11(8), 2271. <https://doi.org/10.3390/su11082271>
- 34) Shen, J.; Dumont, J.; Deng, X. (2018) Employees' Perceptions of Green HRM and Non-Green Employee Work Outcomes: The Social Identity and Stakeholder Perspectives. *Group Organising. Management*. 2018, 43, 594–622.
- 35) Shen, J.; Benson, J. (2016) When CSR is a Social Norm. *Journal of Management* 2016, 42, 1723–1746
- 36) Turban, D. B., & Greening, D. W. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management*
- 37) Wood, D. J. (1991). Corporate social performance revisited. *Academy of Management Review*, 16, 691-718

Predictive Software Engineering: Transform Custom Software Development into Effective Business Solutions



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ABSTRACT: The paper examines the principles of the Predictive Software Engineering (PSE) framework. The authors examine how PSE enables custom software development companies to offer transparent services and products while staying within the intended budget and a guaranteed budget. The paper will cover all 7 principles of PSE: (1) Meaningful Customer Care, (2) Transparent End-to-End Control, (3) Proven Productivity, (4) Efficient Distributed Teams, (5) Disciplined Agile Delivery Process, (6) Measurable Quality Management and Technical Debt Reduction, and (7) Sound Human Development.

KEYWORDS: Agile, Disciplined Agile Delivery, Distributed Team, Predictive Software Engineering, Measurable Quality Management and Technical Debt Reduction System (MQM&TDR).

I. INTRODUCTION

This Predictive Software Engineering (PSE) mitigates the "random" and debatable components of software development, transforming it into a precise and predictable engineering exercise. Through its 7 principles, PSE enables software development teams to standardize their engineering, making their processes controllable and transparent.

In this article, we will examine the core principles of PSE, each of which was formed in accordance with 25+ years of development experience.

II. MEANINGFUL CUSTOMER CARE

Whether your business is B2B, B2C, or another type, it's focused on the customer. Your success is measured by how many customers you have, their satisfaction, and their brand loyalty.

Until your customers recognize the quality of your products or services and follow through with purchases, the company is failing. Therefore, to understand whether you're moving in the right direction, customer satisfaction and feedback should be the primary KPIs you measure.

If your company isn't moving in the right direction, your next question should be: how do you transform unhappy customers into happy ones? There are 8 strategies for doing so:

1. Implement a seamless onboarding process for all customers.
2. Introduce a customer portal.
3. Set up a clear governance model.
4. Draw up a clear escalation path.
5. Conduct early problem discovery.
6. Carry out deep customer complaint analysis.
7. Managing customer satisfaction.
8. Set realistic expectations.

III. TRANSPARENT END-TO-END CONTROL

In the business world, transparency indicates trust, openness, and cooperation. Only a small percentage of organizations are transparent, and achieving this status requires plenty of effort. But the rewards are well worth it; clients recognize that working with you is less risky and more reliable.

To ensure transparency outside the organization:

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1. Conduct governance meetings.
2. Implement Agile methodologies.
3. Conduct status reporting with every project.
4. Use tools to track teamwork.
5. Use project portals that enable customers to track their projects at all times.
6. Conduct process audits.
7. Use proactive project monitoring rather than reactive.
8. Implement onsite visits when the project begins, when there's a big delivery, and when there are any communication issues.

To ensure transparency inside the organization:

1. Periodically hold C-level meetings.
2. Sync meetings with the department director.
3. Hold regular checks with project managers.
4. Involve the talent management team in teamwork.
5. Hold team-building and company events.

IV. PROVEN PRODUCTIVITY

Proving the productivity of your software engineers can be a difficult task, but it's relevant to all organizations. There are two tools for measuring productivity and velocity during development: Measurable Quality Management and Technical Debt Reduction System (MQM&TDR, which will be addressed in Section VII) and the Software Development Efficiency KPI.

The latter contains 10 sub-KPIs: (1) static code analysis for the project, (2) static code analysis for the developers' code, (3) planned vs. actual work, (4) bugs per line of code, (5) opened bugs per feature, (6) templates missed, (7) algorithms missed, (8) standard libraries use missed, (9) missed exception/error handling, (10) security problems. Some guidelines for proving productivity for these KPIs include:

- 2+ developers should review the same code.
- The entire code review process should be documented.
- The team manager or leader should review and approve the KPI results.
- Use tools that prohibit cheating while also simplifying the review process.
- Try to review less than 500 lines of code at once.

V. EFFICIENT DISTRIBUTED TEAMS

Physical locations no longer limit organizations; distributed teams make it possible to build a geographically diverse workforce. Some benefits of using the distributed team model include time effectiveness, cost savings, and talent pool diversification:

- **Time Effectiveness:** When you have distributed teams, your employees are located across the world — therefore, they can work in multiple time zones. By strategically placing your development centers, you can make sure that at least one team is available at all times. This is really helpful for organizations that need 24/7 support.
- **Cost Savings:** By hiring team members from other countries, organizations can cut costs on salaries, rentals, and operating fees.
- **Talent Pool Diversification:** Through the distributed team model, companies can access a practically unlimited talent pool of highly skilled developers.

But as physical distance increases, communication problems and inefficiency may arise. To ensure your distributed teams are as efficient as possible, follow these guidelines:

1. Design tasks in a way that facilitates cooperation, considering time constraints, industry regulations, workloads, etc.
2. Clearly define all members' roles and duties.
3. Use well-defined, appropriate communication tactics, such as closed-loop communication.
4. Loosely couple tasks, so team members' workloads are not too dependent upon each other.
5. Team members should mutually monitor performance while still carrying out their own tasks [1].

There are also social aspects to consider: because your team members are located in various areas of the world, social norms and communication styles might vary drastically. To mitigate this, you should foremost ensure that the team has appropriate, effective leadership that can motivate members, facilitate cohesion, and offer coaching as needed.

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Furthermore, it is important to promote common ground between the team members and, when possible, train the teams in a common environment.

VI. DISCIPLINED AGILE DELIVERY PROCESS

Nowadays, nearly every software development team follows Agile methodologies — but there are thousands of adaptations. We've found that Disciplined Agile Delivery (DAD) is one of the most advantageous versions for service organizations.

DAD's lifecycle is different from typical Agile methods; it has three main phases: inception, construction, and transition [2].

A. Inception

- Identify the project's vision
- Obtain stakeholder agreement with the project's vision
- Identify the project plan, initial technical strategy, and initial requirements.
- Create the initial team.

B. Construction

- Address the stakeholders' changing needs.
- Produce a possibly usable solution.
- Move closer to the deployable release.
- Maintain or improve the existing quality levels.
- Address the biggest risks.

C. Transition

- Ensure the solution is ready for production.
- Ensure stakeholders are ready to receive it.
- Deploy the solution to production.

VII. MEASURABLE QUALITY MANAGEMENT AND TECHNICAL DEBT REDUCTION

The Measurable Quality Management and Technical Debt Reduction System (MQM&TDR) is used to measure a project's technical debts, assess the quality level of software, and determine the product's business efficiency.

MQM&TDR isn't just for techies; it is relevant to everybody working with a product. Testers and developers get an unbiased assessment of their output, managers get feedback on the overall capacity, and users get a well-performing, reliable final product.

It's also useful to investors, as they can use the results to better define the product's fair market value and assess investment risks.

MQM&TDR evaluates the following components of software:

- Source code quality
- Usability
- Security
- Performance
- Business logic
- Solution architecture
- Data quality
- Open-source software & other 3rd-party code

With this knowledge, MQM&TDR brings product owners, development teams, and investors these benefits:

1. Technical debts can be paid before getting out of hand.
2. Redevelopment and support costs are greatly cut.
3. Progress evaluation is adjusted.
4. The product's business efficiency is predicted.
5. Comprehensive quality analysis is conducted.
6. The product's key features are analyzed in detail.
7. A compliance check is carried out.
8. Improvement recommendations are given.

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MQM&TDR is recommended for every software development project, and it has received resounding support from clients.

VIII. SOUND HUMAN DEVELOPMENT

Humans aren't resources, regardless of how the HR department is named — they are agents that make decisions, further their skills, and set goals.

By contributing to human development, you aren't just improving the skills of your workforce; you are also facilitating a sense of fulfillment and bolstering loyalty [3].

D. Benefits

One area to consider is employee benefits; you can include training and certification and English courses in addition to standard benefits (medical insurance, sports compensation, food in the office, etc.)

E. Mentor Program

An internship/mentorship program is incredibly helpful. The interns are learning from real projects rather than getting theoretical knowledge. What's more, they aren't just learning about programming and testing; they're also getting communication and processes knowledge. And quite often, after the internship concludes, they remain on the team, so your people are training a future partner.

F. Performance Review and Career Growth

Create an individual development plan for every employee. Sit with the employee and the talent management team, listen to their goals and career decisions, and create a career path plan. Another strategy is to conduct proprietary performance reviews. Every 6 or 12 months, have the employee conduct self-measurement, and then present your own scores. Review the scores together and decide on the next cycle's steps for improved productivity.

G. Skills Improvement

Always be ready to help your team members take courses, attend training, and get certifications. You can help people grow with these three main strategies: (1) bring in external advice from experts whenever necessary, (2) set up plenty of internal and web training, and (3) implement Centers of Excellence.

IX. RISK THAT PSE COVERS

When a software development team adopts Predictive Software Engineering and implements the principles listed above, they will effectively mitigate many risks, including:

- Executives failing to support the project (Transparent Control and Meaningful Care)
- Ill-defined scope (Transparent Control)
- Inaccurate estimates (Disciplined Agile)
- Resource shortfalls (Distributed Teams)
- Inadequate training (Sound Human Development)
- Ambiguous decisions (Meaningful Care)
- Delays in required infrastructure (Transparent Control)

ACKNOWLEDGMENT

Predictive Software Engineering (PSE) is a framework that addresses bottlenecks of custom software product development. It reconstructs the reliable approach to delivering software development services.

PSE overcomes the “art” component of programming. It makes software engineering exactly what it was meant to be: an engineering exercise that is precise and predictable.

The PSE framework consists of seven specific concepts. Together they ensure transparency, as well as render the process controllable and predictable in its essence. PSE is a proprietary framework developed by Intetics as result of 26+ years in custom development practices.

The work on creation of Predictive Software Engineering is just started and far away from completion! We invite other companies to join us in this work as Predictive Software Engineering is not about Intetics, it is about the industry and programming technology. Of course, a lot of companies are working on improvement of their processes. It would be great to join the forces and cooperate as this really is not about competition but about the profession.

The research was performed under the leadership of Boris Kontsevoi, President & CEO, and Sergei Kizyan, Delivery Director, Sandbox based on global engineering practices.

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REFERENCES

- 1) A Larsson, P Törlind, L Karlsson, A Mabogunje, L Leifer, T Larsson, B-O Elfström, "Distributed team innovation – a framework for distributed product development," in ICED 03, Stockholm, pp. 1-10, 1997.
- 2) S. W. Ambler, M. Lines. "Introduction to Disciplined Agile Delivery," Crosstalk Journal, vol. 40, pages 7-11, 2013.
- 3) United Nations Development Programme, "Human Development Report 2016," UNDP, New York, USA, Rep. ISBN: 978-92-1-126413-5, 2016.
- 4) B. Kontsevoi, S. Terekhov "TETRA™ Techniques to Assess and Manage the Software Technical Debt", Advances in Science, Technology and Engineering Systems Journal, vol. 6, no. 5, pp. 303-309, 2021.
DOI: <http://dx.doi.org/10.25046/aj060534>.
- 5) B. Kontsevoi, "Predictive software engineering," Global Engineering Community.

External Sector and The Nigerian Manufacturing Sector Performance, 1981-2019



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ABSTRACT: No country is an island. The globalization phenomenon is making all countries to be interdependent. The external sector environment has become critical for the success of every country and internal balance. Thus, it has become important to examine how much the external sector environment impact on the performance of the domestic economy. The present study, therefore, examined the influence of Nigerian external sector environment on the performance of the Nigerian manufacturing sector between 1981 and 2019. The study adopted exp-post research design approach and the Autoregressive Distributed Lag (ARDL) model estimation techniques. The empirical model consists of the Nigerian manufacturing sector output index as the dependent variable and exchange rate, trade openness, and foreign direct investment as independent variables and external sector environment variables. Test of unit root results indicated that the variables have mix order of integration, while the co-integration analysis results indicated that the variables in the model have stable long run relationship. Estimate of the ARDL model reveals that in the short run exchange rate variations have negative, but significant effect on manufacturing sector performance, while trade openness, and FDI have positive but insignificant influence on the manufacturing sector performance in the short run. In the long run, exchange rate level and FDI inflows have positive and significant effect on the manufacturing sector performance, while trade openness has negative and significant effect on the Nigerian manufacturing sector performance. The study therefore conclude that the Nigerian external sector Environment has significant influence on the performance of the Nigerian manufacturing sector.

KEYWORDS: exchange rate, external sector, globalization, manufacturing sector, trade openness

1. INTRODUCTION

Nigeria currently imports various quantities of manufactured goods to satisfy the demand of her teeming population. This is very puzzling considering her huge industrial potentials. With a population of over 170 million people constituting a strong labour force, strong agricultural (base) that could serve as a spring board for industrialization. The country has some of the richest natural resources for industrial production in the world. Nigeria was once a key player in the global textile market. It was one of the manufacturers of steel in West Africa in the 1960s (Babatunde, 2016).

Prior to the discovery of oil in commercial quantities, the country depended largely on the locally produced goods which are basically primary in nature. The Northern region was noted for groundnut oil, cocoa butter, and Shea butter, production, the Eastern region for palm oil, soap and West for her cotton and textile (tie and dye) industries and the south for her salt and fishery. This success story was not sustained with the emergence of oil; locally manufacturing industries were abandoned and neglected by successive government in the country (Nwanne & Eze 2015).

However, the decline in crude oil revenue since 2014 has once again exposed the vulnerability of the Nigerian dependency on crude oil as a major earner of foreign exchange. Consequently, Nigeria is finding it difficult to pay for her import bills which are compounded by the unfavourable exchange earning from the fall in the value of Naira.

According to Simon Oke, (2010) the Nigerian manufacturing industry is believed to possess the potentials that drive not only food production but also other industrial products such cement, foot wears, car assembly, wood and wooden produce, chemicals and pharmaceutical products etc which can serve as a spring board from which the country's development can take off. The manufacturing sector is presumed to have a multiplier effect on any nation's socio-economic and industrial fabric because of the multifunctional nature of the sector, developing therefore the manufacturing sector of a nation is an essential prerequisite for industrialization.

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On the other hand, external sector of a nation is that part of the economy that is in constant interaction with the economies of other countries. The external sector is dynamic in nature. It had evolved over time. From the time of the mercantilist till date, there have been significant changes in the international market. These changes in the external sector have caused structural alterations in the economy of many countries. Such changes include change in the basis and terms of trade, foreign exchange prospects, industrialization pattern and the general development of the countries. No country is excluded from the influence of its external sector, sometimes changes in the external sector has the potentials to eliminate the well-established comparative advantages the country had been enjoying and jeopardize industrialization processes ,especially in developing countries like Nigeria. (Nwosa, 2018).

Beside, past analysis of the external sector of the Nigerian economy as measured by the overall balance of payments revealed instability since 1960 due to the persistent high demand for foreign goods and services in the face of dwindling foreign exchange earnings. Structurally the sector which has been dominated largely with export of crude oil remained unaltered for over four and half decades for instance, over dependence on crude oil export and imported inputs, renders the economy to be highly vulnerable to external shock; sharply declining foreign exchange reserves; a largely “overvalued” naira, staggering external debt; alarming proportion of unemployment; balance of payment crises and the collapse of oil price.

Besides, past studies (Akinde, 2014; Ogu, Aniebo & Elekwa 2016) have shown conflicting influence of the external sector on the manufacturing sector performance. While Otokoni, Olokoyo, Okoye, Ejemeyovwi (2016); Ilemona & Okwanya (2017) found positive influence, others, such as, Ammani (2017) found no relationship, either positive or negative between external sector variables and Nigerian manufacturing sector. This suggests that there is no consensus in literature on how external sector variables impact on manufacturing industries in Nigeria. This problem has thus necessitated this study.

This knowledge gained from the findings of the study will guide policy makers in formulating and implementing effective trade policy that will support the Nigerian industrial development drive. The remaining part of the study is organized into four sections as follows: section two (2) is the literature review and centres on conceptual clarification, theoretical literature, empirical literature. Section three (3) is the methodology of the study. It presents the model specification and method of data analysis. Section four (4) is used for data presentation, empirical analysis, and the discussion of the empirical findings, while section five (5) is devoted to the summary and conclusion.

2. LITERATURE REVIEW

This section is devoted to literature review. It specifically presents the conceptual clarification of major themes of the study, a review of the theoretical literature relevant to the study

2.1 Conceptual Clarification

The external sector is the part of a country's economy that is in constant interactions with the economies of other countries. The external sector has two parts. In the goods market, the external sector consists of import and export of goods and services. In the financial sector, the external sector consists of financial flows such as capital external debt, foreign direct investment, external reserves, exchange rate, and foreign investment position. The external sector consists of everything that lies outside the boundaries of a country. The primary function of the external sector is to facilitate foreign trade. The external sector is also called foreign sector. In Nigeria, the external sector is made up of the foreign exchange market, the foreign direct investment flows, the capital account, the current account, external debt profile, external reserves, and balance of payment (CBN, 2013). The various components of the Nigerian external sector are explained below.

The manufacturing sector is the agglomeration of industries engage in chemical, mechanical and physical transformation of materials, substances and components into consumer or industrial goods (Web finance Inc,2019). Manufacturing sector refers to those industries which involve in the manufacturing and processing of items and indulge in either creation of new commodities or in value addition. The manufacturing industry accounts for a significant share of the industrial sector in developed countries. The final products can either serves as a finished good for sale to customers or as intermediate goods used in the production process (The Economy Watch,2017)

Manufacturing industries are the chief wealth producing sectors of an economy. These industries use various technologies and methods widely known as manufacturing process management. Manufacturing industries are broadly categorized into engineering industries, construction industries, electronics industries, chemical industries, energy industries, textile industries, food and beverage industries, metalworking industries, plastic industries, transport and telecommunication industries.

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2.2 Theoretical Framework

In the field of macroeconomics, there are many different models for examining the relationship between the external sector and the internal sector. All the models have one thing in common: they are based on theoretical consideration, definitions of variables, and accounting system (Matlanyane, 2005). This section of the study presents a review of the relevant theories of the external sector.

The monetary theory of the external sector was proposed by Frankel (1976), Musa (1976) and Bilson (1978). The theory is popular with Frankel and therefore has become attached to Frankel (1976). There are two versions of the theory. One assumes price flexibility, while the other assumes fixed price. Given the assumptions of the theory the monetary theory asserts that the exchange rate, as the relative price of moneys, is determined by the supply and demand for money. An increase in the supply of domestic money causes a proportionate depreciation. An increase in the demand for domestic money, such as results from an increase in domestic income or a decrease in expected inflation, causes an appreciation. The implication of the theory is that domestic output is a function of exchange movement, foreign income growth, and foreign price level. Thus, the output of the manufacturing sector is dependent on the exchange rate level and the export price index. These shortcomings in the monetary model lead to re-specification of the model in the form of the portfolio balance model.

The portfolio balance approach to flexible exchange rates was pioneered in a small country framework by Black (1973), Kouri (1976), Branson (1977), and Girton and Henderson (1977). The whole idea in the portfolio balance theory is that the external sector has impact on the internal sector through the exchange rate. Specifically, the theory pointed out the role of government external debt and the demand and supply of government debt through bond as the main determinant of the external sector performance and the link to the domestic economy. In the present study, the study variable, manufacturing and exchange rate has link through the exchange rate to the domestic output. Increase in domestic bond will reduce the price and increase interest rate. This will lead to the appreciation of the domestic currency and reduce the aggregate domestic output. Frankel (1980) estimate the portfolio balance model to verify the reality of the portfolio balance using the German mark. The result indicates that the portfolio balance like the monetary model performs poorly

In the theories, the basic variables of the external sector are the export trade, import trade, exchange rate, external reserve, external debt stock, foreign direct investment and portfolio investment, and trade openness. Export and import represent the current account balance, while, foreign direct investment; external debt and reserve are the capital account, trade openness proxy the overall institutional environment.

2.3 Empirical Literature Review

There is a plethora of empirical literature on the relationship between the external sector variables and the performance of the manufacturing sector indicators within and outside Nigeria. This section presents a review of a few empirical studies on the relationship between the external sector variables and the performance of the manufacturing sector.

Desbordes, and Loa Franssen (2019) adopted a cross-country, multisector approach to investigate the intra- and inter-industry effects of foreign direct investment (FDI) on the productivity of 15 emerging market economies in 2000 and 2008. Their findings indicate that intra-industry FDI has a large positive effect on total and exported labor productivity. The effects of FDI on total factor productivity are much more elusive, both in statistical and economic terms. This result suggests that foreign firms raise the performance of their host economies through a direct compositional effect. They recommended opening the economy for more foreign direct investment.

Ammani (2017) assessed the impact of exchange rate deregulation and the Structural Adjustment Program (SAP) on Cotton Production and Utilization in Nigeria. He used the average exchange rate of the naira to the dollar and the manufacturing capacity utilization of cotton industry from 1973 to 2017 using multiple regression model. The results show that exchange rate deregulation per se has no significant effect on cotton production in Nigeria; more cotton was produced in Nigeria during the post-SAP period.

Ilemona and Okwanya (2017) examined the effect of trade openness and total factor productivity on industrial output in Nigeria between 1981 and 2015. They used vector autoregressive (VAR) model for estimating the effect of trade openness on industrial sector output. The results show that trade openness has a positive and increasing effect on industrial output in Nigeria; while the effect of total factor productivity on industrial output is found to be insignificant. The impulse response function shows that over the long run period total factor productivity has negative effect on industrial output in Nigeria.

Ugwuanyi and Nkem (2017) carried out a study to analyze industrialization drivers and Nigeria economic growth between the periods 1980 to 2014 using time series data. The methodology employed was Unit Root Test, Co-integration Test, Error Correction model and Granger Causality Test in determining the objectives of the research. Findings revealed that Foreign Direct Investment

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(FDI), Financial System Development which is proxy with Aggregate Bank Lending (ABL) and Exchange Rate (EXR) significantly stimulate the Nigeria economy while Trade Openness negatively influences economic growth in the long run. They concluded based on their results that Foreign Direct Investment, Aggregate Bank Lending and Exchange Rate are key determinants of industrialization

Ugwu Okereke (2017) studied the impact of EXCH fluctuations on the performance of manufacturing firms in Nigeria within the period 1986–2016 using firms' profitability as a proxy for performance. The estimation technique adopted for the study was multiple regression analysis based on the OLS technique. The findings of the study showed a positive and significant relationship between EXCH fluctuations and the profitability of manufacturing firms in Nigeria. Similarly.

Otokini, Olokoyo, Okoye, Ejemeyovwi (2016) examined the effect of exchange rate deregulation on manufacturing sector output performance from 1980 to 2016. He used nominal exchange rate and the manufacturing sector output index and the independent and dependent variables respectively. The results from the Granger causality test and the cointegration analysis shows that exchange rate variation has positive but insignificant impact on the manufacturing sector. He therefore recommended that the monetary authority should stabilize exchange rate through appropriate policy

Akpan, and Eweke_(2017) examined the impact of Foreign Direct Investment (FDI) on Industrial Sector Performance in Nigeria and annual time series data for the period 1981-2015. The study employed the VAR method. The VAR estimate shows that FDI had a slight significant positive impact on GDP, while Industrial Sector Output had a small significant positive impact on GDP at present, with a negative relationship observed at previous periods. The impulse response functions clearly reveal that GDP exhibited negative response to shocks in FDI up to the 3rd period, while the effect was positive from the 4th period henceforth, while GDP also exhibited a negative response to shocks in Industrial Sector Output throughout the period observed. The variance decomposition analysis further revealed that GDP was mainly driven by shocks in FDI, with industrial sector output contributing very little. The study concludes that Nigeria is yet to fully reap the benefit of FDI since its contribution to GDP is still very low at the moment, whilst the contribution of the industrial sector in the country has not be vibrant enough to spur economic growth.

Anowor, Ukwani, Ibiam , and Ezekwem (2016) analyzed the contributions of foreign direct investment to the growth of manufacturing sector in Nigeria using annual time series data of the choice variables from 1970 to 2011. Among the findings was that Foreign Direct Investment (FDI), Domestic Investment (DINVT), Exchange Rate (EXR) and the Degree of trade Openness (DOPN) were all related to Manufacturing sector Output Growth in Nigeria. More so, the Foreign Direct Investment, Degree of trade openness, exchange rate and the lagged error term were statistically significant in explaining variations in Nigeria's Manufacturing Output Growth and Gross Domestic Product as a proxy for economic growth (GDP) in the models adopted in the study. It was recommended that there should be concerted support for technological capabilities of indigenous firms, should create favourable conditions for knowledge exchange, improve technical education base to attract the inflow of FDI and intensively support Research & Development.

Orji et al. (2015) studied the relationship between foreign direct investment and industrial sector output in Nigeria from 1970 to 2010. The study employed the classical linear regression model and discovered that within the period under review, FDI impacted negatively on the manufacturing sector. The study therefore recommends that competitive policies should be enacted by the government that will ensure proper functioning of the markets necessary to attract well targeted foreign investors in Nigeria

Most of the studies reviewed examined the relationship between the external sector and the manufacturing sector using disaggregate variable approach. That is, they examined one aspect of the external sector and, most times one part of the manufacturing sector. Examples of such studies include Anowor, Ukwani, Ibiam, and Ezekwem (2016), Orji et al. (2015). These studies are redundant in that they excluded many aspects of the external sector from the empirical models. The findings from such studies cannot be generalized to the manufacturing. The present study will bridge this gap by examining the various variables of the external sector and their impact on the manufacturing sector in general and specific impact of the industries in the manufacturing sector. All the empirical studies reviewed did not analyzed the specific effect of each of the external sector variables on each industry of the manufacturing sector. The impact of the external sector variables is not the same both in the short and long run. This present study will remedy this by estimating the specific impact of the external sector variables on the manufacturing sector output for both the long run and the short run.

3. METHOD OF STUDY

This section is centred on the steps adopted in gathering and analyzing the data for the study. They include: research design; model specification, data required, data collection and sources, and method of data analysis.

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3.1 Model specification

In line with the theoretical framework of the Keynesian's open economy theory and the empirical model of Ogu, Aniebo and Elekwa (2016), we specify the relationship between the external sector variables and the Nigerian manufacturing sector performance as follows:

$$MSO = f(EXR, OPT, FDI) \quad (3.1)$$

The econometrics form of the equation is written as:

$$MSO = \alpha_0 + \alpha_1 EXR_i + \alpha_3 OPT_i + \alpha_4 FDI_i + \mu_1 \quad (3.2)$$

The log linear form of the equation is written as:

$$\log MSO_i = \log \alpha_0 + \alpha_1 \log EXR_i + \alpha_3 \log OPT_i + \alpha_4 \log FDI_i + \mu_1 \quad (3.3)$$

$$\alpha_1 > 0; \alpha_2 > 0; \alpha_3 > 0; \alpha_4 > 0; \alpha_5 > 0;$$

Where: MSO manufacturing sector output, EXR is Exchange rate, OPT is Trade openness, FDI is Foreign direct investment, α_0 is constant. $\alpha_1 \dots \alpha_4$ are co-efficient of the explanatory variables

μ_1 is a white noise error term

All data are secondary in nature and consists of annual time series of the variables. The data were collected from 1981 to 2019. Data required for the study were collected from various sources. Data for manufacturing sector output and pharmaceutical products industry output, and exchange rate of naira to the dollar were collected from the Central Bank of Nigeria's (CBN) statistical bulletin (various issues). Data for foreign direct investment inflows to Nigeria and openness to trade index were collected from the World Bank's World Development indicator (WDI). Supplementary materials were collected from the National Bureau of Statistics (NBS), the African Economic Research Consortium (AERC), International Monetary Fund Country Specific Financial Statistics, test books, research journals, and published and unpublished work of other scholars.

3.2 Method of Data Analysis

The study adopted the Auto-Regressive Distributed Lag (ARDL) econometrics regression techniques developed by Pesaran, Shin and Smith (2001) to analyze the data. The ARDL/ Bound testing approach has some advantages over the traditional approaches such as the Engle-Granger (1987), Johansen (1988) and Johansen and Juselius (1990). One advantage of the ARDL/ Bound test approach is that it can be applied in case of mixed order of integration, that is order 0, and 1. However, It breaks down in the presence I (2) series. It is efficient in small sample and requires just one equation set up for both long run and the short run. The ARDL/Bound test approach does not need separate unit root test apart from guiding against I (2) series in the model. The ARDL regression analysis method proceeds in this order:

3.2.1 Unit Root Test

Maddala (2007) observed that time series data are fraught with unit root. Ignoring unit root and running regression with the data will lead to spurious regression (Granger & Newbold, 1974) Therefore, it is advisable to examine the unit root properties of the data before applying them in regression analysis. The unit root test adopted in the study is the Augmented Dickey-Fuller approach. (Dickey & Fuller, 1987). However, several studies have established that the ADF has low power in differentiating from unit root and alternative close to 1 (Sjoo, 2008). Therefore, a researcher who is interested in examining unit root should conduct more than one test. Based on this advice, the ADF would be complemented by Phillips-Perron test (Phillips & Perron, 1988).

3.2.2 ARDL/Bound Cointegration Test.

The ARDL/Bound cointegration testing model for the study can be specified compactly as follows:

$$\Delta X_i = \alpha_0 + \sum_{i=1}^n \eta_i \Delta Y_{it-1} + \sum_{i=1}^m \theta_i Y_{it-1} + V_i \quad (3.9)$$

Where ΔX is the first difference operator of dependent variable, and ΔY_{it-1} is column vector of the lag of the first difference of the independent variables, $i=1 \dots 4$. η_i is a row vector of the short run coefficients of the independent variables; while Y_{it-1} is column vector of the lag of the independent variables, and θ_i is row vector of the variables long run parameters. So, in one equation we have an estimator for the short and long run impact of the variables.

The Bound F-statistics test which is generated by the Wald test is compared with the critical upper and lower bounds at 5% probability level. The null hypothesis of no cointegration is rejected if the empirical F-statistics is greater than the upper bound critical value at 5% probability level. Then, the long run parameters can be estimated. It would be maintained if the empirical F-statistics is less than the lower critical bound at 5% probability level. In this case, there is no long run relationship. Only the short run parameters can be estimated Where the F-statistics fall between the upper and lower critical values the result is inconclusive.

3.2.4 Model Diagnostic Test

Testing the basic assumptions of the Ordinary Least Square (OLS) is important in empirical studies. The important assumptions that may affect the estimates include residual distribution, autocorrelation, and heteroskedasticity.

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Normality Test: the Jacque-Bera (JB) test of normality approach would be employed at 0.05 level of significance. The test examines the distribution of the estimated residuals under the null hypothesis that the residuals are normally distributed.

Autocorrelation: autocorrelation test examines the estimated residuals if they are correlated; that is, if there is any correlation between successive term. Autocorrelation in the residuals affect the efficiency of the estimates. In the presence of autocorrelation, the parameter estimates are no longer "BLUE". The standard error is affected and hypothesis testing becomes misleading. the Breusch-Godfrey (BG) test techniques would be adopted for this test at 0.05 levels of significance. The BG test approach tests the null hypothesis that there is no autocorrelation in the error terms.

Heteroskedasticity. The heteroskedasticity test examines the variance of the error terms over time. If the variance is constant, then it is homoscedastic; otherwise, it is heteroskedastic. Heteroskedasticity like autocorrelation affects the efficiency of the parameter estimates and therefore affects the standard error. Hypothesis testing in the presence of heteroskedasticity would be misleading. The Breusch –Pagan- Godfrey (BPG) test of heteroskedasticity would be employed at 0.05 levels under the null hypothesis that the variance of the error terms is constant Multicollinearity test. Before combining variables in a multiple regression model, it is important to examine the data for multi-co-linearity problem. Multi-co- linearity among variables in a model will make unique estimates of the model parameters impossible. In the correlation matrix techniques for detecting multicollinearity, the researcher examines the pair-wise correlation coefficient between any two variables in the model. If the pair-wise correlation coefficient between any two variables is greater than 0.6, then there is evidence of multicollinearity among the variables in the model. Pair-wise correlation coefficient less than 0.6 prove there is no reason to suspect the problem of multi-co-linearity among variables in the model.

4. DATA ANALYSIS AND EMPIRICAL RESULTS

This section presents the analysis of the empirical data and the empirical results from the analysis. The results are presented as follows:

4.1 Descriptive Statistics

It is important to examine the statistical behaviour of the model in the empirical mode. this affords the researcher the opportunity to see variables that may cause problem in the model. This section presents the results of the descriptive statistic of the variables in the model.

Table 4.1: Descriptive Statistics of variable in the model

	LOGMSO	LOGEXR	LOGFDI	LOGTOP
Mean	2.787236	1.591079	9.187404	1.674590
Median	2.885292	2.027431	9.158103	1.714004
Maximum	4.095362	2.403279	9.946507	1.912822
Minimum	1.429526	-0.172071	8.276840	1.241274
Std. Dev.	0.869067	0.802749	0.460354	0.166002
Skewness	-0.187166	-1.107549	-0.010650	-0.880888
Kurtosis	1.737884	2.798744	2.197165	2.962697
Jarque-Bera	2.744015	7.833007	1.021247	4.916644
Probability	0.253597	0.019911	0.600121	0.085578
Sum	105.9150	60.46101	349.1214	63.63443
Sum Sq. Dev.	27.94527	23.84301	7.841253	1.019595
Observations	38	38	38	38

Source: E-view computer output

Table 4.1 shows the descriptive statistics of variables in the regression model. From the table, there are 38 observations. During the period under review, the exchange rate (EXR) had a minimum-0.172071. The maximum value of this variable was 2.403 while the mean and median of exchange rate were 1.591079 and 2.027431 respectively Foreign direct investment (FDI) level averaged 9.187404 during the period under review. In the 38 year, the manufacturing sector output (MSO) averaged 2.787236 billion naira per year in logarithms. The highest value during the period was 4.095362 billion; while the minimum value was 1.429526 billion. Trade openness index had mean of 1.674590. and the maximum and minimum value of 1.912822 and 1.241274

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The Skewness values for all the variables, are less than 0.00. This implies that the distributions of these variables are negatively skewed. The skewness values for FDI, and TOP are very close to zero, and so the distributions of these variables could be taken as central. The Skewness values for exchange rate (EXR) is far from zero and so have negative tails extending to the left. The kurtosis value for FDI, EXR, TOP, and MSO are less than 3.00. This mean that the distribution of these variables has flatter top than the normal distribution. They are platykurtic. The Jacque-Bera (JB) test of normality for the variables shows that all the variables have normal distribution. The P-value of the JB statistics for all the variables, are less than the critical 0.05

4.2 Multicollinearity Test- Correlation Matrix

This test has been conducted using the correlation matrix. If the pair-wise correlation coefficient, R^2 from the correlation matrix is in excess of 0.8, we conclude that there is presence of multicollinearity, but if the R^2 from the correlation matrix is less than 0.8, we conclude that there is no multicollinearity

Table 4.2.Descriptive Statistics Results

	LOGMSO	LOGEXR	LOGFDI	LOGTOP
LOGMSO	1.000000			
LOGEXR	0.910241	1.000000		
LOGFDI	0.703002	0.750468	1.000000	
LOGTOP	0.195235	0.353093	0.514792	1.000000

Source: E-view computer output

Following the correlation table, there is multicollinearity between Exchange rate (EXR)and Manufacturing sector output (MSO), and also, and FDI. According to Blanchard and Gujarati (2004), multicollinearity is God's will, not a problem with OLS or statistical technique in general. Hence, we followed the 'do nothing' school of thought as expressed by Blanchard (1998) to avoid specification bias. Thus, there is no reason to express fear over the problem of multicollinearity in the model.

4.3 Unit Root Tests

Table 4.3.Unit Root Tests Results

Variable	Augmented Dickey Fuller (ADF)		Philips-Perron(PP)		Remarks	
	Level	1st Diff	Level	1st Diff.	ADF	PP
EXR	2.8569	5.7541**	2.5869	5.7541	I(1)	I(1)
FDI	3.7214 *	-	2.1329	6.5780	I(0)	I(1)
TOP	3.6355*	-	3.0355	-	I(0)	I(0)
MSO	4.3926 *	-	2.1021	3.4921	I(0)	I(1)

Source: E-view computer output

The unit root test results are presented in Table 4.3. From the results, the Augmented Dickey-Fuller (ADF) statistics shows that Foreign Direct Investment (FDI), trade openness (TOP), and manufacturing sector output variables are stationary at level. They are therefore I (0) series, and Exchange rate (EXR) is not stationary at level. It became stationary after 1st differencing. It is thus, I (1) series. The results from the Phillips-Perron statistics shows that variable exchange rate (EXR), and manufacturing sector output variables are not stationary at level. They are I (1) series.

From the unit root test results, we have mixed order of integration, that is, a mixture of I (1) and I (0) series. Therefore, the most appropriate model for specification and estimation of the models is the Autoregressive Distributed Lag (ARDL) developed by Pesaran, Smith, and Shin (2000). Thus, the analysis proceeded to estimate the ARDL models of the relationship between the external sector and the Nigerian manufacturing sector.

4.4 Cointegration Test- ARDL/Bound Test

The variables were examined to see if they have any long run relationship that can be modelled and estimated. Since the variable have different order of integration, the ARDL/Bound test to cointegration was employed. The results are presented in Table 4.3

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Table 4.3. Results of ARDL/Bound Test Cointegration

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	12.34456	10%	2.08	3
K	5	5%	2.39	3.38
		2.5%	2.7	3.73
		1%	3.06	4.15
Actual Sample Size	34		Finite Sample: n=35	
		10%	2.331	3.417
		5%	2.804	4.013
		1%	3.9	5.419

Source: E-view computer output

The figures in Table 4.3 shows the result of ARDL/Bound test cointegration of the variables in the model 1. From the result, the F-statistics is 12.3445. at probability of 0.05(5%), and for finite sample of 34(the actual size is 37, differencing removes 3) we look at the second row, and along the 5% critical value. The empirical F-statistic is greater than any of the upper and lower critical values of 4.013 and 2.804 respectively. Thus, the null hypothesis is rejected. This implies that there is a fixed and stable long run relationship among the external sector variables and the Nigerian manufacturing sector output. The variables have a long run equilibrium value that can be modelled and estimated. The analysis proceeded to estimating the long run values of the model parameters.

Table 4.4. Long Run Coefficients of Manufacturing Sector

Variable	Coefficien	Std. Error	T-statistic	P-Value
LOGEXR (-1)	- 0.1565	0.0437	-3,3579	0.0038
LOGFDI (-1)	0.05337	0.0491	1.0864	0.2986
LOGTOP (-1)	0.3779	0.1077	2.3147	0.0043

Source: E-view computer output

The long run coefficients presented in Table 4.4 shows that Exchange rate has negative and significant relationship to manufacturing sector output. This implies that fall in exchange rate, that is, the appreciation of the Nigerian currency would have a positive impact on the manufacturing sector out. The depreciation of the value of the Nigerian naira affected the manufacturing sector output negatively. Specifically, depreciation in the value of the naira by 1% brought about reduction in the manufacturing sector output by 0.15% after one-year lag.

Foreign direct investment has positive, but insignificant effect on the manufacturing sector output. This implies that during the period under review, increase in foreign direct investment spurred output in the manufacturing sector. However, the effect was not significant. In particular, increase in Foreign direct investment inflow by 1% lead to increase in the manufacturing sector output by about 0.05% on the average during the period under review.

The relationship between trade openness and the manufacturing sector is positive and statistically significant. Specifically, increase in the Nigerian trade openness index by 1% lead to increase in the manufacturing sector output by 0.38% in the long run. We proceed to Table 4.5 to analyse the short run impact of the external sector on the manufacturing sector performance.

Table 4.5 Short Run Coefficients Manufacturing Sector

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOGEXR(-1))	0.2551	0.0372	6.8438	0.0000
D (LOGFDI (-3))	0.1265	0.0264	4.7906	0.0004
D(LOGTOP(-1))	-0.1827	0.0411	-4.4352	0.0008
CointEq(- 1)*	-0.0253	0.0022	-11.3849	0.0000

Source: E-view computer output

The short run effect of the Nigerian external sector environment on the Nigerian manufacturing sector performance is shown in Table4.5. The table reveals that the effect of exchange on the manufacturing sector output is positive and statistically significant. Specifically, depreciation of the naira by 1% brought about fall in the manufacturing sector output by 0.26% after one-year lag.

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The empirical result shows that exchange rate has negative and significant impact on the manufacturing sector output. The result is in line with the a priori expectation for the variable. Specifically, the result implies that depreciation of the domestic currency stimulates output growth of the manufacturing sector. The finding of the study supports economic theory. Depreciation of the domestic currency relative to other currencies make the domestic output cheaper and so stimulate the demand for the domestic output. In the same line, the import of the same product becomes expensive to the domestic residents and so they do expenditure switching from importation to local products. This will stimulate output expansion in the manufacturing sector. the finding of the study is in line with the result of Otokini, et al (2016) which found positive influence of exchange rate depreciation on manufacturing sector output in Nigeria. However, the finding of the study with respect to exchange rate contradicts the finding of Ayinde (2014) which found negative effect of exchange on manufacturing sector output performance in Nigeria. The difference in result could be attributed to measures of exchange rate used. While Ayinde used real effective exchange rate, Otokoni et al used nominal exchange rate. Nominal exchange rate would give positive relationship, while real effective exchange rate will give negative results

Foreign direct investment (FDI) had positive and statistically significant effect on the Nigerian manufacturing sector output. During the period under review, increase in the level of foreign direct investment inflow by 1% led to the growth of manufacturing sector out by 0.1% after three years lag. The impact is statistically significant in the short run. The result is in conformity with the a priori expectation for the variable and economic theory. The result implies that increase in FDI inflows will stimulate output of the manufacturing sector, all things being equal. The expansion in manufacturing sector output result from the extra output from the foreign investors and from the technological progress associated with the inflow of FDI, and other forward and backward linkage effects of FDI inflows in the economy. The result supports the findings of Akpan, and Eweke_(2017) and Anowor, Ukwani, Ibiam, and Ezekwem (2016) which found positive and significant effect of FDI inflow on the productivity and output growth in manufacturing sector in Nigeria. However, Orji et al. (2015) found negative, but significant effect of FDI on manufacturing sector output in Nigeria. We can attribute the difference between the findings to methods of the study. Akpan and Eweke used ordinary regression method. The VAR method is a better method and performs better in large sample. Again, the measure of FDI flows is more important here. The present study used only FDI inflows, the same as Akpan and Eweke (2017). Orji et al. (2015) net FDI, which includes both inflows and outflows. The inflow is more and negative. The net flows in smaller. And thus, the negative relationship.

The short run relationship between trade openness and the manufacturing sector output is negative and statistically significant. The table reveals that during the period under review, a 1% increase in Nigerian trade openness index brought about fall in the Nigerian manufacturing sector output of 0.18% in the short run. This implies that the more the trade openness index of Nigerian economy, the less the output of the Nigerian manufacturing sector. The result is contrary to the a priori expectation for the variable and economic theory. Economic theory proposed that more open economy entails large market and encourages economics of scale in the manufacturing sector. the findings of the study support the results of Ogu, Aniebo and Elekwa (2016) which found negative effect of trade liberalization on manufacturing sector output in Nigeria. The result is not in support of the findings of Ilemona and Okwanya (2017) which show that trade openness has a positive and increasing effect on industrial output in Nigeria. Method of analysis could be the main reason behind the different results. Ilemona and Okwanya (2017) used VAR method and focused on the long run impact; while Ogu Aniebo and Elekwa (2016) used the ARDL approach and focused on the short run impact of trade openness on manufacturing sector output. The present study also found positive effect of trade openness on manufacturing sector out in Nigerian in the long run.

4.6 Post Estimation Tests

Table 4.6: Results of Model Diagnostic Tests

Test	Techniques	Statistic	Empirical value	P-Value	Remarks
Residual Normality	Jacque-Bera	Jacque-Bera	3.6447	0.1800	Accepted
Serial Correlation	Breusch-Godfrey	χ^2	4.1973	0.1226	Accepted
Homoskedasticity	ARCH	χ^2	0.1579	0.9241	Accepted
Model specification	Ramsey RESET	F-statistic	0.0742	0.929	Accepted

Source: E-view computer output

The results of the post estimation test are presented in Table 4.6. The results show that the estimated residuals from the model parameters are normally distributed. Further, there is no evidence from the serial correlation test to suspect serial correlation

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among the error terms. The residuals variances over time are constant. This implies that the error terms are homoscedastic, the report of the Ramsey RESET test of model specification shows that the model employed for the analysis was correctly specified. That is, there is no misspecification or specification bias. The implication of the model diagnostic test is that the model was adequately specified, and the estimated error terms are independently and identically distributed (IID) with mean 0 and constant variance. Therefore, standard hypothesis testing techniques can be applied.

5 .SUMMARY AND CONCLUSION

The objective of the study was to examine the effect of Nigeria's external sector on manufacturing sector performance in Nigeria from 1981 to 2018. The study used ex-post quasi-experimental research to examine the effect of the external sector on the Nigerian manufacturing sector performance. The ARDL/Bound test cointegration approach developed by Pesaran et al. (2001) was adopted as the method of analysis. The ARDL/Bound test results proved that all the variables in the model are cointegrated. The estimate from the ARDL model revealed that the external sector variables of had insignificant effect on the manufacturing sector output in the long run.

From the results of the study, we can conclude that the external sector has significant impact on the Nigerian manufacturing sector performance. It therefore implies that growing the Nigerian manufacturing sector and industrialization of the Nigerian economy rest heavily on the performance of the external sector. Effort to develop the economy through industrialization strategy must address the instability in the external sector within the context of policy instrument in the hands of the economic managers. One issue which has been a source of challenge to the manufacturing sector is the level and instability in the value of the domestic currency. The Nigerian naira value is rather too low compared to the exchange rate of her trading partners. This was used as a strategy to stimulate expansion in the manufacturing sector through economics of scale in the large market. However, the Nigerian manufacturing sector has little or no linkage in the domestic economy. Most of the inputs are imported and this is imposing high cost on the manufacturing sector so much so that the sector has lost its competitiveness. The value of the domestic currency does not have to be this low to stimulate industrialization in Nigerian economy. There are two sides of the market: the demand side is important; likewise, the supply is equally important. A level of exchange rate that reduces the cost of production in the manufacturing sector will do the magic. The abundance of labour, natural resources, and large domestic market are just good enough compliments to optimal currency value to spur manufacturing sector output growth and industrialization in Nigerian economy. As a policy guide preference in the allocation of foreign exchange, should be given to the manufacturing sector and industries that are negatively affected by the exchange rate level and instability as we adopt strategic trade openness to protect critical industries in the economy.

REFERENCE

- 1) Akanbi, O. A. & Dutoit, C.B. (2010). Macroeconomic modeling for the Nigerian economy: A growth poverty Gap Analysis. *Economic Modeling*. Doi:1016/j.eiowmod.2010.08.015
- 2) Akinlo, O. O. & Lawal, Q. A. (2015) 'Impact of Exchange Rate on Industrial Production in Nigeria: 1986–2010.' *International Business and Management* 10 (1): 104–10.
- 3) Akpan, E. S & Gamaliel, O. E. (2017) Foreign direct investment and industrial sector performance: assessing the long-run implication on economic growth in Nigeria
- 4) Alam, M.I. (2003), Manufactured exports, capital goods imports, and economic growth: experience of Mexico and Brazil. *International Economic Journal*, 17(4), 85-105
- 5) Ali A , Ali , A. Y.S. & Dalmar, M. S. (2018) The impact of imports and exports performance on the economic growth of Somalia, *International Journal of Economics and Finance*; 10(1), 1-10.
- 6) Ammani, A. A (2017) An assessment of the impact of exchange rate deregulation and structural adjustment programme on cotton production and utilization in Nigeria, *Trends in Agricultural Economics*, 5 (1): 1-12.
- 7) Anowor, O. F.; Ukwani, N. O., Ibiam, F. O. & Ezekwem, O. S. (2013). Foreign direct investment and manufacturing sector growth in Nigeria, *International Journal of Advanced Scientific and Technical Research* 5(3),1-8.
- 8) Ayinde, T. O. (2014). The impact of exchange rate on manufacturing performance: new evidence from Nigeria. *Fountain Journal of Management and social sciences*. 3(2), 83-92.
- 9) Azeroual, M. (2016) The impact of foreign direct investment on the productivity growth in the moroccan manufacturing sector: is source of FDI important? *Azeroual, Journal of International and Global Economic Studies*, 9(1), 29-45
- 10) Babatunde, T.S (2016) External debts and economic growth in Nigeria: an empirical study using autoregressive distributed lag model, *Business and Economics Journal, Bus Eco J* 7(2), 39-51.

External Sector and The Nigerian Manufacturing Sector Performance, 1981-2019

- 11) Basdevant, O. (2000). An econometric model of the Russian federation, *Economic Modeling*, 17(1), 305 – 336.
- 12) Bilson, J. (1978). The monetary approach to the exchange rate-some empirical evidence. *IMF Staff Papers* 25 (March): 48-75.
- 13) Black, S. (1973). *International money markets and flexible exchange rates*. Studies in International Finance, no. 25. Princeton University
- 14) Boboye, A. L. & Ojo, O. M. (2012). Effect of external debt on economic growth and development of Nigeria, *International Journal of Business and Social Science* 3(12), 1-8.
- 15) Branson, W, Halttunen, H., & Masson, P. (1977). Exchange rates in the short run: The dollar-deutschemark rate. *European Economic Review* 10:303-24.
- 16) Breusch T. S. & Pagan, R.A (1980), The Lagrange multiplier test and its applications to model specification in econometrics, *The Review of Economic Studies*, 47(1), 239–253.
- 17) Canzoneri M., Valles J., & Vinals J. (1996) Do exchange rates move to address international macroeconomic imbalances?, CEPR Discussion Paper no. 1498.
- 18) Cuaresma, J.C., & Wörz, J. (2005), On export composition and growth. *Review of World Economics*, 141(1), 33-49.
- 19) Dickey, D.A. & W.A. Fuller (1979). Distribution of the Estimators for Autoregressive Time Series with a Unit Root, *Journal of the American Statistical Association*, 74(1), 427-31.
- 20) Dornbusch, R. (1976). Expectations and exchange rate dynamics. *Journal of Political Economy* 84(1), 1161-1176.
- 21) Ehinomen, C. and Oladipo, T. (2012). Exchange rate management and the manufacturing sector performance in the Nigerian economy. *Journal of Humanities and Social Science (JHSS)* 5(5), 1-12.
- 22) Fleming J.M (1962). Domestic financial policies under fixed and under floating exchange rate international monetary fund staff papers
- 23) Frenkel, J. (1976). A monetary approach to the exchange rate: Doctrinal aspects and empirical evidence. *Scandinavian Journal of Economics* 76 (May): 200-224.
- 24) Girton, L. & Henderson, D. (1977). Central bank operations in foreign and domestic assets under fixed and flexible exchange rates. In *The effects of exchange rate adjustment*, ed. P. Clark, D. Logue, and R. Sweeney. Washington: United States Treasury.
- 25) Gozgor, G. (2016) International trade and manufacturing employment in developed economies: an empirical study, *Regional and Sectoral Economic Studies*, 1(6), 1-11.
- 26) Granger, C.W. & P. Newbold (1996) *Forecasting Economic Time Series*. New York: Academic Press.
- 27) Gulzar A. & Zhaohua, L. (2016) Analyzing the role of imports in economic growth of Pakistan; Evidence from ARDL Bound Testing Approach, *International Journal of Academic Research in Business and Social Sciences*, 6(9), 22-68.
- 28) Habibur, R. & Ismail, H. (2003). Exchange rate and investment in the manufacturing sector of Bangladesh. *The Bangladesh Development Studies*, 29(1), 111-124.
- 29) Hache, G. & Townend, J. (1981). Exchange rates and monetary policy: Modelling Sterling's effective exchange rate, 1972-1980. In *The Money Supply and the Exchange Rate*, ed. W. A. Eltis and P. J. N. Sinclair. Oxford: Clarendon Press.
- 30) Haque, N. U., K. Lahiri & P. J. Montiel (1990). A macroeconomic model for developing Countries, *IMF Staff Papers*, 37(3): 537 – 559
- 31) Hassan, O.M., Sule, A. & Abu, J. (2015). Implications of external debt on the Nigerian economy: Analysis of the dual gap theory. *Journal of Economics and Sustainable Development*, 6 (13), 238-248
- 32) Hausman, J. (1978) 'Specification tests in Econometrics', *Econometrica*, 46, pp. 1251-71.
- 33) Igor Grebenkin & Igor B. (2016). The impact of imports on the dynamics of the regional manufacturing industry development, economy of region, centre for economic security, Institute of Economics of Ural Branch of Russian Academy of Sciences, 1(3), 703-713.
- 34) Im, K.S., Pesaran, M.H. & Shin, Y (2003), Testing for unit roots in heterogeneous panels, *Journal of Econometrics*, 115(1), 53–74.
- 35) Jah, R. (2003): *Macroeconomics for Developing Countries*. London: Routledge
- 36) Jhingan, M. L. (2003): *Macro-Economic Theory*. Delhi: Nisha Enterprises
- 37) Kao, C. (1999) Spurious regression and residual-based tests for cointegration in panel data', *Journal of Econometrics*, 90(1), pp. 1-44
- 38) Kazungu, K (2009), Trade liberalization and the structure of production in Tanzania. University of Glasgow.
- 39) Kilavuz, E, & Betül A. T. (2012) Export and economic growth in the case of the manufacturing industry: panel data analysis of developing countries, *International Journal of Economics and Financial Issues*, 2(2), 201-215.

External Sector and The Nigerian Manufacturing Sector Performance, 1981-2019

- 40) Kogid, M., (2011). Does import affect economic growth in Malaysia. *empirical economics letters*, 10(3): 297-307
- 41) Kouri, P. (1976). The exchange rate and the balance of payments in the short run and in the long run: A monetary approach. *Scandinavian Journal of Economics* 78 (May): 280-308.
- 42) Larsson, R, L, & Lothgren, M. (2001) Likelihood based cointegration tests in heterogeneous panels', *Econometrics Journal*, 4(1),109-142.
- 43) Lawal, E. O (2016). Effect of exchange rate fluctuations on manufacturing sector output in Nigeria, *Quest Journals Journal of Research in Business and Management*, 4(10), 32-39.
- 44) Levin, A., C.F Lin, & J.S. Chu, (2002), Unit root tests in panel data: Asymptotic and finite-sample properties, *Journal of Econometrics*, 108(1), 1–24.
- 45) Maddala, G.S & Wu , S. (1999). A comparative study of unit root tests with panel data and a new simple test, *Oxford Bulletin of Economics and Statistics*, special issue, 61(1), 631-52.
- 46) Matlanyane, A. R. (2005). A Macro econometric Model for the Economy of Lesotho. University of Pretoria, South Africa. Unpublished Ph.D Dissertation
- 47) McCoskey, S. & Kao, C. (1998) 'A Residual-Based Test for the Null of Cointegration in Panel Data', *Econometric Reviews*, 17, pp. 57-84.
- 48) Mcdonald, F. & Dearden ,S. (1999), *European Economic Integration*, Addison Wesley Longman Ltd: Essex.
- 49) Moyo, V., & Mapfumo, A ((2015), Causal Relationship Between Imports And Economic Growth In Zimbabwe: An Empirical Analysis 1975 – 2013, *The Economics and Finance Letters*, 2015 Vol. 2, No. 4, pp. 35-44
- 50) Mundell R.A. (1973) "Uncommon Arguments for Common Currencies" in the *Economics of Common*
- 51) Mussa, Michael. (1976). The exchange rate, the balance of payments, and monetary and fiscal policy under a regime of controlled floating. *Scandinavian Journal of Economics* 78 (May): 229-48.
- 52) Nwanne, T. F. I. and Eze, O. R. (2015). Assessing the effect of external debt servicing and receipt on exchange rate in Nigeria. *International Journal of Economics and Finance*, 7(9), pp.278-286.
- 53) Nwosa, P. I(2018)*Foreign Direct Investment in Nigeria: Its Role and Importance in Industrial*
- 54) Obademi, O.E. (2013). External Debt and Nigeria's economic growth nexus, matters arising. *Journal of poverty, Investment and Development-An open access international Journal*, 1 2013.
- 55) Ogu, C. C. Aniebo, & Paul E. (2016). Does trade liberalisation hurt Nigeria's manufacturing sector? *International Journal of Economics and Finance*; Vol. 8, No. 6; 2016
- 56) Okoli, O.R. (2014). External debt crisis, debt relief and economic growth: Lessons from Nigeria. *European Journal of Business and Management*, 6 (33)
- 57) Opaluwa, D; Umeh, J.C; & Abu A.A. (2010). The effect of exchange rate fluctuation on the Nigerian manufacturing sector. *African Journal of Business Management*, 4 (14), 2994- 2998.
- 58) Ousmanou N. (2003) Trade reform and efficiency in Cameroon's manufacturing industries, *AERC Research Paper* 133
- 59) Pandit, V. (2000): *Macroeconomic Policy Modelling for India: A Review of Some Analytical Issues*. Centre for Development Economics Working Paper, No. 74.
- 60) Paul, K. (2003). A framework for a macroeconomic model of an emerging small open economy. Revised Draft, Institute of Policy Analysis, Toronto.
- 61) Pedroni, P. (1999) Critical values for cointegration tests in heterogeneous panels with multiple regressors', *Oxford Bulletin of Economics and Statistics*, special issue, November, 61, 653-70.
- 62) Sector Growth, *Acta Universitatis Danubius. Œconomica*, Vol 14, No 2
- 63) Simon-Oke, O. O. (2010) Exchange rate deregulation and industrial performance: an assessment (1975 – 2006), *African Research Review*, 4(2), 236-251.
- 64) Tams-Alasia O, Olokoyo F. O., Okoye, L. U, Ejemeyovwi J. (2016) Impact of exchange rate deregulation on manufacturing sector performance in Nigeria,
- 65) Ugwu Okereke, J. (2017) 'Foreign Exchange Rate Dynamics and Manufacturing Firms' Performance in Nigeria.' *International Journal of Humanities and Social Science Invention* 6 (9): 9–14.
- 66) Ugwuanyi, C.U., & Nkem, M.N. (2017) Industrialization drivers and Nigeria economic growth. *International Journal of Science and Research Methodology*, 6(4).
- 67) Umoru, D., & Eboriem, M. (2013) Trade liberalization and industrial growth in Nigeria. *Journal of Poverty, Investment and Development*, 3(8), 148-156.
- 68) Wong, K. N. & Tuck, C. T. (2011) Foreign direct investment and employment in manufacturing and services sectors, *Journal of Economic Studies*, 38(3), 313-330.

External Sector and The Nigerian Manufacturing Sector Performance, 1981-2019

- 69) Zakaria, M. (2014). Effects of trade liberalization on exports, imports and trade balance in Pakistan; A Time Series Analysis. Prague Economic Paper, 1 (1), 121-139.

Impact of Capital Structure on The Financial Performance of Listed Financial Institutions in Nigeria



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ABSTRACT: The influence of capital structure on deposit money bank financial performance was explored in this study. The secondary data was gathered from the annual reports and accounts of the 14 sampled Deposit Money Banks from 2014 to 2018, and generalized least square multiple regression was used to evaluate the secondary data. According to the findings, total debt to total assets, total debt to total equity, and long-term debt to total assets have little bearing on the financial performance of Nigerian banks. The study also discovered that the ratio of short-term debt to total assets has a considerable influence on a bank's financial success. In light of the findings, it is suggested that bank management strive diligently to reduce the short-term debt to total assets component of their capital structure, since this has a detrimental impact on their financial performance. They also have a tendency to enhance the ratio of total debt to total assets since it improves their financial performance. Long-term debt to total assets ratios should be reduced in capital structure components since they have a negative impact on financial performance

KEY WORDS: Financial performance, Long-term debt, Short-term debt, Total assets, Total equity.

1.1 INTRODUCTION

Financial performance constitutes the fundamental objective of every financial sectors, it is a catalyst for transmitting monetary policy impulses to the banking sector and the entire economy. The presence of a smooth banking system is a pathway to growing economy. The fulcrum of an economic development is the sound functioning of the financial sector via its laudable roles in coordinating funds or capital. Capital structures are particularly imperative to the banking industry because, cases of failures in business practices had negatively affected investors' and public confidence.

A solid capital structure combination is the cure for a successful business, since it arises from the drive to maximise shareholder value, and as such, it has a significant impact on a company's capacity to compete. The choice of debt and equity to achieve a strong capital structure with low operating costs and great financial profitability is one of the most pressing concerns managers confront today. The choice of a good balance of debt and equity, the debt maturity schedule, and the precise forms of capital to utilise at a given moment are all factors to consider when deciding on capital structure. Managers must make capital structure decisions to optimise shareholder wealth and a company's intrinsic value, according to (Brigham & Ehrhardt, 2017).

Practically, there are recent cases of failure in the banking sector in Nigeria has been attributed to low performance; this is recognized as one of the key factor responsible for the failure of banks in the country. These failures may be attributed to the inability of banks to meet the optimum capital structure. For instance, the collapse of Skype Bank Plc. has raised concerns on capital structure financing mix. It is glaring that failures do not happen within a blink of eye. The build-up process is mostly over a long period of time resulting from the inability to meet up with corporate financing issues. It is noteworthy that Skype Bank fate was determined by how its capital structure was managed. With regards to that, the regulatory bank in Nigeria which is the Central Bank of Nigeria (CBN) together the Nigeria Deposit Insurance Corporation (NDIC), announced the formation of a bridge bank. Since then, Polaris Bank has taken over the assets and liabilities of Skype Bank Plc. An overwhelming numbers of financial institutions have been faced with glaring failure due to improper management of capital structure. Several authors have

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absorbed different opinions on the relationship between capital structure and financial performance. For example, Abor (2005), Nimalathason and ValeriuBrabete (2010), San and Heng (2011) and Saaedi & Mahmoodi (2011) carried out research and the results showed that capital structure and financial performance has a strong positively relationship. Some authors found that there are a no or a weak relationship between capital structure and financial performance, Ibrahim (2009) and Khalaf Al- Taani (2013) have confirmed this assumption. From the above contributions, it is clear that researches on the relationship between financial performance and capital structure are indecisive and requires further investigation which is the major drive to this current research.

In Nigeria for instance, vast number of the studies have fail to employ other mechanisms on capital structure in relation to financial performance. The studies which include Babalola (2012), Yinosa and Babaloola (2012), Olokoyo (2012), Sabastian and Rapuluchuckwu (2012) and Idode, Adeeleke, Ogunlowo and Ashogbon (2014) left out some gaps that requires to be filled. For instance, Salawo (2007), conducted a research on the effect of capital structures on profitability of some selected companies in Nigeria, it focused on short term debt while other forms of financing were left out, hence the result could only be used in the context of short term debt financing rather than the overall. In the actual sense, a study on capital structure is presumed to cut across different forms of debt financing. Also, Babalola (2012), conducted as research on the effect of capital structure on financial performance in Nigeria, using sample of ten firms, focused on total debt to total assets. The study did not include the aspect of total debt to equity, short term debt to total equity and long term debt to total equity even when all the types of debt financing are used by the sampled firms. More so, The study of Babalola (2012) and that of Olokoyo (2012) made use of Chi-square technique to analyse the data. Chi-square is seen as a tool which lacks the reflecting of the concept of time variant.

Theoretically, studies on capital structure and financial performance of enterprises should use approaches that evaluate both time variation and particular characteristics. Sebastian and Rapuluchukwu (2012) also contracted short term debt, long term debt, and total debt in an attempt to analyse the link between capital structure and liquidity on corporate returns of enterprises from 2002 to 2006. Total debt to total equity was not included as one of the debt financing variables in the analysis. From 2008 to 2012, Idode, Adeleke, Ogunlowore, and Ashogbon (2014) performed research on the influence of capital structure on bank performance in Nigeria, which included both equity and debt financing.

However, the analysis overlooked short-term and long-term loans, both of which are critical forms of funding for Nigeria's banking system. In order to fill the gaps described above, a study should be conducted that examines various kinds of finance in order to address the concerns that remain unanswered. What impact does the short debt to equity ratio, long term debt to total equity ratio, and total debt to equity ratio have on a bank's financial performance? The goal of this research is to find answers to these fundamental problems. As a result, the following hypotheses are proposed in order to attain the aforementioned goals.

H₀I: Total debt to total assets ratio has no significant impact on financial performance of Deposit Money Banks in Nigeria.

H₀II: Total debt to total equity ratio has no significant impact on financial performance of Deposit Money Banks in Nigeria.

H₀III: Short term debt to total asset ratio has no significant impact on financial performance of Deposit Money Banks in Nigeria.

H₀IV: Long term debt to total asset ratio has no significant impact on financial performance of Deposit Money Banks in Nigeria.

2.1 LITERATURE REVIEW

2.1.1 Concept of Financial Performance (Profitability)

Financial performance, often known as profitability, refers to the extent to which shareholder wealth and earnings rise at the conclusion of a period compared to when the period began. Profitability may be calculated using ratios from financial statements, namely the statement of financial position and the income statement, or by utilising stock market indexes (Aboh, 2012).

The ratios provide a path for determining whether or not a company is maximising shareholder wealth, as well as a way to assess industry average performance over time. According to Saeed (2013), a good performance metric should take into consideration all of the effects of investments on shareholders' wealth maximisation. The primary goal of shareholders is to increase their profits. As a result, while calculating profitability, the company must indicate how much wealthier the shareholder is as a result of previous investments made over a period of time.

2.1.2 Concept of Capital Structure

The capital structure of a company may be defined as the combination of its financial liabilities. The basic kinds of a firm's obligations are equity and debt, and equity and debt holders are the two main types of investors in businesses. Each investor is connected with varying degrees of advantages, risk, and control. As a result, it is regarded as the method through which businesses finance their assets using a mix of equity, debt, and hybrid securities. A company's capital structure is made up of its

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obligations. It is a combination of a company's short-term debt, long-term debt, common stock, and preferred equity. The capital structure decision refers to how a company finances its whole operation and expansion by combining several sources of funding.

The debt-to-equity ratio measures how well a company uses borrowed capital. Total debt (short- and long-term debt) + current liabilities is divided by Total Equity Contribution to arrive at this figure. Lenders of money (creditors) want this ratio to be lower, because the lower the debt ratio (firm's leverage), the higher the percentage of the firm funded by shareholders. The total debt to total equity ratio indicates how much of a company's entire equity is compared to its total liabilities. This shows how much the outside world, such as obligors, lenders, and raw material suppliers, have invested in the firm in comparison to what the owners (shareholders) have invested.

According to various studies done in Nigeria and across the world, the total debt to total equity ratio is projected to have a significant influence on a company's financial success. Bonds and long-term notes payable are examples of debts, whereas retained earnings, preferred stock, and common stock are examples of equity. Financial leverage increases with business size, investment opportunities, fixed assets, and decreases proportionally with profitability, the risk of bankruptcy, volatility, and advertising spend, according to Raviv (2014). According to the theories of capital structure, non-debt tax shielding, asset structure, and earnings volatility are the elements that may strain leverage.

2.2 Empirical Review

Mathanika (2015) investigated the link between capital structure and financial performance of industrial firms listed on the Nigerian Stock Exchange's floor (NSE). Its findings reveal that the total debt to equity ratio has no impact on a company's financial success. From 2004 to 2009, Rasa and Jurgita (2012) evaluated the influence of corporate governance decisions on capital structure in Nigerian food and beverage industries. There was a substantial negative link between total debt to total asset and business financial performance, according to the findings. Furthermore,

Abor (2005) investigated the influence of capital structure on the financial performance of firms listed on the Ghanaian Stock Exchange's floor. Short-term depreciation and Return on Equity were shown to have a substantial positive association in the study. To put it another way, short-term debt is an essential source of funding for Ghanaian businesses. From 2007 to 2011, Saeed (2013) investigated the impact of capital structure on bank financial performance in Pakistan. Short-term debt to total assets shows a substantial positive link with a bank's financial success, according to the study.

Umar (2012) investigated the influence of capital structure on the financial performance of the Pakistan Stock Exchange's listed firms. Short-term debt, long-term debt, and overall debt all have a negative influence on profit before interest and taxes, return on assets, earnings per share, and gross/net profit margin, according to the findings. Return on equity has a positive link with long-term debt, according to the findings. Goyal (2013) investigated the impact of capital structure on public sector financial performance in the Republic of India. The association between earnings per share, return on assets, and return on equity with capital structure was launched using regression analysis. The findings reveal that short-term debt to total assets has a positive association with financial success as evaluated by Return of equity, Return on assets, and Earnings per share.

Pouraghajan and Malekian (2012) investigated the influence of capital structure on the financial performance of enterprises in Tehran. As a result, the findings reveal a substantial negative association between bank debt ratios and financial performance, as well as a positive relationship between asset turnover and financial performance. Furthermore, the study reveals that when debt rates decline, profitability rises, resulting in an increase in the number of financial performance indicators reported by banks, maximising shareholder value. In Nigeria, Abiodun (2014) looked at the link between capital structure and business success. The findings revealed a link between return on assets and the debt-equity ratio.

2.3 Theoretical Review

The trade-off theory, which was initially utilised by Modigliani and Miller (1963) to explain the most advantageous level of capital structure that may be used to assess the advantages and costs associated with debt financing, is the foundation theory. This might be thought of as a trade-off between the tax benefits of deferring interest payments and the costs of financial difficulties. This capital structure theory contends that enterprises with higher profits should be encouraged to employ debt financing rather than stock financing in order to benefit from the tax break.

According to Myers (2001), tradeoff theory aids enterprises in determining debt levels that balance the tax benefits of more debt financing with the costs of potential financial crisis. This idea aids tax-paying businesses in making reasonable borrowing projections. The trade-off hypothesis compares the firm's risk of bankruptcy and agency costs versus the tax advantages associated with debt utilization. According to Myers and Majluf (1984), corporations employ the pecking order hypothesis to

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pick capitals in the following sequence: internal finance, debt, and equity. However, due to the lack of other options, businesses prefer to fund their operations using retained earnings wherever possible. When retained earnings are insufficient, they use borrowed financing. Only as a last resort is equity financing used.

This theory also claims that using retained earnings to fund investments first closes a gap generated by knowledge asymmetry. Due to knowledge gaps between the company and its stakeholders, the company will choose retained earnings over debt, short-term debt over long-term debt, and debt over equity.

3.1 METHODOLOGY

The study adopted correlational research design as it links the relationship between capital structure and financial performance. The population of the study consist of 14 Deposit Money Banks (DMBs) listed on Nigerian Stock Exchange as at 31st December, 2018. Census sampling technique was adopted for the study. Secondary data from annual reports and accounts of DMBs for five (2014-2018) was used to analyzed the panel data using multiple regression technique with the help of stata₁₃ statistical tool. Financial performance (ROA) is the dependent variable, while total debt to total assets (TDTA), total debt to total equity (TDTE), short term debt to total assets (SDTA) and long term debt to total assets (LDTA) represents the independent variables. This relationship is captured in the model:

$$ROA = \beta_0 + \beta_1 TDTA_{it} + \beta_2 TDTE_{it} + \beta_3 LDTA_{it} + \beta_4 SDTA_{it} + \epsilon_{it}$$

Where: β_0 = Constant term, β_1 - β_3 = Parameters to be estimated, TDTA=Total debt to Total asset, TDTE=Total debt to Total equity, LDTA= Long term debt to total asset, SDTA=Short term debt to total asset ϵ =Error Term, i = i th Bank, t = t th Period. Financial Performance (ROA): Profit After Tax by Total Asset (Abor, 2008), Total Debt to Total asset: Total debt by Total Asset (Akinoyomi, 2013); Total debt to Total equity: Total debt by Total Equity (Salawu, 2007); Short-term debt to Total Assets: Short-term debt divided by Total Asset (Amara & Bilal, 2014) and Long-term Debt to Total asset Long-term debt by Total Asset (Khalaf, 2013)

4.1 RESULTS AND DISCUSSIONS

The result of the data analysis and test of hypotheses are presented in this section. The descriptive statistics, correlation matrix and summary of regression result are presented and analyzed.

Table 1. Descriptive Statistics

Variables	Mean	Std Deviation	Minimum	Maximum
ROA	.0254254	.0435028	-.0953183	.2584365
TDTA	.8051026	1.065605	.0060247	8.804617
TDTE	5.516938	8.896063	-1.968358	73.6552
LDTA	.124621	.151554	0	.9516289
SDTA	.6236332	.311177	.0060247	1.758078

Sources: Generated by Researchers (Stata output) 2021)

Table 1 shows that Deposit Money Banks (DMBs) in Nigeria has a return on assets (ROA) with a mean value of 0.0254254 (3%) which indicates that the DMBs made an average of 3% profit approximately compared with total assets employed. The standard deviation of 0.0435028 (4%), shows that the dispersion between the banks is not much because the value of the standard deviation is very much closer to the mean value. The result showed minimum and maximum values of -0.0953183 and 0.2584365 respectively. TDTA has a mean value of 0.8051026 (81%) which shows that DMBs in Nigeria has an average total debt of 81% that constitute their capital. The standard deviation value of 1.065605 (107%) indicates that the dispersion is high as the value of the standard deviation is greater than the mean value. The range is between the minimum and maximum values 0.0060247 and 8.804617 respectively.

TDTE has a mean value of 5.516938 which indicates that on the average, the total debt DMBs in Nigeria is 552% more than the total equity. The standard deviation of 8.896063 reveals that the deviation between the banks in terms of TDTE is very high this is because the value of the standard deviation is greater than the mean value. The range is between -1.968358 and 73.6552. LDTA has a mean value of 0.124621 which reveals that on the average the long-term debt of the DMBs is 12%. The standard deviation is 0.151554 (15%) which indicates that the dispersion is not very much from the mean value. The minimum and maximum values range between 0 and 0.9516289 respectively. SDTA reveals a mean value of 0.6236332 which indicates that

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DMBs have 62% short-term debt during the period under review. The standard deviation stood at 0.311177 (31) which shows that the deviation is very small among the banks.

Correlation Matrix

Table 2 below presents the correlation matrix which shows the relationship between the dependent variable and the independent variables and equally the association between the independent variables themselves.

Table 4.2. Correlation table

VARIABLES	ROA	TDTA	TDTE	LDTA	SDTA
ROA	1.0000				
TDTA	-0.2442* (0.0416)	1.0000			
TDTE	-0.1423 (0.2399)	0.9147* (0.0000)	1.0000		
LDTA	-0.3875* (0.0009)	0.3137* (0.0082)	-0.0043 (0.9715)	1.0000	
SDTA	-0.5429* (0.0000)	0.3260* (0.0059)	0.1552 (0.1996)	0.5179* (0.0000)	1.0000

Sources: Generated by Researchers (Stata output) 2021.

Table 2 above indicates that TDTA is negatively associated with ROA as revealed by the coefficient value (-0.2442) (0.0416) significant at 5% and TDTE with a coefficient of (-0.1423) (0.2399) significant at 5% is negatively related to ROA. Also, LDTA is negatively associated with ROA revealed by the coefficient (-0.3875) (0.0009) significant at 1%. SDTA showed a negative correlation with ROA (-0.5428) (0.0000) and significant at 1%. This negative association of TDTA, TDTE, LDTA and SDTA with ROA indicates that profitability may decrease when banks increase their debt ratio. LDTA reveals a negative relationship with TDTE (-0.0043) (0.9715) significant at 10%, which shows that further increase in long-term debt may decrease total equity. The correlation coefficient can only show the degree of association between the explained and the explanatory variables but cannot be used to make statistical inferences.

REGRESSION RESULTS

Table 3 below reveals that the mean variance inflation factor value is 8.74 which is below 10 and suggests the absence of multicollinearity. This is consistent with Neter, Wasserman and Kutner (1989), only VIF more than 10 is indicative of multicollinearity. The Breusch-Pagan/Cook-Weisberg test for heteroscedasticity test reveals a Chi2 value of 71.19 which is significant at 1%. This indicates the presence of heteroscedasticity in the data of the study hence the conduct of fixed and random effect regression technique to avoid wrong statistical inference. The choice of the most appropriate model is based on the outcome of the Hausman specification test which reveals a Chi2 value of 0.17 and an insignificant p-value of 0.9968 suggesting that the random effect model is the most appropriate technique for the study. The Breusch and Pagan Lagrangian multiplier test for random effects reveals a chi2 value of 34.21 and a significant p-value of 0.0000 informs the choice of the random effect model to ordinary least square model as the most appropriate. Rsq value of 0.3173 signifies that the repressors' explained 32% of variation in financial performance; the remaining 68% are determined by factors not captured by the model. Wald Chi2 value of 19.94 and a p-value of 0.0005 indicate a significant linear relationship between the variables.

Table 3. Summary of Random Effect Regression Result

Variables	Coefficient	z-value	p-value
TDTA	0.0111442	0.62	0.537
TDTE	-0.0013796	-0.63	0.530
SDTA	-0.0722086	-3.00	0.003
LDTA	-0.0542569	-1.05	0.292
Constant	0.0758576	4.51	0.000
R2 (overall)	0.3173		
Wald Chi2	19.94		0.0005
Hausman test	0.17		0.9968
Heteroskedasticity	71.19		0.0000
Mean VIF	8.74		

Source: STATA₁₃ Output

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The model is estimated as:

$$ROA = 0.0758576 + 0.0111442(TDTA_{it}) - 0.0013796(TDTE_{it}) - 0.0542569(SDTA_{it}) - 0.0722086(LDTA_{it})$$

Testing of Hypothesis

Hypothesis I

Table 3 above reveals TDTA with a z-value of 0.62, p-value of 0.537 (significant at 10%) and an associated coefficient value of 0.0111442 signifies that for any 1% increase in TDTA ratio, the profitability of DMBs in Nigeria will increase by 1.11%. The findings provide sufficient evidence not to reject null hypotheses I and therefore concludes that TDTA has an insignificant positive effect on financial performance of DMBs in Nigeria. Therefore, the result suggests that DMBs may increase TDTA. This finding agrees with the study of Saeed (2013). However, this finding contradicts the work of Mathanika (2015) who found a negative relationship between LDTA and financial performance.

Hypothesis II

TDTE indicates a z-value of -0.63, p-value of 0.530 (significant at 10%) with a coefficient of -0.0013796. This signifies that for any 1% increase in TDTE ratio, financial performance of DMBs in Nigeria may decrease by 0.14%. This result provides evidence not to reject null hypotheses II and therefore conclude that TDTE has an insignificant influence on financial performance of DMBs. Therefore, the result suggests that DMBs may decrease TDTE ratio. This findings is in line with the study of Mathanika (2015) and in contrast with Rasa and Jurgita (2012) who found significant but negative association between debt to equity and financial performance.

Hypothesis III

SDTA reported a z-value of -3.00, p-value of 0.003 (significant at 1%) and a corresponding coefficient value of -0.0722086. This implies that for any 1% increase in SDTA ratio, financial performance may decrease by 7.22%. This result provides sufficient evidence to reject null hypotheses III and therefore conclude that SDTA has a significant influence on financial performance of DMBs in Nigeria. This suggests that DMBs may decrease SDTA ratio. This findings aligns with the study of Umar (2012) but contradict Saeed (2013) and Goyal (2013) who found strong positive relationship.

Hypothesis IV

LDTA showed a z-value of -1.05, p-value of 0.292 (significant at 5%) with an associated coefficient value of -0.0542569. This means that for any 1% increase in LDTA ratio, financial performance may decrease by 5.43%. The result provides evidence not to reject null hypotheses IV and further concludes that LDTA has an insignificant effect on financial performance of DMBs in Nigeria. This suggests that DMBs may decrease the LDTA ratio. The findings is in line with the study of Umar (2012).

5.1 CONCLUSIONS

This study examines the impact of capital structure on the financial performance of listed deposit money banks (DMBs) in Nigeria. TDTA, TDTE, SDTA and LDTA constitute the independent variables used to determine the influence on financial performance, while the financial performance (ROA) is the dependent variable of the study. It was found that TDTA has a positive and insignificant influence on the financial performance of DMBs at 10% level of significant. TDTE has an insignificant negative effect on financial performance of DMBs at 10% significant level. However, SDTA has a negative and significant effect on the financial performance of listed DMBs in Nigeria at 1% significant level. While LDTA has an insignificant negative influence on the financial performance of DMBs at 5% level of significance. Therefore the result implies that of all the independent variables only SDTA significantly impacted on the profitability of listed DMBs in Nigeria.

6.1 RECOMMENDATIONS

Based on the findings and conclusions, it is recommended that:

- i. The management of DMBs should increase the ratio of TDTA because it may improve their financial performance
- ii. The management of DMBs should decrease the ratio of TDTE this because it decreases the financial performance
- iii. The management of DMBs should monitor SDTA ratio by reducing it because it has a significant declining effect on their financial performance.
- iv. The management of the DMBs in Nigeria should reduce the ratio of LDTA as long term debt exerts a declining insignificant influence on their financial performance.

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REFERENCES

- 1) Abiodun, B.O. (2014). An analysis of Capital Structures and Firms Performance in Nigeria. *International Proceedings of Economics Development and Research Journal*, 69(12), 75-82.
- 2) Abor, J. T., (2005). Impact of capital structures on profitability. *Journal of Risk Finance*,6(5), 438-445.
- 3) Akinyomi, O.J. (2013). Effect of Capital Structure on Firm Performance of Nigerian Manufacturing Industry. *Journal of Innovation research and Studies* , 2(9), 1-13.
- 4) Babalola, Y.S. (2014). Analysis of Capital Structure and Firms Performance in Nigerian firms. *Ukrainian National University*. 69(12), 75-82.
- 5) Brigham, E. U., & Ehrhardt, M. O. (2011). *Financial Management: Theory and Practice*. *Journal of Management Science*, 3(10), 55-59.
- 6) Dura, C. A., & Drigă, I. P., (2015). The Role of Financial Sector and Banks in Economic Development. *Journal of the University of Petrosani*, 16(16), 598-603.
- 7) Goyal, A. B., (2013). Effect of Capital Structure on Performance of Listed Public Sector Banks in India. *Journal of Business and Management*, 2(10), 35-43.
- 8) Harris, M., & Raviv, A. (2014). The theory of the capital structures and profitability. *Journal of Finance*, 46, 297-355.
- 9) Ibrahim E., E., (2009), The effect of capital structure on performance of Banks in Nigeria. *The Journal of Risk and Finance*. 69(12), 75-82.
- 10) Idode, P.E, Adeleke, T.M., Ogunlowore, A.J, &Ashogbon, O.S. (2014). Impact of Capital Structure on Profitability: Evidence from Listed Nigerian Banks. *Journal of Finance*, 16 (11), 22-28.
- 11) Khalaf A., T., (2013). Effects of capital Structure on Banking Performance. *International Journal of Economics, Finance and Management Sciences*. 3(9), 1-12.
- 12) Mathanika, T., Virgina, A.G. & Paviththira, R. (2015). The impact of capital structure on Firms' value of listed manufacturing firm in Sri Lanka. *International Conference on Contemporary Accounting and Management*, 24-35.
- 13) Modigliani, F. & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *American Economic Review*, 53 (3), 443-453.
- 14) Myers, S. C. (2001). Capital structure. *Journal of Economic Perspectives* 15 (2), 81 – 102.
- 15) Myers, S. C. & Majluf, N. S. (1984). Corporate financing and Investment decisions when firms have information that investors do not have. *Journal of Financial Economics*. 13(2), 187-221.
- 16) Muzir, E. U., (2011). The Triangle Relationship among Capital Structure Choice, Firm Size, Financial Performance. *Journal of Management Research*, 11(2), 87-98.
- 17) Neter, J., Wasserman, W. & Kutner, M. H. (1989). *Applied Linear Regression Models* Homewood, IL: Irwin.
- 18) Nimalathanasan, B. A., &Valeriu B. C, (2010) Capital Structure and Its effect on Profitability. *International Journal of Business and Commerce*, 2(10), 20-27.
- 19) Olokoyo, F.O. (2012). *Impact of capital Structure and Corporate Performance Nigerian Quoted Firms: Panel Data Approach*. (Doctoral dissertation)
- 20) Pouraghajan, A. S., &Malekian, E. T., (2012). The Correlation between Capital Structures and Firm Profitability Evaluation Measures. *International Journal of Business and Commerce*, 1(9), 166-181.
- 21) Rasa, N., &Jurgita, S. (2012). The Relation of Corporate Governance Decision on Capital Structure and Company's financial Performance of Lithuanian Food and Beverages companies. *Journal of Management science*, 17(2), 480-486.
- 22) Sabastian, O. U., & Rapulchukwu, U.E. (2012). Impact of Capital Structure and Liquidity on Returns in Nigeria: Evidence from Manufacturing Firms. *Journal of Accounting, Finance and Management*, 2(3), 1-16.
- 23) Saeed, M. W., Gull, A. B., & Rasheed, M.O., (2013). Evaluating the Impact of Capital Structure on Banking Performance. *Research Journal of Finance and Accounting*, 3(9), 1-12.
- 24) Salawu, R. O. (2007). Empirical Analysis of the Capital Structure of Selected listed Companies in Nigeria. *International Journal of Economics and Finance*, 1(1), 16 -28.
- 25) San, O. T., Heng, T.B., (2011), Assessment of Capital Structure and Corporate Performance of Construction Sector in Malaysia, *International Journal of Humanities and Social Science*, 1(4), 16-19.
- 26) Umar, B. Q., (2012). Evaluating the Impact of Capital Structure on Firms' Financial Performance: Evidence from Pakistan . *Research Journal of Finance and Accounting*, 3(9), 1 12.
- 27) Yinusa, O.G., & Babalola, Y. A. (2012). Impact of corporate governance on capital structure of Nigerian firms. *Ukrainian National University*.

The Effect of Inventory Turnover, Cash Turnover, and Receivable Turnover on Profitability at Telecommunication Companies during the Covid-19 Pandemic



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ABSTRACT: This study aimed at analyzing three different turnovers of current asset elements: the inventory turnover, the cash turnover, and the receivable turnover on profitability. Data is taken in the form of financial statements from the public companies of the telecommunication sector during four quarters of 2020. The panel data is processed from 9 companies or 36 observations using the Eview9 application and produced the fixed effect model as the best regression. The results indicate that the cash turnover has a significantly positive effect on profitability, whereas the inventory turnover and the receivable turnover have not significantly any effect on profitability. Therefore, the study concluded that the cash turnover was the one of current assets turnover that effected on the profitability of the public company telecommunication sector in Indonesia. It implied to the public companies of telecommunication sectors to choose the appropriate turnover model to achieve the maximum profitability during the Covid-19 pandemic.

KEYWORDS: Inventory Turnover, Cash Turnover, Receivable Turnover, Return on Assets, Telecommunication

INTRODUCTION

The main goal of the company is to earn as much profit as possible. In achieving the maximum profit, of course, it cannot be separated from how much the company's ability to earn profit? This question is very important, especially the problem of profitability during the covid-19 pandemic. Regarding the stagnation of the conditions of the economy in Indonesia related the restrictions on community activities, like the policy of Large-Scale Social Restrictions (LSSR) based on Government Regulation No. 21 of 2020 issued March 31, 2020. This policy potentially to affect reducing of community activities, especially amount of business activities. On the next policy still related in covid-19, namely the policy of Enforcement of Restrictions on Community Life (ERCL), then it will not be surprising that some business sectors have already felt the impact, especially in terms of the company's ability to survive during this covid-19 pandemic. In many companies from various business sectors, starting from companies that have reduced operational activities to companies that have stopped their business, there are even companies that have declared bankruptcy and one of the businesses that have the lowest impact from the lockdown policy is the telecommunications sector. Is there any effect of restrictions on the community's economic activities on the profitability of telecommunications companies? This question is very interesting and requires an answer based on the results of empirical research. A stable level of profitability does not come by itself but must always be fought for to succeed in obtaining the expected profitability. This research was conducted based on data from the 2020 quarterly financial statements to study the condition of profitability during the COVID-19 pandemic. With the decline in economic activity due to restrictions, the market automatically becomes quiet and less enthusiastic, but the market for the telecommunications business seems to continue as usual because the characteristics of the products or services are offered by telecommunications companies are different from the products that are offered by companies in general. The telecommunications sector is one of the business sectors that still have the potential to grow in the new normal era because the telecommunications business has a strong enough resilience to navigate the Covid-19 pandemic, especially during 2020. The community's need for a digital lifestyle with internet access helps maintain the company's life. Why is profitability important to be researched? because profitability is a tool used to measure the company's ability to earn a profit. Return on Assets is categorized as an indicator to measure profitability. Return on Assets is an indicator to measure the ratio of net income to total assets. High Return on Assets (ROA) shows the company's ability to generate high profits based on total assets used.

The Effect of Inventory Turnover, Cash Turnover, and Receivable Turnover on Profitability at Telecommunication Companies during the Covid-19 Pandemic

Telecommunications companies have many important roles in supporting communication needs in almost all circles of society. The need for unlimited virtual communication for maximum utilization, not only the internet, social media, you tube, Instagram, Facebook, Twitter, but also the service provider platforms, such as zoom meeting, skype, google meet, and so on. In the face of intense competition, many companies are expected to pay more attention to company management strategies such as pricing and customer-oriented innovation to increase sales so that they can provide benefits to users and affect the company's profitability. Profitability is closely related to the ability to generate profits. The profitability ratio is the set of ratios to be used to measure the efficiency of the use of company assets during a certain period. The survival of the company is influenced by many things, including profitability itself.

The telecommunications business has its uniqueness related to the characteristics of its products. The products are offered by the company are products based on cash recognition and accrual basis. Therefore, this study not only examines cash turnover but also examines inventory turnover and inventory turnover. This study uses the ratio of Return on Assets (ROA) to measure profitability because the telecommunications business uses a lot of modern and sophisticated assets. According to Riyanto, 2016, ROA is an important ratio to measure the assets performance. These modern and sophisticated facilities are certainly obtained at high prices, like the rental of communication satellites to support the telecommunications business, and so on. The telecommunications business has its uniqueness related to the characteristics of its products. The products are offered by the company are products based on cash and accrual recognition. Cash sales are more than credit sales. Therefore, this study does not only examine the cash turnover but also examines the inventory turnover and receivable turnover. This ratio is used to measure the average inventory turnover in an accounting period, or in other words, this ratio measures the number of times the company converts inventory into Cost of Goods Sold (COGS) during the year. The cash turnover was obtained with matching between sales and average cash. The cash turnover is the ability of cash to generate income, or the cash turnover also shows the amount of cash turnover in a certain period. Receivable Turnover is a financial ratio that shows the speed at which credit sales can be converted into cash. This ratio is basically to measure the company's efficiency in managing and collecting credit to be given to customers.

RESEARCH METHODS

This study determined valid samples based on certain criteria under the purposive sampling method as follow:

Table 1: Samples and Total Observation

Explanation	Total
The Telecommunication Companies listed at Indonesia Stock Exchange (IDX) of four quarters in 2020.	15
The Telecommunication Companies listed at Indonesia Stock Exchange (IDX) of four quarters in 2020 had reported losses during the observation period.	(4)
The Telecommunication Companies listed at Indonesia Stock Exchange (IDX) of four quarters in 2020 could not met certain criteria based on variables used in this study during the observation period.	(2)
Total Telecommunication Companies at Indonesia Stock Exchange (IDX) of four quarters in 2020 as chosen samples.	9
Observation Period	4 quarters
Total Observation	36

Resource: Data Processed, 2021

This study uses quantitative research methods to examine the effect of inventory turnover, cash turnover, and receivables turnover as independent variables on Return on Assets (ROA) as the dependent variable, then analyze the effect of these three turnovers on ROA. The population of this study was 15 public companies in the telecommunications sector. The sample was determined based on the purposive sampling method to obtain 9 companies as valid samples for the period 1, 2, 3, and 4 of 2020. The nine companies were: 1. PT. Telkom Indonesia, Tbk [TLKM] 2. PT. Indosat Ooredoo [ISAT], 3. PT. XL Axiata, Tbk [EXCL], 4. PT. Smartfren Telecom, Tbk [FREN], 5. PT. Centratama Telekomunikasi Indonesia [CENT], 6. PT. Trikomsel Oke, Tbk [TRIO], 7. PT. Tower

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Bersama Infrastruktur, Tbk [TBIG], 8. PT Bali Towerindo Sentra, Tbk [BALI], and 9. PT.Solusi Tunas Pratama, Tbk [SUPR]. The data panel is taken from the financial statements 1,2,3 and 4 quarters of 2020 with 9 companies or 36 observations that have been processed based on the number of valid samples after meeting the specified criteria. Processing data were conducted by the Eviews application and found that fixed effect regression was the best regression.

RESEARCH RESULTS

The tabulation of data is processed by application eview9, then produces descriptive statistics, the table of fixed effect for the regression equation, and the results of the t-test, but previously the data has passed the results of the classical assumption test which includes normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. In the normality test that uses the jarque-bera probability value, the data is normally distributed, which is indicated by probability $> \alpha$, which is $0.381752 > 0.05$, and multicollinearity test, there is no multicollinearity problem because the coefficients between variables of inventory turnover, cash turnover, and receivables turnover do not exceed 0.8. In the autocorrelation test, it was found that there was no autocorrelation symptom because the Dublin Watson [DW] value was between Du and 4-Du, namely $[1.6539 < 1.656973 < 2.3461]$. Likewise, in the heteroscedasticity test, there is no heteroscedasticity problem because the Glejser test results show that the probability value is not statistically significant at the 5% degree.

Table 2: Descriptive Statistics

	ROA	ITO	CTO	RTO
Mean	0.130231	2.060754	1.535145	-0.363577
Median	0.016000	2.119637	1.681571	-0.122746
Maximum	2.485000	3.805262	3.740784	0.319181
Minimum	0.001000	0.012916	-0.957113	-2.918771
Std. Dev.	0.423298	0.875202	1.060495	0.648974
Skewness	5.020055	-0.325287	-0.265324	-2.221845
Kurtosis	28.19180	2.858079	2.616322	8.355557
Jarque-Bera	1103.146	0.665081	0.643195	72.64257
Probability	0.000000	0.717100	0.724990	0.000000
Sum	4.688300	74.18713	55.26520	-13.08877
Sum Sq. Dev.	6.271335	26.80925	39.36272	14.74086
Observations	36	36	36	36

Resource: Data Processed, 2021

Based on descriptive statistics that the Mean of ROA was 0.130231 or 13%, which means that the achievement of the Mean of ROA in the telecommunications industry was quite high. The highest ROA of 2,485 or 248.5% was obtained by PT Trikonsel Oke, Tbk in the 4th quarter of 2020, and the lowest ROA of 0.001 or 0.1% was obtained by PT Indosat Ooredoo, Tbk in the 4th quarter of 2020. The Mean inventory turnover for the 1st, 2nd, 3rd, and 4th quarters of 2020 is 2.060754 with a standard deviation of 0.87520. The highest value of inventory turnover of 3.805262 was achieved by PT. Solusi Tunas Bersama, Tbk in the 1st quarter of 2020 period, and the lowest value of 0.012916 was achieved by PT. Telkom Indonesia, Tbk in the first quarter of 2020. The mean of cash turnover during the 1,2,3 and 4 quarters of 2020 was 1,535145 with a standard deviation of 1.060495. The highest CTO of 3.740784 was achieved by PT. XL Axiata, Tbk. 2nd quarter period in 2020 and the lowest CTO of -0.957113 was achieved by PT. Centratama Telekomunikasi Indonesia, Tbk in the 1st quarter of 2020. The mean of Receivable Turnover [RTO] during the 1,2,3, and 4 quarter 2020 periods was -0.363577 with a standard deviation of 0.648974. The highest RTO of 0.319181 was achieved by PT. Solusi Tunas Bersama, Tbk in the 3rd quarter of 2020, and the lowest ROA of -2.918771 were achieved by PT. Trikonsel Oke, Tbk in the second quarter of 2020.

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Table 3: The Result of Chow Test

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	15.796373	(8,24)	0.0000

Table 4: The Result of Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	15.480270	3	0.0014

To get a better regression equation, the Chow test was carried out for the resulting probability value in a cross-section F smaller than alpha $[0.000 < 0.05]$, it means the fixed effect model was better than the common fixed model. The Hausman test produces the probability value of a random cross-section smaller than alpha $[0.0014 < 0.05]$, which means the fixed effect model is better than the random effect. Based on the result of the partial test that an independent variable that has a significant effect on ROA is cash turnover. The cash turnover has a significant effect because $t\text{-count} > t\text{-statistic}$ $[3.700243 > 1.69389]$ and probability value $< \alpha$ $[0.0011 < 0.05]$. However, the inventory turnover and receivables turnover show that they have no significant effect on ROA. The inventory turnover is not significant to ROA because $t\text{-count} > t\text{-statistic}$ $[1.478751 < 1.69389]$ and probability value $> \alpha$ $[0.1522 > 0.05]$, and the receivable turnover has no significant effect because $t\text{-count} > t\text{-statistic}$ $[-0.91209 < 1.69389]$ and probability value $> \alpha$ $[0.6991 > 0.05]$. Thus, the selected regression equation is **ROA = 0.0141166 + 0.014181 ITO + 0.035841 CTO – 0.013261 RTO.**

Table 5: The Regression of Fixed Effect Method

Dependent Variable: Y
Method: Panel EGLS (Cross-section weights)
Date: 06/26/21 Time: 13:19
Sample: 1 36
Periods included: 4
Cross-sections included: 9
Total panel (balanced) observations: 36
Linear estimation after one-step weighting matrix

Variable	Coefficient	Std.	Error-Statistic	Prob.
C	0.041166	0.017709	2.32456	0.0289
ITO	0.014181	0.009590	1.478751	0.1522
CTO	0.035841	0.009686	3.700243	0.0011
RTO	-0.013261	0.033896	-0.391209	0.6991

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Effects Specification			
Cross-section fixed (dummy variables)			
Weighted Statistics			
R-squared	0.842100	Mean dependent var	0.234019
Adjusted R-squared	0.769729	S.D. dependent var	0.441122
S.E. of regression	0.159815	Sum squared resid	0.612976
F-statistic	11.63588	Durbin-Watson stat	1.646973
Prob(F-statistic)	0.000000		

ANALYSIS AND DISCUSSION

The Effect of Inventory Turnover on Profitability (ROA)

The results showed that Inventory Turnover had no effect significantly on Return on Assets (ROA) because the level of inventory turnover did not reflect the level of profitability. The calculation of Inventory Turnover on dividing Cost of Goods Sold by Average Inventory is applied to telecommunications companies, especially since the covid-19 pandemic. The business characteristics of telecommunication companies apply revenue recognition based on Cash Basis rather than Accrual Basis so that changes in Inventory Turnover have no effect on ROA. Moreover, the form of inventory at telecommunications companies is in the form of components that will be charged at the time of use such as telephone terminals, cables, and other spare parts. In this case, inventory includes SIM (Subscriber Identification Module), telephone sets, wireless broadband modem, and prepaid vouchers which are charged at the time of sale. This analysis proves that Inventory Turnover has no effect on ROA. The company sells products more in cash than on credit because its customers are mostly individual rather than corporate customers. Why does the inventory turnover have no effect on ROA? This question has been answered based on the results of this study because Inventory Turnover is not relevant information to measure the performance of ROA. The Inventory Turnover performance that increases or decreases do not reflect the performance of ROA because the change of inventory is closer to affect Receivable or Cash than ROA. The results of this study are in line with Farooq's 2019 research on public companies engaged in cement, sugar, and automobiles in Pakistan for the 2006-2015 period, it was revealed that inventory turnover did not affect ROA. Research results from Migang, S & Irwan, A, 2019 and Suraya, A, 2018 state again that inventory turnover does not affect profitability in the ceramics and retail sector. However, in other retail businesses, the results of Nuraini's research, 2021 stated that inventory turnover has a negative effect on ROA. This shows that the slower the Inventory Turnover, the higher the ROA. Different results state that Inventory Turnover has a positive and significant effect on ROA based on research results from Julianti, et.al.2017; Werdiningtyas, R & Sam'ani, 2018; Widiyanti, M & Bakar, S.W, 2014 on automotive products, products in the Jakarta Islamic Index (JII) index and property and real estate. Thus, it is clear that the cost of goods sold from industrial products in the form of automotive products, products in JII, and real estate tends to produce products with a long-term range of use rather than short-term.

The effect of cash turnover on profitability

The results of this study indicate that there is a significant influence between Cash Turnover on ROA and as usual sales are the main actor associated with changes in ROA. The form of business in the telecommunications sector is closer to the service business than the manufacturing business and Cash Turnover is determined by dividing net sales by the average cash. High or low cash turnover indicates the amount of net sales to be achieved, not only from cash sales but also from credit sales. Why does cash turnover from net sales affect ROA in telecommunications sector companies? The business characteristics of telecommunications companies are more likely to target retail customers who pay cash than corporate consumers who pay by credit. Moreover, the company is currently facing the COVID-19 pandemic and therefore the company would prefer to accept cash rather than credit. During quarters 1,2,3 and 4 of 2020, cash turnover has always increased, this means that the use of cash has been efficient and the profitability that has been achieved is getting bigger and bigger. In line with the results of this study from research that be conducted by Widiyanti & Bakar, S.W, 2014; Hakim, et.al, 2020: Nuraini, 2021 who also revealed that the cash turnover affects

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ROA positively and significantly. The research of Widiyanti & Bakar, S.W, 2014 explains this influence in the property and real estate sector for 2008-2012 while the research of Hakim, et.al, 2020 reveals the effect of cash turnover on profitability in the cosmetics and household appliances sector. The result of Research from Nuraini, 2021 reveals that it was in the retail trade sector in 2015-2020. Research that contradicts the results of this study from Melvina, et.al. 2020: Rakhman, 2020 revealed that cash turnover negatively affected profitability in the food & beverage sector in 2015-2018. This means that the higher the cash turnover, the lower the profitability achieved. It's not surprising that there is a negative impact on ROA because the food & beverage sector is one of the sectors most severely impacted during the COVID-19 pandemic.

The effect of receivable turnover on profitability

In the third study, it was revealed that receivables turnover had no significant effect on ROA. An increase or decrease in receivables turnover has no effect on ROA because the company expects cash sales rather than credit. Total sales that be made by telecommunications companies have actually increased during this pandemic because of the character of the company that they sell more retail than the corporate customers and cash sales are more favorite according to the characteristics of the service or products were offered to customers. Therefore, credit sales and receivable turnover have an insignificant effect on ROA. The condition of receivables turnover at telecommunications companies is irrelevant to affect ROA because the number of credit sales does not change significantly during the pandemic. During the PSBB and PTKM periods, there has been a significant increase in sales of telecommunication products in cash. This could have happened due to the increasing number of community activities and office activities being carried out virtually. On the other hand, the company is also happy because the company has good cash flow even though it is operating in the midst of a pandemic. Other studies also reveal that receivables turnover does not have a significant effect on ROA, namely from the research of Almadany, K & Ningsih, Y.R, 2020; Manullang, et.al, 2020; Nelly & Toni, N, 2020 and Rumbyarso, Y.P.A, et.al, 2021 and their research is mostly in the food & beverage, basic industrial and various industrial sectors. Similarity with the results of this study in terms of similarities in consumer characteristics, namely retail consumers. By serving retail consumers, the actual number of sales is dominated by cash sales. On the other hand, the research that shows the significant effect of receivables turnover on ROA is from Hakim, et.al. 2020: Kurniawan, et.al, 2020, Nuraini, 2021 and Rakhman, et.al, 2019 in the cosmetics and household sectors, retail traders, and food & beverage. In the business sector, it is stated that credit sales and receivables turnover affect ROA due to the increase in credit sales, and do not forget that the sector that discloses is the manufacturing sector.

CONCLUSION

This study revealed that inventory turnover and receivables turnover did not have a significant effect on profitability, but cash turnover had a positive and significant effect on profitability. Therefore, from this study, it can be concluded that cash turnover can help show the condition of the telecommunications business that still exists even though the company is in a position of business difficulty during this covid-19 pandemic. Even with the COVID-19 pandemic, it was revealed that the cash turnover of telecommunications companies affected the level of profitability, this was due to the increasing use of telecommunications services by individuals who were not allowed to communicate directly. telecommunication services rather than managing products, as we know this is in accordance with the business character of the telecommunications business. In a time of pandemics where everyone tries to avoid communicating with each other but the telecommunication business is growing rapidly during this pandemic. This can happen because telecommunications services have become a way out for solving problems related to communication during the COVID-19 pandemic.

REFERENCES

- 1) Almadany, K & Ningsih, Y,R, 2020, Analysis of Receivable Turnover Against Liquidity and Profitability at the Medan LP3I
- 2) Polytechnic , *The Journal of Accounting and Finance*, Vol.1 No.1, <https://ejournal.plm.ac.id/index.php/JAFIN/article/view/462>
- 3) Farooq, Umar, 2019. "Impact of Inventory Turnover on the Profitability of Non-Financial Sector Firms in Pakistan," *Journal of Finance and Accounting Research*, University of Management and Technology, Lahore, vol. 1(1), pages 34-51, February, <https://ideas.repec.org/a/ris/jfiacr/0003.html>
- 4) Government Regulation No. 21 of 2020 on Large-Scale Social Restrictions (Pembatasan Sosial Berskala Besar), March 31, 2020, <https://www.kemendikppm.go.id/pembatasan-sosial-berskala-besar>
- 5) Hakim, H.M.Z., Manda. G,S & Rakhman, A, 2020, Effect of Cash Turnover and Account Receivable Turnover on Profitability,

The Effect of Inventory Turnover, Cash Turnover, and Receivable Turnover on Profitability at Telecommunication Companies during the Covid-19 Pandemic

- 6) *Business Innovation and Entrepreneurship Journal*, Vol.2 No.1, pp.61-67, <http://ejournals.fkww.uniga.ac.id/index.php/BIEJ/article/view/42>
- 7) Julianti, D.K., Sumendra, I Wayan & Telagawati, N,L,W, S., 2017, Pengaruh Current Ratio dan Debt to Equity Ratio Serta Inventory Turnover Terhadap Return on Asset Pada Perusahaan Otomotif yang terdaftar di Bursa Efek Indonesia,
- 8) *Jurnal Manajemen Indonesia*, Vol.5 NO.1, <https://ejournal.undiksha.ac.id/index.php/JMI/article/view/9362>
- 9) Kurniawan, H., Khosasih, R,W.,Simatupang, J.P & Januardin, 2020, Effect of Solvency, Current Ratio and Account Receivable Turnover on Profitability in Basic Industrial Companies and Chemical listed on the Indonesia Stock Exchange 20152019, *International Journal of Research and Review*, Vol7 issue12, December 2020, pp.518-525, https://www.ijrrjournal.com/IJRR_Vol.7_Issue.12_Dec2020/IJRR0076.pdf
- 10) Manullang, A.A., Togatorop, D., Purba,P,R,D., Manik., A,Y., Simorangkir., E.N, Lase, R,K, 2020, The Significance of Account Receivable Turnover, Debt to Equity Ratio, Current Ratio to The Probability of Manufacturing Companies, *International*
- 11) *Journal of Social Science and Business*, Vol.4 No.3, 2020 pp 464-471, <https://ejournal.undiksha.ac.id/index.php/IJSSB/article/viewFile/27874/16136>
- 12) Melvina., Handoko & Yaasin, F.N, 2020, Effect of Current Ratio, Debt to Total Assets Ratio, Cash Turnover, and Total Assets Turnover on Return on Assets in Food and Beverage Sector Companies on the IDX 2015-2018 Periode, *Jurnal Mantik*, Vol4 No.3, <https://iocscience.org/ejournal/index.php/mantik/article/view/1120>
- 13) Migang, S & Irawan A, 2019, Pengaruh Cash Turnover, Working Capital Turnover, Receivable Turnover dan Inventory Turnover Terhadap Return on Assets Pada Perusahaan Keramik yang Terdaftar di Bursa Efek Indonesia, *Jurnal Geoekonomi*, Vol.10 No.2, September, <https://jurnal.fem.uniba-bpn.ac.id/index.php/geoekonomi/article/view/60>
- 14) Minister of Home Affairs Instruction No.15 of 2021 on Enforcement of Restriction on Community Activities (Pemberlakuan Pembatasan Kegiatan Masyarakat untuk Jawa-Bali), July 3, 2021, <https://news.detik.com/berita/d-5628512/ini-dasarhukum-ppkm-darurat-yuk-disimak>
- 15) Nelly & Toni, N, 2020, The Effect of Treasury Turnover, Receivable Turnover, Working Capital Turnover and Current Ratio against Profitability Registered Food and Beverage Companies in Indonesia Stock Exchange for the period 2013-2018, *Budapest International Research and Critics Institute (BIRCI-Journal) : Humanities*, Vol.3 No.3, <http://www.bircujournal.com/index.php/birci/article/view/1117>
- 16) Nuraini, A.I., 2021, The Effect of Cash Turnover and Inventory Turnover of Return on Assets (ROA), *Almana : Jurnal Manajemen dan Bisnis*, volume 5, No.2/August 2021, p.259-270, DOI: 10.36555/almana.v5i2.1659, <http://journalfeb.unla.ac.id/index.php/almana/article/view/1659/1002>
- 17) President Decision No.11 of 2020 on Public Health Emergency (Kedaruratan Kesehatan Masyarakat Covid-19), March 31, 2020, <https://www.kemendikbud.go.id/pembatasan-sosial-berskala-besar>
- 18) Rakhman, A, Zakaria, H.K & Manda G,S, 2019, Factors Affecting Return on Assets, *The International Journal of Business Review (The Jobs Review)*, Fakultas Pendidikan Ekonomi dan Bisnis Universitas Pendidikan Indonesia, Vol.2 No.1, <https://ejournal.upi.edu/index.php/thejobsreview/article/view/17772>
- 19) Riyanto, Bambang, 2016., Dasar-Dasar Pembelian Perusahaan, BPFE, Yogyakarta.
- 20) Rumbayso, Y,P,A., Suharto & Sodikin, A, 2021, Effect of Receivable Turnover, Inventory Turnover on Company Profitability with Return on Assets as Moderation Variables, *Journal of Research in Business and Management*, Vol.9 Issue1 (2021) pp.81-86, <http://questjournals.org/jrbm/papers/vol9-issue1/2/J0901028186.pdf>
- 21) Solihin, D & Verahastuti , C. 2020. Profitabilitas Sektor Telekomunikasi di Tengah Pandemi Covid-19, *AKTUAL Jurnal of Accounting and Finance*, STIE AUB Muluk Kondang Kusumaning Bawono, Volume 5, No.2, December, <https://ejournal.stie-aub.ac.id/index.php/aktual/article/view/775/644>
- 22) Suraya, A, 2018, The Influence of Account Receivable Turnover and Inventory Turnover on Profitability at PT Sumber Alfaria Trojaya Tbk, *Pinisi Discretion Review*, Vol.2 Issue 1, September 2018, <https://ojs.unm.ac.id/UDR/article/view/13246>
- 23) Werdiningtyas, R & Sam'ani., 2018, Analisa Pengaruh Receivable Turnover (RTO), Inventory Turnover (ITO), Working Capital
- 24) Turnover (WCTO) dan Total Assets Turnover (TATO) Terhadap Probabilitas pada Perusahaan yang terdaftar di Jakarta Islamic Index (JII) periode 2011-2017, *Jurnal Sains Ekonomi dan Perbankan Syariah*, Vol.8 No.1, <https://jurnal.polines.ac.id/index.php/jse/article/view/1666/106668>

The Effect of Inventory Turnover, Cash Turnover, and Receivable Turnover on Profitability at Telecommunication Companies during the Covid-19 Pandemic

- 25) Widiyanti, M & Bakar, S,W, 2014, Pengaruh Working Capital Turnover, Cash Turnover, Inventory Turnover, dan Current Ratio, Terhadap Profitabilitas (ROA) Perusahaan Property dan Real Estate yang terdaftar di BEI, *Jurnal Manajemen & Bisnis*
- 26) Sriwijaya, Fakultas Ekonomi Universitas Sriwijaya, Vol.12 No.2,
<https://ejournal.unsri.ac.id/index.php/jmbs/article/view/3212>

The Impact of Rice Import Policy on Community Economic Welfare in East Java



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ABSTRACT: This study aims to identify policies, levels of imports, production and consumption in East Java, to analyze the impact of rice import tariff policies on production and consumption and also the community welfare changes in East Java. The data that used in this study are secondary data from the Central Statistics Agency (BPS), BULOG, and other research. The method of analysis uses the 2SLS simultaneous equation and the economic surplus simulation. The results showed that from 2004 to 2018, East Java always had a higher rice production rate than the consumption, but still continued to do rice import to maintain price stabilization. The simulation of a tariff increase causes an increase in production and a decrease in consumption, and vice versa. Liberalization of the rice trade (tariff exemption) has led to greater economic welfare, but from a distribution point of view, producers receive a smaller surplus than consumers, which means that the benefit distribution aspect of government policies is not realized, so the government must pay more attention to producer surpluses and consumer surpluses without much disadvantage one of the parties.

KEYWORDS: Import tariff policy, producer surplus, consumer surplus, economic welfare.

I. INTRODUCTION

Indonesia is the fourth most populous country in the world, with 272,004,902 people or 3.53% of the world's population. Indonesia is also an agricultural country where agriculture is a sector that plays an important role in the economy, this is evidenced by data from BPS (2018) that 29.63% of the Indonesian population chooses Agriculture, Plantation, Forestry, Hunting, and Fisheries sectors as the main employment. Indonesia is also the third-largest rice producer in the world after China and India with rice production reaching 81 million tons in 2017 or if converted into rice it will be 42 million tons of rice in one year. The results of the Study on Consumption of Staples (BPS, 2017) show that the level of rice consumption in Indonesia tends to be stable, on average, rice consumption per capita per day from 2011 to 2017 is around 3 ounces per day per person [1].

Indonesia is the world's third rice importer after the Philippines and China. Indonesia's rice imports come from three main countries, namely Vietnam, Thailand, and India. Rice imports in Indonesia from 2009 to 2018 fluctuated both in terms of volume and value of imports, the highest volume of rice imports ever occurred in 2011 with a figure of 2.75 million tons. To protect domestic rice producers, the government implements a tariff policy for every rice imported into Indonesia. The rice import tariff itself is regulated by the Minister of Finance Regulation (PMK) No. 6 of 2017 by imposing a tariff of Rp 450/kg for all types of rice imported into Indonesia [2].

The largest rice producer in Indonesia is East Java Province. In 2018, it is known that the three provinces with the highest rice production occurred in East Java, West Java, and Central Java with productions of 10.54 million tons, 9.54 million tons, and 9.51 million tons, respectively. The total production of East Java contributes 18.64 % of the total rice production in Indonesia, this shows that East Java's rice production plays an important role in achieving the national rice self-sufficiency program. Meanwhile, consumption in East Java is quite volatile and tends to decrease every year so that there is always a rice surplus. The existence of a quota of national imports that enter the East Java region will certainly have an impact on production and consumption in East Java, with the government's tariff policy of Rp. 450 consumer surplus and producer surplus. Therefore, it is important to research the impact of import policies on the economic welfare of the people in East Java. The objectives of this research are: (1) to identify the level of imports and national rice import policies as well as the level of production and consumption in East Java; (2) Analyzing

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the impact of rice import tariff policies on rice production and consumption in East Java; (3) Analyzing the impact of the rice import tariff policy on changes in people's welfare in East Java.

II. REVIEW LITERATUR

A. Imports

Imports are the entry of goods from abroad which are basically carried out to meet domestic needs for goods that have not been produced or are not sufficiently produced domestically. From year to year, the composition of imports has shifted so that in the end it has a large weight on raw materials, auxiliary materials, and capital materials. In general, the direction taken in establishing the mechanism for imported goods is to maintain balance and maintain smooth transactions between goods. Controlling import demand in an effort to utilize the foreign exchange to support domestic business and industry and improve the quality of domestic production

B. Welfare

The level of welfare can be defined as an aggregate condition of individual satisfaction. This basic understanding leads to a complex understanding which is divided into two arenas of debate. The first is what the scope of the welfare substance is, the second is how the intensity of the substance can be represented in the aggregate.

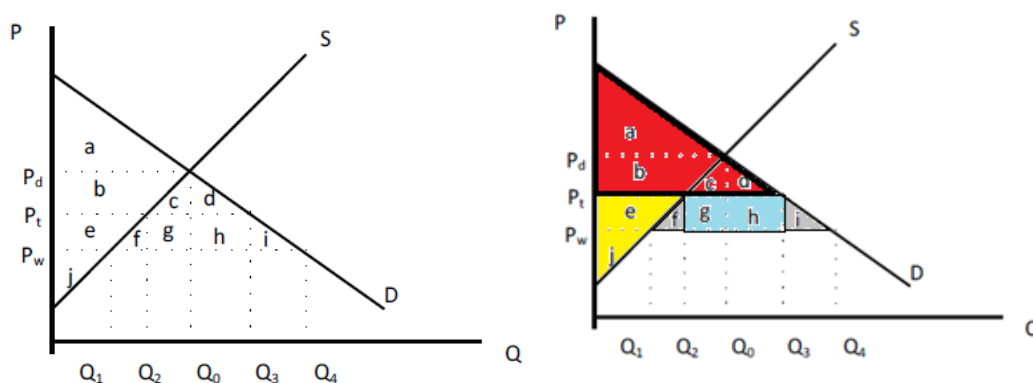
Welfare is a number of satisfactions obtained by a person from the results of consuming the income received, but the level of welfare itself is something that is relative because it depends on the amount of satisfaction obtained from the results of consuming the income. The relationship between the concept of welfare and the concept of needs is that when these needs are met, a person is considered prosperous because the level of these needs is indirectly in line with the welfare indicators.

III. RESEARCH METHODS

This research was conducted by selecting East Java Province as the location under study based on the consideration that the province is the largest rice producer in Indonesia. The data were taken in this study from 2004 to 2018. The data analysis method used by the research objectives. for the first purpose on the analysis of Production, Consumption and Import Levels using descriptive analysis. For the second purpose of analyzing the impact of rice import tariff policies on rice production and consumption in East Java, the 2SLS simulates regression test analysis is used to obtain the elasticity of demand and supply. For the third purpose of analyzing the impact of rice import tariffs on changes in people's welfare, it is analyzed using the calculation of producer surplus, consumer surplus, government revenue, and net welfare. This paper analyzes the impact of the rice import tariff policy using the following two policy scenarios:

- 1) Scenario 1 where the rice import tariff is reduced from Rp. 450 per kg to Rp. 200 per kg.
- 2) Scenario 2 with an increase in rice import tariffs from Rp. 450 per kg to Rp. 700 per kg.

Graphically, the comparative static impact of the imposition of rice import tariffs on people's welfare is presented in the image below:



Sumber : Ellis, 1992

IV. RESULT AND DISCUSSION

A. Rice Production, Consumption and Import Levels in East Java

The average rice production in East Java in 2004-2018 was around 5.3 million tons per year, but if you look at it in more detail, rice production tends to increase. Ishaq's research (2017) states that production in East Java is influenced by the increase in land area. In addition, the conversion rate also determines the size of the amount of rice produced. While the average consumption in East

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Java is 3.5 million tons, the rate of change in rice consumption in East Java in 2004-2018 is fairly volatile but tends to decrease, from this it is known that East Java Province experiences a rice surplus of around 2 million tons annually, however, East Java still gets an import share of the total national imports which is quite large. The largest imports into East Java occurred in 2018, which was 646,710 tons, the rest of the imports were very volatile. This happens because the import decision is made by the central government by considering triggers; rice stocks are too small, rice prices have increased by 10%, estimated production forecasts for 6 months, and other factors [3].

Considering a large number of incoming imports, in the Minister of Finance Regulation No.93/PMK.011/2007 the government set a policy of rice import tariffs of Rp. 450/kg to protect domestic rice production. The import decision itself has pros and cons from various parties, the rice import policy is not in accordance with the food law which states that food imports can only be carried out if domestic food production is insufficient and/or cannot be produced domestically [4]. If you look at the production which always experiences a surplus, then there should be no need to import rice. Even so, it is known that rice is also a political commodity. [5] states that import decisions in Indonesia are carried out by the interests of various parties, resulting in a decision to import which will only benefit the strongest party and harm the community. The application of tariffs aimed at inhibiting the entry of imported rice is indeed needed, but the government needs to pay more attention to decisions taken without bringing personal interests so that there are no regulations or policies that conflict with conditions in society.

B. Impact of Import Policy on Production and Consumption in East Java

Simultaneous equation analysis using 2SLS in this study needs to be done to get the elasticity of demand and supply which will be used in the subsequent simulation calculations. The elasticity value can be seen from the price coefficients in Table 1 and Table 2. From these calculations, it is obtained that the demand elasticity value is -0.268 and the supply elasticity value is 0.003. Validation of the model is done by calculating the RMSPE and U-Theils values, the results of the RMSPE DEMAND and SUPPLY equations are 0.331 and 0.095, respectively, while the U-Theils values are 0.012 and 0.003 which means that the simulation results are close to the actual results.

Table 1. Estimation Results of Rice Demand Parameters

Coefficients						
		Unstandardized Coefficients		Beta	t	Sig.
		B	Std. Error			
Equation 1	(Constant)	23.485	4.029		5.828	.000
	Ln_X1	-.268	.162	-1.032	-1.649	.130
	Ln_X2	.157	.093	1.273	1.685	.123
	Ln_X3	-.246	.102	-1.143	-2.404	.037
	Ln_X4	-.381	.236	-.404	-1.614	.138

Source: BPS data processed

Table 2. Estimation Results of Rice Supply Parameters

Coefficients						
		Unstandardized Coefficients		Beta	t	Sig.
		B	Std. Error			
Equation 1	(Constant)	1.970	.939		2.098	.062
	Ln_X1	.003	.022	.007	.118	.908
	Ln_X5	.835	.069	.766	12.013	.000
	Ln_X6	.032	.007	.238	4.824	.001
	Ln_X7	.023	.004	.298	5.801	.000

Source: BPS data processed

Furthermore, a simulation is carried out using two scenarios, namely, reducing the import tariff of rice to Rp. 200/kg (simulation 1), increasing the tariff from Rp. 450 to Rp. 700/kg (simulation 2) which aims to determine the impact of changes in import tariffs on production and consumption. So that we get the result that in the additional production variable whose purpose is to find out changes in production, it is found that the reduction in tariffs becomes Rp. 200 in simulation 1, will result in a decrease in the production of 693 tons or 0.0001144 percent of the original production so that the initial production of 6.053 million tons decreased to 6.052 million tons. On the other hand, if the rate increases to Rp. 700 in simulation 2, production will increase by

The Impact of Rice Import Policy on Community Economic Welfare in East Java

693 tons by 0.0001144 percent from the original production so that the initial production of 6.053 million tons has increased to 6.054 million tons.

The amount of consumption at the basic tariff is 3.30 million tons, based on the calculations carried out according to the instrument in the table, it is found that if the tariff is lowered, there will be an increase in consumption by the community by 33,804 tons or 0.010227 percent, so that the initial consumption by 3.30 million tons will increase to 3.33 million tons, on the contrary, if the tariff is increased, there will be a decrease in consumption by 33,804 tons or 0.010227 percent of the original consumption so that consumers will be 3.27 million tons. These calculations can be seen in the following table:

Table 3. Results of Calculation of Consumption and Production after Tariffs

Variable	Based Value	Simulation 1	Simulation 2
CIF Price (Rp)	6,551	6,551	6,551
Tariff (Rp)	450	200	700
Price of rice (Rp)	7,939	7,689	8,189
Rice Consumption (Tons)	3,305,264	3,305,264	3,305,264
Rice Production (Tons)	6,053,467	6,053,467	6,053,467
Rice Imports (Tons)	646,710	646,710	646,710
Elasticity of demand	-0.268	-0.268	-0.268
Supply elasticity	0.003	0.003	0.003
Rice price increase with new tariff	0	-250	250
Increase in production (Tons)	0	-693	693
Lost consumption (Tons)	0	33,804	-33,804
Production after import tariffs	6,053,467	6,052,774	6,054,160
Consumption after import tariff	3,305,264	3,339,069	3,271,460
Import after Import rate	646,710	681,207	612,213

Source: BPS data processed

C. Impact of Import Policy on Community Welfare in East Java

The rice import tariff policy set by the government will affect producer surplus, consumer surplus, government revenue and society as a whole. An analysis of the impact of import tariff policies on producers, consumers, government and public welfare can be seen in Table 4. Theoretically, according to [6] a reduction in rice import tariffs will reduce the retail price of rice in the market, and vice versa, increasing import tariffs will increase prices. Rice retail in the market. If the rice import tariff policy is lowered from simulation 1, it will result in an increase in consumer surplus of Rp. 830 Billion. On the other hand, if the government increases the rice import tariff, as can be seen in simulation 2, it will result in a decrease in the consumer surplus of Rp. 822 Billion.

Table 4. Calculation of Surplus Producers, Consumers and Community Welfare

Variable	Based Value	Simulation 1	Simulation 2
Changes in consumer surplus (Rp.000)	0	830,541,584	-822,090,481
Change in producer surplus (Rp.000)	0	-1,513,280,120	1,513,453,380
Government revenue from tariffs (Rp.000)	291,019,500	136,241,490	428,548,785
Net welfare effect (Rp.000)	291,019,500	818,980,026	-262,814,114

Source: BPS data processed

Based on the rice import tariff policy in simulation 1 by reducing the tariff, the producer surplus decreased by Rp. 1,513.28 Billion. On the other hand, if the government increases the rice import tariff in simulation 2, it will increase the producer surplus to Rp. 1.51 Trillion. Meanwhile, if the government lowers the rice import tariff to Rp. 200/kg, then the government's revenue from rice import tariffs fell to Rp. 136 billion. On the other hand, if the government raises the rice import tariff to Rp. 700/kg, then the government's revenue increases from Rp. 291 billion to Rp. 428 Billion. This impact can be seen in the figure below, which is a curve with basic tariffs, simulation curve 1, and simulation curve 2 [7]. The red part is the consumer surplus area, the yellow area is producer surplus and the blue area is government revenue.

The Impact of Rice Import Policy on Community Economic Welfare in East Java

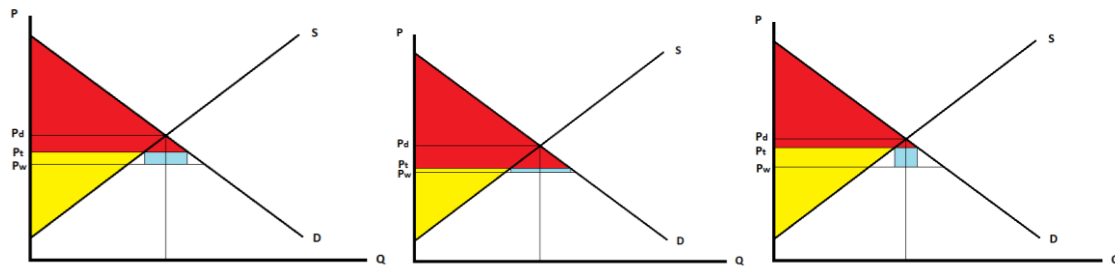


Figure 1. Curves of Tariff Simulation Results on Producer, Consumer and Government Income Surplus

The implementation of the policy of reducing rice import tariffs to Rp. 200/kg can increase the welfare of the community as a whole as much as Rp. 818 M. Meanwhile, if the government raises the rice import tariff to Rp. 700/kg, it will reduce the welfare of the community as a whole to Rp. -262 M. As stated by Krugman and Obstfeld (2000), import tariff policies will reduce the welfare of society as a whole compared to free trade/without tariffs. The exemption of tariffs can provide a larger national economic surplus, which means that the national economy is more efficient. However, in terms of distribution, producers receive a much smaller surplus than consumers, which means that the aspect of equitable distribution of benefits from government policies is not realized [8]

V. CONCLUSION

1. The import tariff policy applied to rice commodities according to PMK No.93/2007 is Rp. 450. Rice production in East Java always increases every year, while rice consumption in East Java tends to decrease. Even so, the government continues to import rice due to various factors such as price increases, lack of stock availability to certain interests.
2. A decrease in tariffs results in a decrease in production, whereas an increase in tariffs increases production. A reduction in tariffs will increase consumption, whereas an increase in tariffs will cause a decrease in consumption.
3. If only seen from the producer's perspective, the higher the import tariff causes the welfare or surplus of producers/farmers to increase. Meanwhile, if only seen from
4. The consumer's side, the higher the tariff, the lower the consumer's welfare. In net welfare, an increase in import tariffs will reduce people's welfare

REFERENCE

- 1) Abidin, Z. 2015. The Impact of Rice Import Policy and Food Security in Social Welfare Perspective. *Journal of Social Information*. Vol. 1 No. 03 Ministry of Finance, Jakarta.
- 2) Hossain, S. S. and Delin, H. 2019. Rice and Wheat Tariff Impact in Bangladesh: CGE Analysis Using the Gtap Model. *Journal of Agricultural Science*. Vol. 11, No. 10. Canadian Center of Science and Education. Beijing, China.
- 3) Zakiyah and Supriyono. 2019. Analysis of Import Procedures on Rice Import Activities. *Journal of Business Administration (JAB)*. Vol 72 No.2. Brawijaya University.
- 4) Alan. M. F. 2019. Rice Import Policy in Indonesia. *Juridical Journal* Vol. 6 No. 1. Gadjah Mada University.
- 5) Kusumah. F. P. 2019. Political Economy in Rice Import Policy: Reading Government Policy Directions for 2014-2019. *Journal of Political Science* Vol. 10 No.2. Gadjah Mada University.
- 6) Septiadi, D and Joka, U. 2019. Analysis of Response and Factors Affecting Indonesian Rice Demand. *Journal of Agrimor* 4 (3) 42-44. Mataram University.
- 7) Yu, K. D., and Cororaton, C. B. 2019. Assessing the Poverty and Distributional Impact of Alternative Rice Policies in the Philippines. *Journal of Business and Economics*. 28 (2). De La Salle University, Manila, Philippines
- 8) Pratama, A. R. 2019. Analysis of Rice Availability and Demand in Indonesia 2018. *Journal of Agricultural Economics*.

The Effect of Service Quality on Internal Stakeholder's Satisfaction: Evidence from Private Higher Education Institutions in UAE



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ABSTRACT: Higher education is considered as the shield of the nations and the benchmark of progress, it is essential for it to be sustainable and to have continuous development. Private Higher Education plays a key role in the UAE, attracting many students. There is a great competition between these institutions in terms of providing the appropriate educational services, to win and satisfy the stakeholders. Undoubtedly, the satisfaction of stakeholders with the quality of educational services provided is the primary concern of any educational institution. The focus on the student takes special. However, the satisfaction of the staff who works to provide this service is also important and to be taken care of with high importance. Hence, the main purpose of this study is to focus on the quality of higher education services and its impact on the internal stakeholders' satisfaction in the private higher education institutions in the UAE. HEDPERF and SERVPERF compiled scale was used for evaluating service quality and internal stakeholders' satisfaction and survey method utilized to gather the data. A total number of 1264 students, 54 Professors and 93 non-academic staff participated in the survey.

KEYWORDS: Service Quality, HEDPERF, SERVREF, Higher Education, Internal Stakeholders' Satisfaction.

INTRODUCTION

The higher education sector is one of the fastest expanding industries in UAE. The rapid growth in this sector is characterized by increased student enrolment, increased governmental expectations and regulations to offer quality service, heightened expectations of higher service quality by well-informed internal stakeholders and the emergence of competitive private universities. Service Quality in education is therefore gaining prominence with high expectations from internal stakeholders as this might affect their satisfaction and retention.

The UAE Ministry of Education has a clear vision to enable citizens and residents of the country to participate in the development of the country through education, training, research and innovation; to evolve a well-informed and educated society that can accommodate with development and effective utilization and application of higher education results regionally and internationally, and to meet the global standard in imparting knowledge and conducting applicable researches in response to social needs effectively.

Presently, there are many universities established in the country to further nurture growth in tertiary education level, many of them are private and also with global partners, UAE has one of the highest rates of enrollment in higher education as a percentage of the population in the world, locally and abroad.

LITERATURE REVIEW

Many research have been carried out to examine the effect of service quality on business performance particularly in manufacturing sector and service sector. Idayati et. al., (2020) argued that measuring service quality can go even beyond this as they undertook a study to examine the effect of service quality on citizens' expectations.

However, few attempts have been done to produce adequate measure of service quality in academia (Munshi, 2019;), scholars assert that there is no agreement on what makes the best scale (Abdullah, 2006; Brochado, 2009; Awan; 2010), and this happened even though Munshi (2019) asserted that service quality measurement is of high importance especially when it comes to academic institutions. For instance, Abdullah (2006) regards the SERVPERF scale developed by Cronin & Taylor (1992) and the SERVQUAL scale developed by Zeithaml & Berry (1988) as inadequate to measure service quality in academic institutions as they were both developed to measure the service quality for sectors other than education. Currently, the literature pertaining to service quality

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in the higher education sector is significantly undeveloped. Traditionally, many researchers have focused their efforts on commercial services (Sultan and Wong, 2010). However, it is increasingly apparent that institutions operating in the higher education sector, previously not regarded as “profit-making organizations,” are attempting to gain a competitive advantage over their competition (Oldfield and Baron, 2000). As a result, universities must consider themselves as a “profit-making organization” that is operating in a competitive marketplace (Oldfield and Baron, 2000). Few studies examined service quality in academia, for instance, Shurair & Pokharel (2019) examined students’ perception of service quality in a university by examining the perceptual context of service quality with respect to students’ loyalty behavior and image of the university and culture. Munshi (2019) argued that higher education institutes survive on their brand image that can be built based on service quality. Mulyono et. al. (2020) argued that building service quality is essential to ensure students’ satisfaction and loyalty. According to them, universities need to innovate their services to maintain high quality. Furthermore, Chandra et. al. (2020) examined the effect of service quality on students’ satisfaction and loyalty, and argued that service quality is an important factor that effect students’ satisfaction, loyalty and motivation. Similarly, Qomariah et. al. (2020) argued that service quality in universities affect students’ satisfaction and that based on service quality students will give referrals to their network.

In light of the current economic climate, funding cuts and potential future decreases in student numbers, universities must realize that they are business entities, competing for resources and students, both in the local and international market (Paswan and Ganesh, 2009). This means that universities should be continually looking for appropriate ways of gaining a competitive advantage. Accordingly, the higher education sector must strive to deliver a high quality of service and satisfy its students, who some may term ‘participating customers’, to achieve sustainability in a competitive service environment (DeShields et al., 2005). After all, universities can only be successful as long as their students are being offered something that they wish to buy, at a quality they feel is acceptable (Brown and Mazzarol, 2009). This demonstrates the importance of service quality in gaining a competitive advantage, whilst also highlighting the need to better understand the role that service quality plays in the higher education sector. Research focusing on college student satisfaction highlights those factors contributing to overall student satisfaction, student departure, and the connection between retention and a student’s social/academic integration. While numerous studies identify the reasons for student departure (Astin, 1977; Danaher & Somassundaram, 2008), an equal number of studies reveal that a student’s positive perceptions of academic programs and personal affiliations with faculty, staff, and students contribute to a feeling of “student-centeredness” (Elliott, 2003). This phenomenon makes students feel connected to and welcomed by their institution, making them more likely to stay in school and feel satisfied with their overall experience. In view of that, Abdullah proposed HEdPERF (Higher Education Performance) as a new and more comprehensive performance-based scale that intend to capture the authentic determinants of service quality within the higher education sector (Abdullah, 2006). According to him, this 41 item instrument aims to consider not only the academic components, but also aspects of the total service environment as experienced by the student. Table 1 below highlight the six dimensions of his scale:

Table 1: The HEdPERF Dimensions of Service Quality.

Sn	Dimensions	Aspects
1	Non-academic aspects	Items that are essential to enable students to fulfill their study obligations, and related to duties carried out by non-academic staff;
2	Academic aspects	Responsibilities of academics
3	Reputation	Importance of higher learning institutions in projecting a professional image
4	Access	Includes issues as approachability, ease of contact, availability and convenience;
5	Program issues	Importance of offering a wide ranging and reputable academic programs/specializations with flexible structure and health services.
6	Understanding	Items related to understanding students’ specific need

A study by Brochado (2009) compares the performance of alternative measures of service quality in the higher education sector and concludes that SERVPERF and HEdPERF presented the best measurement capability but presented inconclusive results with respect to reliability and consistency. Awan (2010) has measured HEdPERF and SERVPERF combined in his study to find out the determinants of service quality. He measured the service quality in three dimensions, namely, academic service quality, managerial service quality and general service quality’. Abdullah (2006) study focuses on education sector and coined a HEdPERF scale as opposed to other scales that measure service quality in other sectors. However, HEdPERF is designed to capture the

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determinants of service quality in the higher education at a macro level, i.e., at a university level but it is not specific enough to capture all dimensions or indicators such as complaints about the services provided; students absenteeism and attrition cases for both students and staff.

The past decade witnessed a remarkable growth in the number of businesses seeking to implement formal quality management systems. And, with the recent clamor for a sustainable knowledge-based economy this research focus on the educational service quality in private education institutions in UAE. Hence, this research examined the quality of services provided and their impact on the satisfaction of students and academic and non-academic staff as key internal stakeholders within the educational institutions. It also intends to identify which service is ranked from the internal stakeholders point of view.

THEORETICAL FRAMEWORK AND HYPOTHESES

Based on the literature review, the theoretical framework and hypotheses of this research developed as follow:

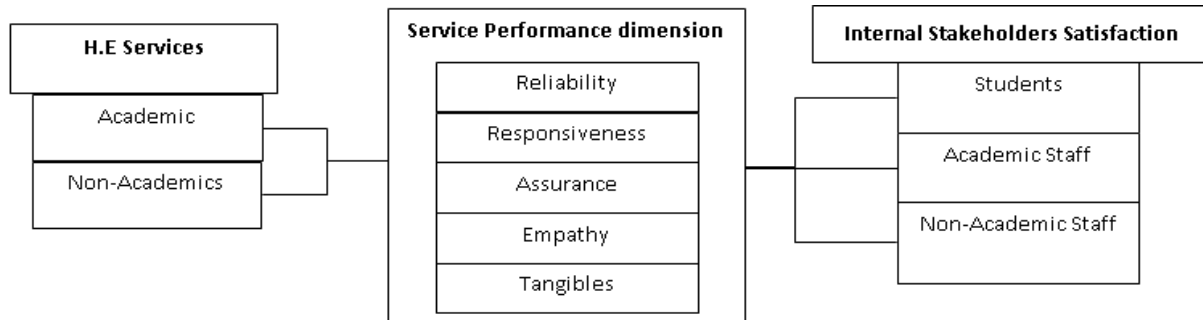


Figure 1: Theoretical Framework

Based on the theoretical framework, the following research hypotheses were developed as follow:

- H1:** *There is positive and significant relationship between Service Quality Dimensions for Academic Services and Students’ Satisfaction..*
- H2:** *There is positive and significant relationship between Service Quality Dimensions for Non-academic services and Students’ Satisfaction.*
- H3:** *There is positive and significant relationship between Service Quality Dimensions for Academic Services and Academic Staff’s Satisfaction..*
- H4:** *There is positive and significant relationship between Service Quality Dimensions for Non-academic services and academic staff’s Satisfaction.*
- H5:** *There is positive and significant relationship between Service Quality Dimensions for Academic Services and Non-Academic Staff’s Satisfaction..*
- H6:** *There is positive and significant relationship between Service Quality Dimensions for non-Academic Services and Non-Academic Staff’s Satisfaction.*
- H7:** *There is positive and significant relationship between staff’s satisfaction and students’ satisfaction.*

DATA ANALYSIS

To have the feeling of the respondents, frequency analysis was conducted as portrayed in below figure.

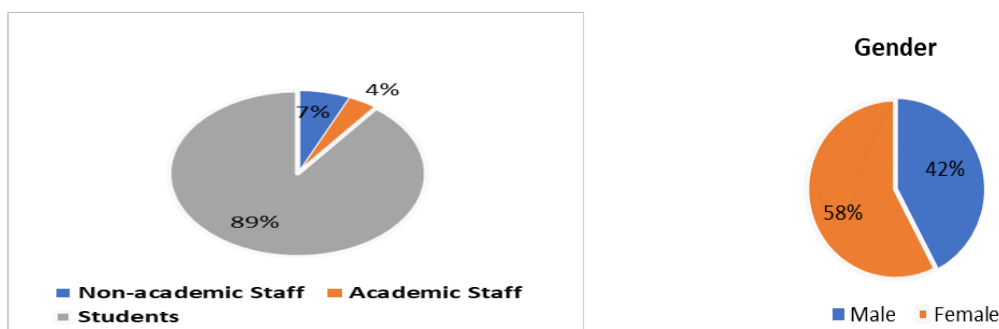


Figure 2: Respondents Demographics

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From figure 2 above, it can be concluded that the majority of respondents in this research are female (58%) whereas male made (42%) of the study population, the majority of respondents are students (89% of the population, followed by non-academic staff (7%) and academic staff (4%) of the study population that made up of 1411 respondents, more details on the population can be found in Table 2 below:

Table 2: Detailed Descriptive Statistics of the Respondents

	Non-academic Staff		Academic Staff		Students	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Male	51	54.8	35	64.8	512	40.5
Female	42	45.2	19	35.2	752	59.5
Total	93	100.0	54	100.0	1264	100.0

This research examined the validity of the used constructs through exploratory factor analysis that conducted by using SPSS Version 24. To examine reliability, Cronbach’s alpha has been calculated to evaluate the internal consistency of the measures. The results are highlighted in table 2 below.

Table 3: Reliability Analysis (Cronbach’s Alpha) of Research Variables

No.	Variables	Cronbach's Alpha	No. of Items
1	Perception of Service Quality - Academic	.850	19
2	Perception on Service Quality - Non-academic	.947	21
3.	Stakeholders’ Satisfaction	.821	9

Based on Table 3 above, Cronbach alpha for Perception of Service quality - academic services and Perception of Service quality - Non-academic services are (0.850) and (0.947) respectively, and hence, the scales used to measure the variables of this study found to be reliable.

Multiple regression analysis was carried out in order to test this research hypotheses, the results of regression analysis explained as follow:

Table 4: Multiple Regression Analysis between Service Quality Dimensions for Academic Services and Students’ Satisfaction.

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	.328	.027	12.129	.000
Reliability of the academic services	.190	.013	15.016	.000
Responsiveness of the academic services	.233	.016	14.727	.000
Assurance of the academic services	.153	.012	12.983	.000
Empathy of the academic services	.128	.014	9.215	.000
Tangibles of the academic services	.200	.008	23.562	.000
Adjusted R Square =0.929 Std. Error of the Estimate = 0.189				
F Value = 3301.017 Significant = 0.000				

To test the impact of academic service quality on students’ satisfaction, multiple regression analysis was conducted with all dimensions of service quality, i.e., reliability, responsiveness, assurance, empathy and tangibles as independent variables and students’ satisfaction as dependent variable, at Adjusted R square value of (0.92) as depicted in Table 4 above, all quality dimensions found to be positively (B= 0.23 – B=0.12) and significantly (0.00) affect students’ satisfaction, and thus, H1 as proposed in this research is accepted.

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To test the second hypotheses that proposed a significant relationship between quality of non-academic services and students' satisfaction, multiple regression analysis was conducted as below:

Table 5: Multiple Regression Analysis between Service Quality Dimensions for non-academic services and Students' Satisfaction.

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	.077	.035	2.224	.026
Reliability of the non-academic services	.243	.013	18.751	.000
Responsiveness of the non-academic services	.129	.012	10.519	.000
Assurance of the non-academic services	.192	.013	15.105	.000
Empathy of the non-academic services	.214	.013	16.137	.000
Tangibles of the non-academic services	.197	.011	17.419	.000
Adjusted R Square = 0.929 Std. Error of the Estimate = 0.189				
Value of F = 3297.023 Significant = 0.000				

Based on Table 5, and at Adjusted R square value of (0.92), all quality dimensions for non-academic services found to be positively (B= 0.24 – B=0.12) and significantly (0.00) affect students' satisfaction even though some weak relationship recorded with Reliability as the highest and Responsiveness as the lowest contributors, hence, H2 of this research is also supported.

Table 6: Multiple Regression Analysis between Service Quality Dimensions for academic services and academic staff's Satisfaction.

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	.384	.109	3.515	.001
Reliability of the academic services	.205	.052	3.942	.000
Responsiveness of the academic services	.083	.052	1.580	.121
Assurance of the academic services	.164	.057	2.873	.006
Empathy of the academic services	.245	.044	5.516	.000
Tangibles of the academic services	.188	.029	6.553	.000
Adjusted R Square = 0.954 Std. Error of the Estimate = 0.129				
Value of F = 220.291 Significant = 0.000				

Multiple regression analysis on the effect of service quality dimensions of academic service on academic staff's satisfaction indicated that, at R square value of (0.95) that all service quality dimensions are associated positively and significantly (0.00) with academic staff' satisfaction. However, when it comes to the effect of responsiveness dimension of service quality, the relationship is found to be weak (0.08) and non significant (0.12) and hence H3 is partially accepted.

Table 7: Multiple Regression Analysis between Service Quality Dimensions for Non-academic services and academic staff's Satisfaction.

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	-.040	.151	-.265	.792
Reliability of the non-academic services	.289	.061	4.770	.000
Responsiveness of the non-academic services	.244	.062	3.910	.000
Assurance of the non-academic services	.166	.063	2.630	.011

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Empathy of the non-academic services	.126	.063	2.006	.051
Tangibles of the non-academic services	.198	.048	4.112	.000
Adjusted R Square = 0.936 Std. Error of the Estimate = 0.153				
Value of F = 154.809 Significant = 0.000				

The above analysis indicates that at R square value of (0.93), all dimensions of service quality for non-academic services are positively and significantly (0.01) associated with academic staff's satisfaction, however, as the significance level of Empathy is slightly above the cut-off point of this research, which is (0.05), thus, the link between empathy and academic staff's satisfaction, hence, H4 is said to be partially accepted.

Table 8: Multiple Regression Analysis between Service Quality Dimensions for academic services and Non-academic staff's Satisfaction.

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	.110	.106	1.039	.302
Reliability of the academic services	.311	.053	5.840	.000
Responsiveness of the academic services	.291	.047	6.200	.000
Assurance of the academic services	.215	.043	5.031	.000
Empathy of the academic services	-.059-	.050	-1.183-	.240
Tangibles of the academic services	.209	.037	5.720	.000
Adjusted R Square = 0.964 Std. Error of the Estimate = 0.155				
Value of F = 231.97 Significant = 0.000				

The analysis above, at R square value of (0.96) indicates that all dimensions of service quality for academic services are associated positively and significantly (0.00) with non-academic staff's satisfaction except for empathy, as the proposed relationship is found to be negative and insignificant (0.24), hence, H5 is partially supported.

Table 9: Multiple Regression Analysis between Service Quality Dimensions for non academic services and Non-academic staff's Satisfaction.

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	.321	.081	3.979	.000
Reliability of the non-academic services	.395	.044	9.003	.000
Responsiveness of the non-academic services	.154	.048	3.193	.002
Assurance of the non-academic services	.187	.052	3.588	.001
Empathy of the non-academic services	-.030-	.046	-.653-	.516
Tangibles of the non-academic services	.191	.034	5.625	.000
Adjusted R Square = 0.952 Std. Error of the Estimate = 0.126				
Value of F = 362.582 Significant = 0.000				

The above table indicates that, at R square value of (0.95), all service quality dimensions of non-academic services are positively and significantly (0.00) are associated with non-academic staff's satisfaction, however, empathy found to be negatively but insignificantly associated, hence H6 is only partially supported.

In order to test the relationship between staff's satisfaction and students' satisfaction, person correlation analysis was conducted as below:

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Table 10: Pearson Correlation between Staff’s Satisfaction and Students’ Satisfaction.

Satisfaction		Students satisfaction
Staff satisfaction	Pearson Correlation	.722**
	Sig. (2-tailed)	.000
	N	1411

The above table shows the person correlation between staff satisfaction and students satisfaction on the quality of the higher educational services provided and found the correlation between the two variables at (0.72) with significancy level of (0.00) indicating high and significant relationship between staff’s satisfaction and students’ satisfaction and thus H7 is accepted.

FINDINGS AND CONCLUSIONS

Measuring service quality in the higher education institution is very important to retain the internal stakeholders. Perception of quality could vary for various stakeholders. The findings of this research indicated positive and significant relationship between all service quality dimensions, i.e., reliability, responsiveness, assurance, empathy and tangibles at significant level (≤ 0.05), however the effect of responsiveness of the academic services on academic staff’s satisfaction, the effect of empathy of the academic services on Non-academic staff’s satisfaction and the effect of empathy of the non-academic services on Non-academic staff’s satisfaction were not supported. The findings also indicate a positive and significant relationship between staff’s satisfaction and students’ satisfaction in higher education private institutions. The findings of this research is believed to be of importance to decision makers in academic institutions as a clear positive and significant relationships were established between most of the dimensions of service quality and students’ satisfaction, academic staff’s satisfaction, and Non-academic staff’s satisfaction, and most importantly, a positive relationship was also detected between staff’s satisfaction and students’ satisfaction.

Based on the findings of this research, Human Resources Departments in higher education institutions need to pay attention to staff’s satisfaction as it found to be positively and significantly associated with students’ satisfaction, a cause-and-effect could be proposed based on this findings. Furthermore, higher education institutions may measure their services in the light of the new modified model and dimensions of SERVPERF that incorporate perceptions of several internal stakeholders. The findings of this research also clearly indicates that both services, i.e., academic and non-academic services are important in achieving internal stakeholders’ satisfaction.

RESEARCH LIMITATIONS AND RECOMMENDATIONS

The study focused mainly on the private higher education institutions in UAE, whereas the number of respondents is remarkably high when it comes to students, the participation from academic staff and non-academic staff is not that much high, hence, creating possibility of conducting the same research by soliciting more responses from the staff. Furthermore, more academic institution can also participate in similar studies and future research also can include governmental academic institutions as well. It will be interesting to make comparative studies across private and public universities to see if the same results can be produced, doing this research in other countries can also be insightful

REFERENCES

- 1) Abdullah, F. (2006), “Measuring service quality in higher education: three instruments compare”, *International Journal of Research & Method in Education*, 29(1), 71-89.
- 2) Astin, Alexander. (1984). *Student Involvement: A Development Theory for Higher Education*. *Journal of College Student Development*. 40. 518-529.
- 3) Brochado, A. (2009). Comparing alternative instruments to measure service quality in higher education. *Quality Assurance in Education*, 17 (2), 174-190.
- 4) Brown, R. M., & Mazzarol, T. W. (2009). The Importance of Institutional Image to Student Satisfaction and Loyalty within Higher Education. *Higher Education*, 58, 81-95.
- 5) Chandraa, T., Hafnia, L., Chandraa, S., Winardib, I. & Chandrac. J. (2020). Effect of students’ service quality and university image on students’ satisfaction, loyalty, and motivation. *Revista Argentina de Clínica Psicológica*. 3. 789-798.
- 6) Danaher, Patrick & Bowser, Don & Somasundaram, Jay. (2008). The student departure puzzle: Do some faculties and programs have answers?. *Higher Education Research & Development - HIGH EDUC RES DEV*. 27. 271-280.

The Effect of Service Quality on Internal Stakeholder's Satisfaction: Evidence from Private Higher Education Institutions in UAE

- 7) Deshields, Oscar & Kara, Ali & Kaynak, Erdener. (2005). Determinants of Business Student Satisfaction and Retention in Higher Education: Applying Herzberg's Two-Factor Theory. *International Journal of Educational Management*. 19. 128-139.
- 8) Elliott R. (2003). Executive functions and their disorders. *British medical bulletin*, 65, 49–59.
- 9) Idayati1, I., Kesuma, I., Aprianto, R. & Suwarno. (2020). The effect of service quality on citizen's expectation through dDimension of tangible, tmpathy, reliability, responsiveness and assurance (TERRA). *SRIWIJAYA International Journal of dynamic economics and business*. 4 (3). 241-252.
- 10) Munshi. R. (2020). Higher education service quality model (HESQUAL) to improve service quality of higher education institutes. *International Journal of Research in Humanities, Arts and Literature*. 7 (1). 181-190.
- 11) Oldfield, B.M. and Baron, S. (2000) Student Perceptions of Service Quality in a UK University Business and Management Faculty. *Quality Assurance in Education: An International Perspective*, 8, 85-95.
- 12) Oldfield, M. S. and Baron, S. (2000). Student perceptions of service quality in a UK university business and management faculty. *Quality Assurance in education*, 8(2), 85-95.
- 13) Paswan, Audhesh & Ganesh, Gopala. (2009). Higher Education Institutions: Satisfaction and Loyalty among International Students. *Journal of Marketing for Higher Education*. 19. 65-84.
- 14) Qomariah, N., Budiastuti, A., Sanosra,A., Susbiani, A. & Budisatoto, E. (2020). Building Student Satisfaction and Loyalty Based on Service Quality and Institutional Image. *SRG International Journal of Economics and Management Studies*. 7(9). 24.
- 15) Sultan, Parves & Wong, Ho Yin. (2012). Service quality in a higher education context: An integrated model. *Asia Pacific Journal of Marketing and Logistics*. 24.

The Effect of Lean Practices on Organizational Sustainability Through Green Supply Chain Management as Intervening Variables (Study on the Palm Oil Industry in North Sumatra Province)



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ABSTRACT:The purpose of this study was to determine and analyze the effect of kaizen and innovation management on Organizational Sustainability through Green Supply Chain Management in the Palm Oil Industry in North Sumatra Province. The independent variables in this study are kaizen and innovation management, the intervening variable in this study is Green Supply Chain Management, while the independent variable is organizational sustainability. The population in this study were 127 palm oil processing companies located in North Sumatra. Samples were selected using saturated samples. The data was processed using the SEM method with SmartPLS 3.0. The results of this study prove that the application of kaizen has no effect on organizational sustainability in oil palm processing companies in North Sumatra. Innovation management has a positive and significant effect on organizational sustainability, kaizen has a positive and significant effect on green supply chain management, innovation management has no effect on green supply chain management, green supply chain management has a positive and significant impact on organizational sustainability, green supply chain management mediates relations kaizen on organizational sustainability, while green supply chain management does not mediate the relationship between innovation management and organizational sustainability in palm oil processing companies in North Sumatra.

KEY WORDS : Organizational Sustainability, Kaizen, Innovation Management, Green Supply Chain Management.

INTRODUCTION

The manufacturing industry is one of the important factors in the economic development and progress of a country. Industry needs to be developed in a balanced and integrated manner by involving active community participation in efforts to optimally utilize all available natural and human resources. Based on data from the Indonesian Manufacturing Company Directory in 2020, it can be seen that there are 24 types of manufacturing industries. One type of industry in the Directory of Manufacturing Companies is the food industry (manufacture of food products), which consists of 8 industrial divisions. In this industry, there are types of edible oil and vegetable and animal fats (manufacture of vegetable and animal oils and fats) industries, which include discussing manufacturing companies engaged in palm oil processing, both CPO (Crude Palm Oil) and PKO (Palm Kernel Oil). Currently, palm oil is included in one of the economic activities of the Master Plan for the Acceleration and Expansion of Indonesia's Economic Development 2011-2025 (MP3EI) for the Sumatra region. In MP3EI 2011-2025, Sumatra's main economic activities are oil palm, coal, steel, and shipping. One of the reasons is that plantations in Sumatra are dominated by oil palm production, where 70% of palm oil producing land in Indonesia is located in Sumatra (Tree Corp Estate Statistics Of Indonesia 2018-2020).

North Sumatra is the province with the third largest oil palm plantation area in Indonesia, with an area of 1,630,744 hectares. This oil palm area is located in 10 districts. In addition, based on data from the Directorate General of Estate Crops, the Province of North Sumatra makes a very large contribution to the total national oil palm production. Indonesia's palm oil production in 2020 is 49,117,260 tons and North Sumatra produces 6,601,399 tons.

Facing these changes, companies in the palm oil industry must be able to manage their resources in order to realize the company's goals which will ultimately maintain the company's sustainability (organizational sustainability) and fully increase the

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value of the company. To be able to realize the company's goals, lean practices are needed in the company's operations so that lean will be one of the keywords in helping companies to become more competitive. Lean practices in companies can be in the form of implementing kaizen and innovation management (Singh, Singh, and Kumar, 2019). Another factor that can influence organizational sustainability is green supply chain management. Green supply chain management is a supply chain management concept that is integrated with environmental aspects which include product design, supplier selection, material procurement, manufacturing activities, packaging activities, product delivery activities to consumers, and end-of-life product management. In the palm oil industry, environmental pollution is one of the main problems that is often discussed so that in order to continue to survive, palm oil companies need to pay attention to environmental aspects in their operational activities. On data obtained through the official website of the Ministry of Industry, it can be seen that the waste that is not environmentally friendly produced for every 1 tonne of FFB processed is 0.3-0.4 tons. If this waste is allowed to continue, it will cause environmental pollution. To overcome this, it is necessary for companies to take into account the ecological side in every decision making.

LITERATURE REVIEW

Organizational sustainability is a principle in improving social, environmental, and economic performance in business operations (Khumar, 2016). Organizational sustainability focuses on sustainable growth, which is defined as the company's ability to meet current needs while considering future needs (Khumar and Jain, 2013). Organizational sustainability in the business sector is more imposed on some of the performance contained in the company. There are three characteristics that also affect organizational sustainability in the company, namely: environment performance, economic performance, and competitive performance (Wang, 2010).

Lean practices

Kaizen is continuous improvement or improvement. According to Cua (2001), kaizen is a way of thinking for management that is used not only within the scope of management but also in the daily operations of the company. Thus Kaizen means continuous and gradual development in increasing value, intensification, and improvement (Yokozawa, 2021). Kaizen is a continuous improvement process that gives progress to all company activities (Imai, 1998). The Kaizen concept is widely applied by companies because Kaizen functions to tidy up all company activities slowly but with definite results (Ishijima, 2021). According to Singh (2019) the concept of kaizen can be influenced by several indicators including Total quality management (TQM), Total productive maintenance (TPM), Customer relationship, Supplier development, and 5S issues.

Management innovation strategies are the process of managing innovation in a company so that it can be efficient for the creation of a sustainable competitive advantage for the company (Zeng et al (2010). Innovation management is needed to recognize that ideas must continue to flow as quickly as possible and at all times in anticipation of In an increasingly fast, diverse and dynamic world (Bowen and Steel, 2010), innovation management plays an important role in this regard. Innovation is a research, development, and/or engineering activity that aims to develop the practical application of new scientific values and contexts, or new ways to apply existing science and technology into products or production processes (Karatepe, 2020). There are several indicators that influence the management of innovation strategies including Innovation resources, Organizational culture, and Organizational structure (Zeng et. al, 2010)

Green supply chain management is the process of integrating enterprise supply chain management and its activities through cooperative organizational relationships, effective business processes, and a high level of information exchange so as to form a high-performance value system that provides a sustainable competitive advantage for members of the organization and combines considerations environment into every stage of organizational decision making (Handfield, 2002). Green supply chain management focuses specifically on reducing the ecological burden which includes all aspects of product manufacturing/reconditioning, use, handling, logistics, and post-production waste management, including reuse and recycling (Dheeraj and Vishal, 2012). There are four components/dimensions of GSCM that need to be processed, namely green purchasing, green manufacturing, green packaging, and reverse logistics (Lin, 2011).

RESEARCH METHODOLOGY

The types of data in this study are primary data and secondary data. Primary data was obtained based on respondents' answers to the question items contained in the research questionnaire. Each company filled out 1 questionnaire. Of the 127 questionnaires distributed, 97 were returned. Thus, the number of questionnaires that can be processed is 97 questionnaires or in other words there are 97 companies that are willing to fill out research questionnaires. Of the total questionnaires

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distributed, the percentage of questionnaires used in the study was 76.38%. The data was processed using the SEM method with SmartPLS 3.0.

DATA ANALYSIS

This section includes the detailed description of statistical analysis performed to validate the questionnaire and meet the objectives of the study.

Hypotheses for the study, validity, and reliability test

To ascertain the role of Kaizen and innovation on organizational sustainability through GSCM (mediating effect), SEM technique has been applied to the different independent and dependent variables. To assess the performance of these lean strategies, an individual model and mixed model have been prepared to ascertain the relationship between latent variables with each other and also on measured variables assigned to each latent variable. The error variables depicting measurement error are also included in relation to measurement variables. The variance of all the error variables has been fixed in software SmartPLS 3.0. The validity of data is measured from loading factor which is greater than 0,70 and AVE is greater than 0,50 (table 1 show AVE). (Figure 2 show the validity test before reduce). Thus, seeing that there are still items that are not feasible to measure the latent variable, it is necessary to reduce (simplify) the use of indicators in variables, namely by removing indicator items that are declared invalid, and excluding the indicators that have been reduced when the re-estimation is carried out. (figure 3 show the validity test after reduce). All the values are greater than 0.70, which is appropriate for the survey research. The reliability of data is measured from composite reliability and cronbach alpha which must be greater than 0,70 (table 2 show reliability test).

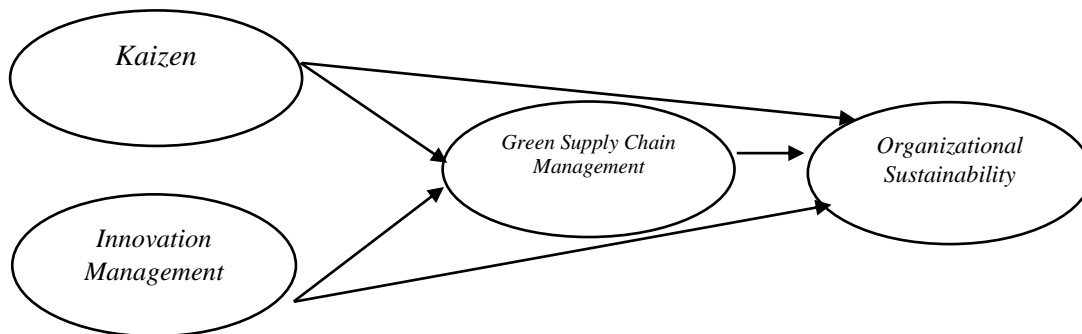


Figure 1. Hypotheses of the research

The hypotheses have been framed for the present research in concern with SEM as shown below:

- H1. kaizen affects organizational sustainability
- H2. innovation management affects organizational sustainability
- H3. kaizen affects green supply chain management
- H4. innovation management affects green supply chain management
- H5. green supply chain management affects organizational sustainability
- H6. green supply chain management mediates the relationship between kaizen to organizational sustainability
- H7. green supply chain management mediates the relationship between innovation management and organizational sustainability

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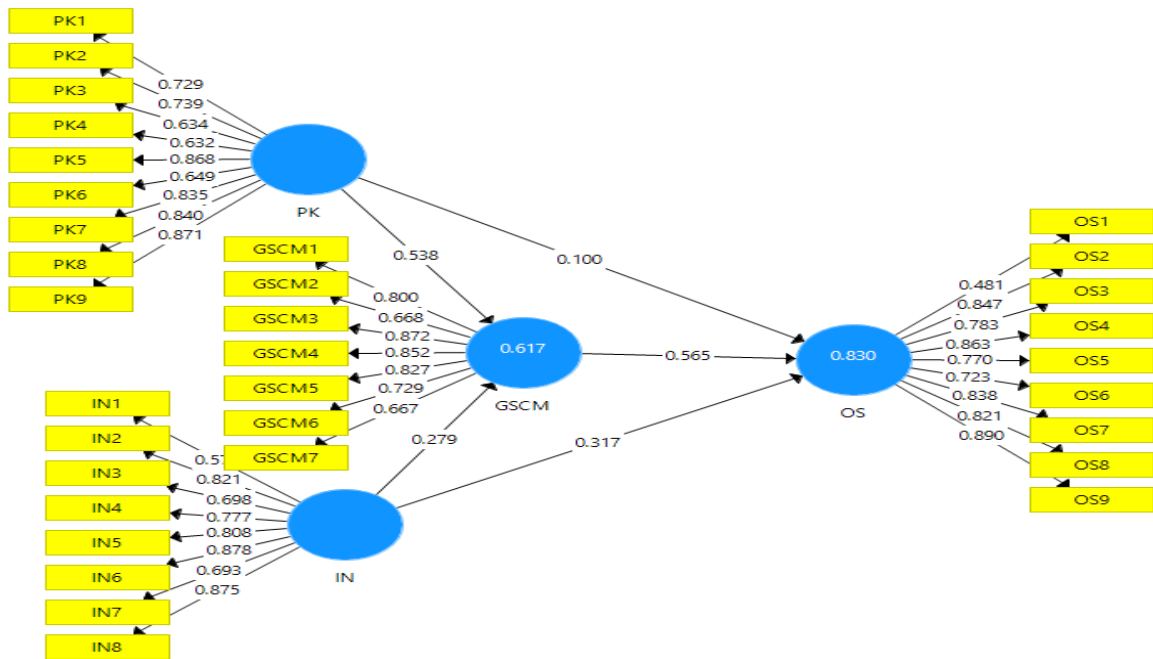


Figure 2. Measurement model for validity (loading factor before reduce)

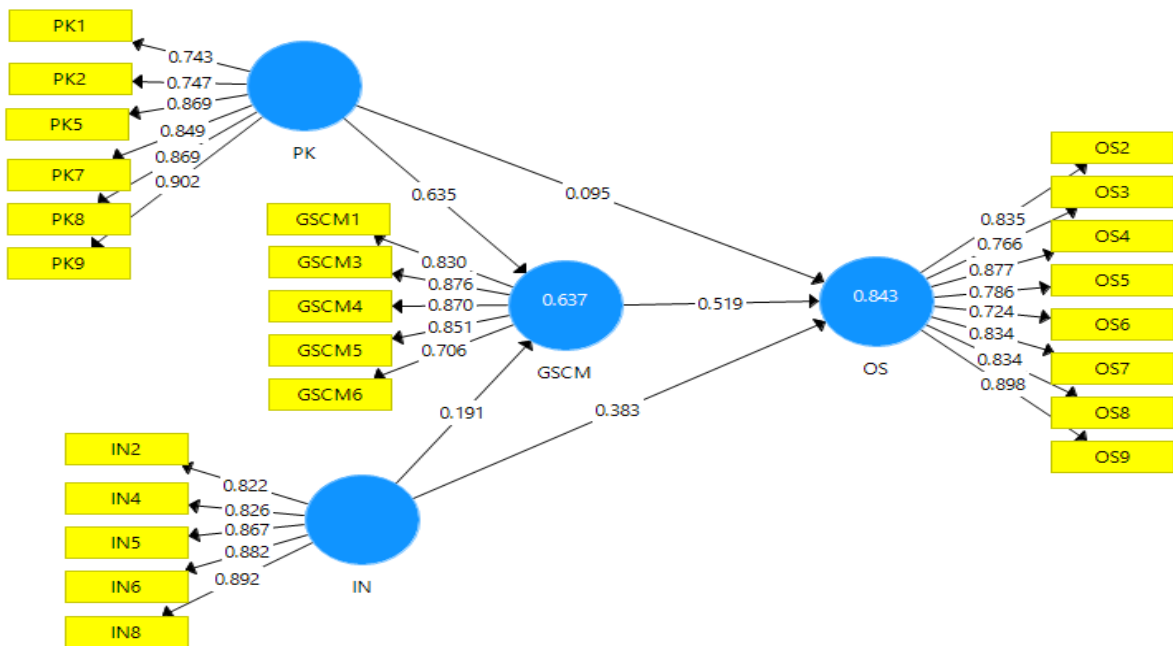


Figure 3. Measurement model for validity (loading factor after reduce)

Table 1. Avarage variance extract (AVE)

	AVE
Kaizen	0.693
Innovation Management	0.736
Green Supply Chain Management	0.687
Organizational Sustainability	0.674

Provisions regarding the measurement parameters (rule of thumb) of the measurement model (outer model) that the AVE is considered to have met convergent validity if the AVE value is greater than 0.50 (Ghozali and Hengky, 2015). So based on the

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table of AVE values above, it can be seen that the AVE value of each construct is valid. So that the construct has met convergent validity.

Table 2. Composite Reliability and Cronbach's Alpha

	Composite Reliability	Cronbach's Alpha
Kaizen	0.931	0.910
Innovation Management	0.933	0.910
Green Supply Chain Management	0.916	0.885
Organizational Sustainability	0.943	0.930

Each construct is above 0.70, so it can be stated that the indicators used in this study have met good reliability (reliable). Assessing the inner model is to look at the relationship between latent constructs, by looking at the results of the estimated path parameter coefficients and their level of significance (Ghozali, 2008). The structural model in PLS is evaluated using R-square for the dependent variable and the path coefficient value for the independent variable which is then assessed for significance based on the T statistic value of each path.

Table 3. R-Square

	R-Square
Green Supply Chain Management	0.637
Organizational Sustainability	0.843

The table shows the R-square value for the green supply chain management variable of 0.637 and for the organizational sustainability variable of 0.843. This shows that 63.7% of green supply chain management variables are influenced by kaizen and innovation management variables and 84.3% organizational sustainability variables are influenced by kaizen, innovation management, and green supply chain management variables.

RESULT

The basis for testing the hypothesis in this study is the value contained in the output path coefficient.

Table 4. Path coefficient for direct effect

	Original sample	T statistic	P value
Kaizen-> Organizational Sustainability	0.095	0.832	0.406
Innovation Management ->Organizational Sustainability	0.383	3.404	0.001
Kaizen-> Green Supply Chain Management	0.635	3.088	0.002
Innovation Management ->Green Supply Chain Management	0.191	1.006	0.315
Green Supply Chain Management -> Organizational Sustainability	0.519	5.130	0.000

The effect of kaizen on organizational sustainability shows the path coefficient value of 0.095 with a tstatistic value of 0.832. This value is smaller than t table (1.96), which means that hypothesis 1 is rejected. The effect of innovation management on organizational sustainability shows the path coefficient value of 0.383 with a tstatistic value of 3,404. This value is greater than t table (1.96) which means innovation management has a significant positive effect on organizational sustainability. The effect of kaizen on green supply chain management shows the path coefficient value of 0.635 with a tstatistic value of 3.088. This value is greater than t table (1.96), which means that hypothesis 3 is accepted. The effect of innovation management on green supply chain management shows the path coefficient value of 0.191 with a tstatistic value of 1.006. This value is smaller than t table (1.96) which means innovation management has no effect on green supply chain management. The effect of green supply chain management on organizational sustainability shows the path coefficient value of 0.519 with a tstatistic value of 5.130. This value is greater than t table (1.96) which means that hypothesis 5 is accepted.

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Table 5. Path coefficient for indirect effect

	T statistic	P value
Kaizen-> green supply chain management-> organizational sustainability	3.573	0.000
Innovation management-> green supply chain management-> organizational sustainability	0.947	0.344

The effect of kaizen on organizational sustainability through green supply chain management as an intervening variable is indicated by the tstatistic value of 3,573 which is greater than t table (1.96). This means that Hypothesis 6 is accepted. Kaizen has no direct effect on organizational sustainability. However, when including the green supply chain management variable as a mediator of the relationship between kaizen and organizational sustainability, it shows significant results. Thus, it can be said that there is a perfect mediation (full mediation). The effect of innovation management on organizational sustainability through green supply chain management as an intervening variable is indicated by the tstatistic value of 0.947 which is smaller than t table (1.96). This means that hypothesis 7 is rejected.

DISCUSSION

Kaizen has no effect on organizational sustainability. This shows that the application of kaizen in palm oil industry companies in North Sumatra can not directly affect organizational sustainability in the company. The application of kaizen in companies requires other factors to achieve organizational sustainability. This is because kaizen emphasizes a process-oriented mindset while management must find, recognize, and correct errors in the process through innovation and work motivation in the process (Maarof and Mahmud, 2015). Kaizen requires long internalization dynamics including the internalization process, changes in human resources, kaizen working process by subject, the process of applying kaizen culture to subjects, and kaizen work application results to achieve organizational sustainability (Khumar and Jain, 2013).

Innovation management has an effect on organizational sustainability. The existence of an organization culture in the process of managing innovation in palm oil industry companies in North Sumatra has the power to create a competitive advantage for the company. Innovation management is a tool that companies can use to achieve long-term sustainability (Kalay and Lynn, 2015).

The application of kaizen in the company's production process will provide an update on the overall knowledge and processes in the palm oil industry in North Sumatra, which in turn will provide an effective production process compared to competitors and can further improve green supply chain management (Perez. et al, 2010). Kaizen will assist the integration process of supply chain management companies and their activities through cooperative organizational relationships, effective business processes, and high levels of information exchange to form a high-performance value system (Green. et al, 2012).

The application of innovation management in palm oil industry companies in North Sumatra has no impact on improving environmental aspects which will lead to the creation of good green supply chain management aspects for the company. Green supply chain management is considered to be part of innovation that focuses on efforts to improve environmental aspects (Dheeraj, 2012).

Green supply chain management in the palm oil industry helps companies to achieve organizational sustainability (Singh, 2019). To balance the development of global industry which is currently aware of environmental issues, companies that are producers must pay more attention to the environment so that they can continue to exist in global developments. Therefore, the application of green supply chain management in companies can be a competitive advantage that companies can use as a way to achieve organizational sustainability.

To achieve good organizational sustainability in a company, a driving aspect of the operational process is needed in the form of continuous improvement practices. In addition, it is also necessary to practice environmental performance that can work together in achieving organizational sustainability within the company. Palm oil companies in North Sumatra are currently actively paying attention to environmental issues. This is due to government pressure regarding regulations for oil palm plantation companies to obtain ISPO (Indonesian sustainable palm oil) certificates which aim to reduce environmental impacts as well as environmental mitigation for companies operating in the palm oil sector. In the process, green supply chain management also influences kaizen in achieving organizational sustainability. Continuous improvement or kaizen coupled with environmental management or green supply chain management makes the company operate more optimally.

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Innovation management does not need to go through green supply chain management first to be able to influence organizational sustainability in the palm oil industry in North Sumatra because it does not play a role at all in linking the two variables. Thus, it can be said that there is no mediation (no mediation). Green supply chain management is considered to be part of innovation that focuses on efforts to improve environmental aspects so that it will not affect innovation management in relation to organizational sustainability.

LIMITATION

The study has some limitations as shown below:

- Scope of subjectivity might be there because managers have responded according to their own perceptions.
- There is a possibility of method variance in applying SEM PLS.

For further research, organizational sustainability variables can be replicated in palm oil processing companies in other regions to strengthen the results of this study and explore the level of generalization across palm oil processing companies in other regions in Indonesia.

REFERENCES

- 1) Bowen, F. E., Rostami, M., & Steel, P. (2010). Timing Is Everything: A Meta-Analysis Of The Relationships Between Organizational Performance And Innovation. *Journal Of Business Research*, 63 (11), 1179-1185
- 2) Cua, K.O., Mckone, K.E. And Schroeder, R.G. (2001). Relationships Between Implementation Of TQM, JIT, and TPM And Manufacturing Performance. *Journal Of Operations Management*, 19 (6), 675-94.
- 3) Dheeraj, Ninawat & Namdev Vishal. (2012). An Overview Of Green Supply Chain Management In India. *Research Journal Of Recent Sciences*. 1 (16), 77-82.
- 4) Green, K., Zelbst, P., Meacham, J. And Bhadauria, V. (2012). Green Supply Chain Management Practices: Impact On Performance. *Supply Chain Management: An International Journal*, 17 (3), 290-305.
- 5) Handfield Rb, Bechtel C. (2002). The Role Of Trust And Relationship Structure In Improving Supply Chain Responsiveness. *Industrial Marketing Management* 31(4), 367-82.
- 6) Imai, M. (1998). *Kaizen: The Key To Japan's Competitive Success*. Random House, New York.
- 7) Ishijima, H., Miyamoto, N., Masuale, F. And John, R. (2021). Improvements To Healthcare Waste Management At Regional Referral Hospitals In Tanzania Using The Kaizen Approach. *The TQM Journal*.
- 8) Kalay, F. And Lynn, G.S. (2015). The Impact Of Strategic Innovation Management Practices On Firm Innovation Sustainability. *Pressacademia*, 2 (3), 412-429.
- 9) Karatepe, O.M., Aboramadan, M. And Dahleez, K.A. (2020). Does Climate For Creativity Mediate The Impact Of Servant Leadership On Management Innovation And Innovative Behavior In The Hotel Industry?. *International Journal Of Contemporary Hospitality Management*, 32 (8), 2497-2517
- 10) Kumar, A.A. And Jain, S. (2013). Impacts Of Kaizen In A Small-Scale Industry Of India: A Case Study. *International Journal Of Lean Six Sigma*, 5 (1), 22-44.
- 11) Kumar, R. And Kumar, V. (2016). Effect Of Lean Manufacturing On Organizational Performance Of Indian Industry: A Survey. *International Journal Of Productivity And Quality Management*, 17 (3), 380-393.
- 12) Lin, Ru-Jen. (2011). Moderating Effect Of Total Quality Environmental Management On Environmental Performance. *African Journal Of Business Management*. 5 (20), 8088-8099.
- 13) Maarof, Mohd Ghazali and Mahmud, Fatimah. (2015). Review of Contributing Factors and Challenges Implementing Kaizen in Small and Medium Enterprises. *Procedia Economics and Finance* 35, 522 – 53.
- 14) Perez-Batres, L.A., Miller, V.V. And Pisani, M.J. (2010). CSR, Sustainability And The Meaning Of Global Reporting For Latin American Corporations. *Journal Of Business Ethics*, 91 (2), 193-209.
- 15) Singh, J., Singh, H. And Kumar, A. (2019). Impact Of Lean Practices On Organizational Sustainability Through Green Supply Chain Management – An Empirical Investigation. *International Journal Of Lean Six Sigma*, 11 (6), 1035-1068.
- 16) Wang, J.X. (2010), *Lean Manufacturing: Business Bottom-Line Based*, Crc Press. Singh, J. And Singh, H. (2010). Assessment Of Continuous Improvement Approach In Smes Of Northern India. *International Journal Of Productivity And Quality Management*, 5 (3), 252-268.
- 17) Yokozawa, K., Nguyen, H.A. And Tran, T.B.H. (2021). Role Of Personal Anxiety In Individual Kaizen Behaviour And Performance: Evidence From Japan. *International Journal Of Operations & Production Management*, 41 (6), 942-961.

The Effect of Lean Practices on Organizational Sustainability Through Green Supply Chain Management as Intervening Variables (Study on the Palm Oil Industry in North Sumatra Province)

- 18) Zheng, G., Lu, J., Yu, X.Z., Li, W.F. And Ding, X. (2010). Total Innovation Management Paradigm For Smes – An Empirical Study Based On Sme Survey. *International Journal Of Learning And Intellectual Capital*, 7 (3), 235-251.

Sticky Cost Behavior in Agricultural Sector Companies in Indonesia



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ABSTRACT: This study aims to analyze sticky cost behavior of agricultural sector industry in Indonesia and the effect of capital intensity, current ratio, profitability, employee intensity, tax, and leverage on sticky cost in agricultural sector industry. There are seven agricultural sector industries used as the sample. The data used in this study was obtained from yearly financial reports of agricultural sector industries from 2015 to 2019. The analysis technique used in this study is panel data regression. The Current ratio, Profitability and Leverage has a positive and significant effect towards the sticky cost, whereas Capital intensity, Employee intensity, and Tax have no significant effect towards the sticky cost.

KEYWORDS: cost behavior, sticky cost, capital intensity, current ratio, profitability, employee intensity, tax, leverage

INTRODUCTION

During the 2020 COVID-19 pandemic, many companies have a lower Gross Domestic Product (GDP) than last year. However, this is not the case for agricultural sector companies, reported in *Bisnis Ekonomi* (<https://www.ekonomi.bisnis.com>) in August 2020. In the second quarter of 2020 the agricultural sector was a sector that contributed significantly to Indonesia's GDP of 15.46 % of which the total GDP is greater than in 2019. This can be because even during this pandemic, all people will still fulfill their basic needs, namely clothing, food and shelter. However, people will be more concerned with food than clothing and shelter during this COVID-19 pandemic.

In maintaining the value of GDP, companies must be able to make the right decisions so that the profits are maximized. In making this decision, companies must be able to understand cost behavior, because cost behavior can describe the relationship between costs and company activities. In the traditional concept, there are fixed costs and variable costs. In general, fixed costs have a constant value and are not affected by changes in the volume of activity, while variable costs have a value that changes proportionally to changes in the volume of activity. However, Anderson et. al. (2003) found that costs do not change in proportion to changes in activity,

The disproportionate change in costs is one of the managers' mistakes in making decisions. This happens because managers will tend to maintain costs until they believe that sales will continue to fall (Anderson, 2003). Sticky cost behavior is found to occur in America and can reduce the accuracy of profit forecasting (Weis, 2010). This can happen if income decreases but the costs incurred are fixed or sticky, so that it has an effect on reducing the profits generated by the company. Therefore, when there are sticky costs, management must be able to reduce sticky costs to maintain company profits. Sticky costs are found in manufacturing industrial companies as in Hidayatullah's research (2011). In addition, sticky costs are also seen in the aviation industry (Cannon, 2011) and the agricultural sector (Argiles and Balndon, 2009). The service sector such as hospitals (Balakrishnan and Gruca, 2008), and in the financial sector, namely banks (Porporato and Werbin, 2011) also found cost stickiness behavior. The difference between this study and previous research is the independent variables used.

THEORETICAL REVIEW

Sticky Cost

Some costs tend not to be easily adjusted because of the sticky cost behavior, (Malcom, 1991). This will cause problems when activity increases and is followed by rising costs, but when activity decreases, the decrease in costs is disproportionate. Cost stickiness is a cost behavior that occurs if the increase in costs due to an increase in activity is greater than the decrease in costs due to a decrease in activity when sales conditions decline (Anderson et. al., 2003). Costs that are difficult to adjust are fixed

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costs, because fixed costs tend to stick and are difficult to change even though the company's activities are experiencing a decline. The nature of these costs that cause costs to be said to be sticky.

From the description that has been explained, costs are said to be sticky if the decrease in costs when activity decreases is not proportional to the increase in costs when activity increases. So to overcome the behavior of costs in the form of sticky costs that can reduce company profits, managers must be able to analyze which costs are sticky. In addition, companies must also be able to predict sales in the future by looking at current trends and be able to read current market conditions and be able to find opportunities that can be done to increase company sales.

Capital Intensity

Capital intensity ratio reflects the amount of capital needed by a company to generate income, the increase in company capital can be obtained from the sale or purchase of fixed assets. Fixed assets in this case include buildings, factories, equipment, machinery and other properties that can support the company's operational activities and can be used for the provision of goods and services or leased to other parties where the use is more than one period (Mulyani et. al., 2013).

The greater the capital intensity ratio, the higher the assets used in obtaining sales. Companies with high capital intensity ratios require a large number of assets to generate additional sales, and therefore require greater external financing for the maintenance of company assets. With the high value of fixed assets, fixed asset costs such as depreciation costs, maintenance costs, and so on will also trigger behavior high cost. The cost attachment to operating costs will be higher in companies that use more company assets in carrying out their operations (Nugroho and Enderwati, 2013). Research by Nelmidia and Siregar (2016) found that there is an indication of sticky costs on capital intensity. Then the proposed hypothesis is:

H₁: Capital Intensity has a positive effect on Sticky Cost

Current Ratio

The current ratio is a comparison between the number of current assets and current liabilities, where current assets are used as payment instruments with the assumption that all current assets can actually be used to pay, (Kasmir, 2014). Meanwhile, current liabilities are obligations that must be paid in less than one year.

If the value of the ratio is higher, the company is able to pay its current obligations. Meanwhile, if the value of the ratio is getting smaller, it can be said that the company has liquidity problems, (Walsh, 2012). Saleem and Rehman (2011) in Nelmidia and Siregar (2016) found that the liquidity ratio has an impact on profitability because costs in the income statement use accrued costs. So even though it has a current ratio that shows good conditions, if cash and cash equivalents cannot meet the payment of the company's short-term obligations, it will be risky for management to maintain costs when sales decline.

The higher the current ratio, the better the company's ability to meet its obligations, making it easier for management to control short-term costs when sales decline. Nelmidia and Siregar (2016) found an indication of the effect of the current ratio on sticky costs. Where the greater the current ratio, the more visible the sticky cost behavior. Then the proposed hypothesis is:

H₂: Current Ratio has a positive effect on Sticky Cost

Profitability

Profitability ratio (profitability ratio) is the ratio used to calculate the company's ability to earn profits in relation to sales, total assets, and own capital (Sartono, 2010). One of the ratios in the profitability ratio is return on assets (ROA). The higher the return on assets generated by the company, the company's management will be more effective in utilizing assets to be able to generate targeted profits, so that company owners will be satisfied with management's performance and will encourage management to maintain and improve the company's performance. So, if the return on assets is greater, it will increase the sticky cost behavior. This is supported by research conducted by Sidabutar, Harahap, and Nasution (2018) show that there is an indication of sticky cost behavior on return on assets. Then the proposed hypothesis is:

H₃: Profitability has a positive effect on Sticky Cost

Employee Intensity

Employee intensity is the ratio of the number of employees to net sales. Employee intensity is measured by the number of employees/sales, which causes the greater the number of workers used, the greater the labor costs incurred by the company (Pichetkun and Panmanee, 2012). The more employees are employed, the more labor costs are incurred so that it will increasingly affect the company's adjustment costs and cost stickiness behavior (Venieris et. al., 2015). Salary costs are said to be sticky because when terminating employees will require a lot of costs because the company needs to incur additional costs, namely severance pay. This is also proven by Kartikasari et al. (2018) which found indications of sticky cost behavior on labor costs in agricultural sector companies listed on the IDX for the period 2012-2015. The proposed hypothesis is:

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H₄: Employee Intensity has a positive effect on Sticky Cost

Tax

Tax ratio is the ratio between tax revenue and the total gross domestic product (GDP), (Parmadi, 2011). So that it can be interpreted that the tax ratio is the government's ability to collect its tax revenues, or the government's ability to reabsorb GDP from the community in the form of taxes. The level of tax effectiveness is a component of the political cost (Kern and Morris, 1991 in Pitchechun, 2012). The tax system in Japan is related to the financial reporting system, so that taxes have an effect on management decisions, (Inoue and Thomas, 1996 in Pitchekun, 2012). The higher the tax ratio, the sticky cost will likely occur, because management will maintain the company's profit at an optimal level to reduce wealth transfer. So it will be difficult for the company to reduce costs when sales decline. This has been proven from research conducted by Pitchekun (2012). Then the proposed hypothesis is:

H₅: Tax has a positive effect on Sticky Cost

Leverage

Leverage is the solvency ratio or leverage ratio is the ratio used to measure the extent to which the company's activities are financed with debt (Kasmir, 2014). This leverage ratio compares the company's overall debt burden to its equity. The higher the leverage value, the greater the company's debt, so that the greater the funds from third parties that enter the company. The third party funds (debt) will be used by management to improve the company's performance. The more debt, the greater the costs in the form of interest that will be issued by the company. The more difficult it is for managers to keep costs down in the form of interest when sales decline. So the higher the leverage, the sticky costs will likely occur. This has been proven from research conducted by Calleja ET. al. (2006), Nelmidia and Siregar (2016), and Jazuli, Azhar, and Endang (2020). Then the proposed hypothesis is:

H₆: Leverage has a positive effect on Sticky Cost

RESEARCH METHODS

The population in this study are all agricultural sector companies listed on the Indonesia Stock Exchange. According to data on the IDX, there are 24 listed agricultural sector companies as of September 2020. The sample is part of the number and characteristics possessed by the population (Sugiyono, 2018). The research sample was selected using a purposive sampling technique based on predetermined criteria. Based on predetermined criteria, there are 7 companies that meet these criteria, so the number of research observations is 35 research samples.

In this study, the type of data used is quantitative data. The technique used to analyze quantitative data is statistical technique. The source of data in this study is secondary data. In this study, secondary data were obtained from agricultural sector companies listed on the Indonesia Stock Exchange during the 2015-2019 period. In collecting data in this study using data collection methods, namely documentation.

In this study, the data analysis method used is the multiple linear regression method. Data analysis was carried out by processing data through the Econometric Views (Eviews) version 9.0 program because the data in this study was panel data. Panel data is a combination of cross section and time series data (Winarno, 2015). The data analysis method used in this study is descriptive statistics, classical assumption test, multiple linear regression analysis, and statistical tests.

Dependent variables are variables that are influenced or are the result, because of the presence of independent variables (Sugiyono, 2018). The dependent variable used in this study is sticky cost. In determining the presence or absence of sticky cost behavior, this study uses the reference variable of changes in sales and selling, administrative and general costs as has been done by previous studies.

A company can be said to have sticky cost behavior if it meets the following criteria if the coefficient value $1 > 0$ and $2 < 0$, or if the coefficient value $1 > 1 + \beta_2$. The coefficient 1 shows the percentage increase in selling, general and administrative costs to the increase in net sales by one percent. While the sum of the coefficients $1 + 2$ shows the percentage decrease in selling, general and administrative costs to the decrease in net sales by one percent. Independent variable The factors in this study are capital intensity, current ratio, profitability, employee intensity, tax, and leverage.

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Table 1. Variable Operation

Variable Operation	Formula
Sticky Cost Indication (Y)	$STICKINESS_{it} = \log\left(\frac{SG\&A_{it}}{SG\&A_{it-1}}\right)$
Sales Changes (SALES)	$SALES_{it} = \log\left(\frac{Sales_{it}}{Sales_{it-1}}\right)$
Dummy Sales Change (SALESCHG)	$SALESCHG_{it} = \text{Dummy} * SALES_{it}$
Capital Intensity Ratio (X1)	$CIR_{it} = \log\left(\frac{\text{Total Aset Tetap}_{it}}{\text{Total Sales}_{it}}\right)$
Current Ratio (X2)	$CR_{it} = \log\left(\frac{\text{Current Asset}_{it}}{\text{Current Liabilities}_{it}}\right)$
Profitability (X3)	$ROA_{it} = \log\left(\frac{\text{Earning After Tax}_{it}}{\text{Total Asset}_{it}}\right)$
Employee Intensity Ratio (X4)	$EIR_{it} = \log\left(\frac{\text{Salaries exp}_{it}}{\text{Total Sales}_{it}}\right)$
Tax(X5)	$TR_{it} = \log\left(\frac{\text{Tax expense}_{it}}{\text{Earning Before Tax}_{it}}\right)$
Leverage(X6)	$LEV_{it} = \log\left(\frac{\text{Debt}_{it}}{\text{Equity}_{it}}\right)$

To see the relationship of the variables Capital Intensity Ratio, Current Ratio, Profitability, Employee Intensity, Tax, and Leverage to Sticky Costs in companies on the Indonesia Stock Exchange, in determining the indication of sticky costs, this study uses the model from ABJ (Anderson, Banker, and Janakiraman) which has been modified as follows:

$$STICKINESS_{it} = \beta_0 + \beta_1 CIR_{it} + \beta_2 CR_{it} + \beta_3 ROA_{it} + \beta_4 EIR_{it} + \beta_5 TR_{it} + \beta_6 LEV_{it} + \epsilon_{it}$$

Description:

STICKINESS _{it}	: Behavioral indication sticky cost
CIR _{it}	: Capital Intensity
CR _{it}	: Current Ratio
ROA _{it}	: Profitability
EI _{it}	: Employee Intensity
TR _{it}	: Tax
LEV _{it}	: Leverage

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Descriptive statistics are statistics used to analyze data by describing the collected data as they are without intending to make generally accepted conclusions (Sanusi, 2011). Descriptive statistics will show the results of the highest value (maximum), lowest value (minimum), average value (mean) and standard deviation. The descriptive statistics of each of the variables studied are as follows:

Table 2. Descriptive Statistics

	Degrees of Sticky Cost	Capital Intensity	Current Ratio	Profitability (ROA)	Employee Intensity	Tax	Leverage
mean	0.0246	-0.2833	0.2907	-1.4123	-1.1941	-0.1899	-0.1442
median	0.0308	-0.2316	0.1652	-1.2584	-1.3129	-0.5517	-0.0058
Maximum	0.1369	0.7511	0.8307	-0.4143	-0.4884	5.8366	1.0937
Minimum	-0.1095	-1.6556	-0.2383	-2.9914	-2.3574	-1.6316	-0.8696
Std. Dev.	0.0605	0.3847	0.3103	0.5178	0.3725	1.5079	0.4779
Observations	35	35	35	35	35	35	35

(Source: Eviews 9) Panel Data Regression Output Results

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RESULTS AND DISCUSSION

Table 3. Common Effect Model

Dependent Variable: Y				
Method: Least Squares Panel				
Sample: 2015 2019				
Periods included: 5				
Cross-sections included: 7				
Total panel (balanced) observations: 35				
Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.095499	0.047417	2.014007	0.0537
Capital Intensity	-0.003653	0.035486	-0.102945	0.9187
Current Ratio	0.132804	0.047241	2.811214	0.0089
Profitability	0.061101	0.021229	2.878136	0.0076
Employee Intensity	0.007872	0.035842	0.219641	0.8277
Tax	0.006949	0.006403	1.085296	0.2870
Leverage	0.093697	0.036647	2.556765	0.0163
R-squared	0.396002	F-statistics		3.059623
Adjusted R-squared	0.266573	Prob(F-statistic)		0.019789
SE of regression	0.051808	Durbin-Watson stat		1.920952

(Source: Eviews 9) Panel Data Regression Output Results

The panel data regression model in this study uses the Common Effect Model. In determining whether the hypothesis is accepted or rejected, it can be seen from the probability value in the table for each variable. If the probability value < 0.05 , then the independent variable has a significant influence on the dependent variable. Meanwhile, the direction and magnitude of the influence of the independent variable on the dependent variable can be seen from the coefficient value.

H₁ : Capital Intensity has a positive effect on Sticky Cost

Probability value for capital intensity is 0.9187. The value is greater than 0.05, then the capital intensity has no effect on the sticky cost. This means that hypothesis one (H₁) for capital intensity is rejected. Capital Intensity does not have a significant effect because the fixed assets in the company come from leasing which when there is a decrease in sales, the company will reduce the cost of maintaining and maintaining these fixed assets so that it will reduce selling, administrative and general costs.

H₂: Current Ratio has a positive effect on Sticky Cost

Probability value for current ratio is 0.0089. With the regression coefficient value 0.132804. This value is smaller than 0.05 and the coefficient value is positive, so the current ratio has a significant and positive effect of 0.132804 on sticky costs. This means that the second hypothesis (H₂) for the current ratio is accepted. The point is that for every one unit increase in the current ratio, the sticky cost will increase by 0.132804 units, on the contrary if the current ratio decreases by one unit, the sticky cost will decrease by 0.132804 units.

H₃ : Profitability has a positive effect on Sticky Cost

Probability value for profitability is 0.0076. With a regression coefficient value of 0.061101. This value is less than 0.05 and the coefficient is positive, so profitability has a significant and positive effect on sticky costs. This means that the third hypothesis (H₃) for profitability is accepted. This means that for every one unit increase in profitability, the sticky cost will increase by 0.061101 units, on the other hand, if profitability decreases by one unit, the sticky cost will decrease by 0.061101 units.

H₄ : Employee Intensity has a positive effect on Sticky Cost

Probability value for employee intensity is 0.8277. The value is greater than 0.05, so employee intensity has no effect on sticky costs. This means that hypothesis four (H₄) for employee intensity is rejected. Employee Intensity does not have a significant effect because the company uses more temporary employees than permanent employees. When a company hires temporary employees, the cost of adding and removing employees will be lower than hiring permanent employees.

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H₅: Tax has a positive effect on Sticky Cost

Probability value for tax is 0.2870. The value is greater than 0.05 then the tax has no effect on the sticky cost. This means that hypothesis five (H₅) for tax is rejected. Tax does not have a significant effect on sticky costs because management does not make any decisions based on the tax ratio when the company experiences an increase so that it does not have an impact on sticky costs.

H₆ : Leverage has a positive effect on Sticky Cost

Probability value for capital intensity is 0.0163. With a regression coefficient value of 0.093697. This value is smaller than 0.05 and the coefficient value is positive, so leverage has a significant and positive effect on sticky costs. This means that hypothesis six (H₆) for leverage is accepted. The point is that for every increase of one unit of leverage, the sticky cost will increase by 0.093697 units, on the contrary if the leverage decreases by one unit, the sticky cost will decrease by 0.093697 units.

The multiple linear regression model produced in this study based on table 3 is:

$$\text{Degree Sticky Cost} = 0.095499 - 0.003653 \text{ Capital Intensity} + 0.132804 \text{ Current Ratio} - 0.061101 \text{ Profitability} + 0.007872 \text{ Employee Intensity} + 0.006949 \text{ Tax} + 0.093697 \text{ Leverage} + 0.051808$$

CONCLUSION

Based on the results of the analysis and discussion of the data that has been done, it can be concluded that Current Ratio, Profitability, and Leverage have a positive and significant effect on Sticky Cost, while Capital Intensity, Employee Intensity and Tax have no effect on Sticky Cost. However, when viewed as a whole from the R² value, the independent variables above explain the dependent variable (Sticky Cost) of 26.66%, while the remaining 73.34% is explained by other factors. This study has several limitations, it is hoped that further research can consider adding other variables that are thought to affect the possibility of sticky cost behavior, conducting research on other company sectors, such as the mining, finance, property, and others sectors.

BIBLIOGRAPHY

- 1) Anderson, Mark. C, Banker, and Janakiraman. 2003. "Are Selling, General and Administrative Costs Sticky?". *Journal of Accounting Research*. Vol. 41, No. 1, March 2003.
- 2) Argilés, JM, & García-Blandón, J. (2009). Cost stickiness revisited: empirical application for farms. *Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad*, 38(144), 579-605.
- 3) Balakrishnan, R., & Gruca, TS (2008). Cost stickiness and core competency: A note. *Contemporary Accounting Research*, Forthcoming.
- 4) Calleja, K., Steliaros, M., & Thomas, DC (2006). A note on cost stickiness: Some international comparisons. *Management Accounting Research*, 17(2), 127-140.
- 5) Canon, JN., 2011. Determinants of sticky Costs. An Analysis of Cost Behavior Using United States Air Transportation Industry Data, *The Accounting Review*: September 2014, Vol. 89, No. 5, pp. 1645-1672
- 6) Hidayatullah, IJ, Utami, W., & Herliansyah, YUDHI (2011). Analysis of sticky cost behavior and its effect on profit prediction using the cost variability and cost stickiness (CVCS) model for issuers on the IDX for the manufacturing industry. *National Accounting Symposium*.
- 7) Jazuli, Muhammad Asrin, Azhar Maksum, and Endang Sulistya. 2020. Analysis of Factors Affecting Cost Stickiness in Manufacturing Companies Listed on the Indonesia Stock Exchange 2014-2018 Period. *Journal of Socio-Humanities Science*, Vol. 4, No. 1, June 2020.
- 8) Kartikasari, R., Suzan, L., & Muslih, M. (2018). Sticky cost behavior on labor costs and operating expenses in sales activities. *Journal of Contemporary Accounting Research*, 10(1), 1-7.
- 9) Cashmere. 2014. *Analysis of Financial Performance*, Seventh Printing. Jakarta, PT. King Grafindo Persada.
- 10) Malcom, RE (1991). Overhead Control Implications of Activity Costing. *Accounting Horizons* (December), 69-78.
- 11) Mulyani, S., Darminto, and MG Endang. 2013. Effect of Company Characteristics, Connections Politics, and Tax Reformation on Tax Avoidance (Study on Manufacturing Companies Listed on the Stock Exchange in 2008-2012). *Tax Journal* 2 (1).
- 12) Nugroho, PI, & Enderwati, W. 2013. "Do the Cost Stickiness in the Selling, General, and Administrative Costs Occur in Manufacturing Companies in Indonesia?" *National Accounting Symposium 16* (pp. 2705-2721). Manado: Indonesian Accounting Association, Educator Accountant Compartment.

Sticky Cost Behavior in Agricultural Sector Companies in Indonesia

- 13) Nelmidia & Siregar, SOH (April, 2016). The Effect of Changes in Sales, Capital Intensity Ratio, Debt To Asset Ratio, and Current Ratio on Cost Stickiness Companies on the Indonesia Stock Exchange . Journal of Economics, Management and Banking., Vol2 No. 1: 1-10.
- 14) Porporato, M., & Werbin, EM (2011, August). Active cost management in banks: evidence of sticky costs in Argentina, Brazil and Canada. AAA.
- 15) Sanusi. 2011. Descriptive Statistics Are Statistics Used By Researchers. PT. Gramedia Pustaka Utama, Jakarta
- 16) Saleem, Q. &. (2011). Impacts of Liquidity Ratios on Profitability: Case of Oil and Gas Companies in Pakistan. Interdisciplinary Journal of Research in Business,, 95-98.
- 17) Sartono, A. (2010). Financial Management Theory and Applications, Fourth Edition. Yogyakarta: BPFE.
- 18) Sidabutar, DH (2018). Effect of Size, Free Cash Flow, Discretionary Expense Ratio, ROA, Tobin's Q, Leverage Ratio, on Sticky Cost Behavior in Manufacturing Companies listed on the Indonesia Stock Exchange for the 2013-2015 Period. Indonesian Journal of Accounting, Finance & Taxation. 6 (01), 13-26.
Sugiyono. 2018. Management Research Methods. Bandung: Alfabeta.
- 19) Parmadi, P. (2011). A DESCRIPTION OF INDONESIAN DOMESTIC TAX REVENUE FOR THE PERIOD OF 1990–2007. Journal of Economics Paradigm, (April).
- 20) Pichetkun, N., and Panmanee. 2012. The Determinants of Sticky Cost Behavior A Structural Equation Modeling Approach. Doctoral Dissertation. Rajamangala University of Technology. Thai thanyaburi.
- 21) Sidabutar, Dumaris, Khairunnisa Harahap, and Akmal Huda Nasution. 2018. Effect of Size, Free Cash Flow, Discretionary Expense Ratio, ROA, Tobins Q, Leverage Ratio, on Sticky Cost Behavior in Manufacturing Companies listed on the Indonesia Stock Exchange for the period 2013-2015. Indonesian Journal of Accounting, Finance and Taxation, Vol. 6, No. 01.
- 22) Venieris, G., Naoum, VC, & Vlismas, O. (2015). Organization capital and sticky behavior of selling, general and administrative expenses. Management Accounting Research, 26, 54-82.
- 23) Walsh, Ciaran. 2012. Key Management Ratio, Fourth Edition. Jakarta: Erlangga Group Publisher.
- 24) Weiss, D. 2010. Cost Behavior and Analysts Earnings Forecast. The Accounting Review, Vol. 85, No. 4.
- 25) Winarno, Wing Wahyu. 2015. Econometric and Statistical Analysis with Eviews, 4th ed. Yogyakarta: Upp Stim Ykpn.
- 26) Windyastuti, BF 2005. Cost behavior analysis: Sticky Cost Behavior, Marketing, Administration and General Costs on Net Sales (Empirical Study of Companies listed on the JSX). VIII National Accounting Symposium, Solo.
- 27) www.economy.business.com (August, 2020).

Detecting Financial Fraud Following The Covid 19 Pandemic: Role of The Board of Directors



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ABSTRACT: Today, the era of COVID-19 has exacerbated the problem of financial fraud. Indeed, many companies are migrating to remote virtual working environments, where fraudsters can find new ways to bypass existing controls, especially those that are important for the preparation of annual financial statements. Thus, this new economic environment can weaken internal controls and increase the risk of fraud. The aim of this paper to identify the effect of the COVID-19 pandemic on the aggravation of the problem of financial fraud and to emphasize the role of the board of directors in detecting financial fraud

KEY WORDS: Financial Fraud Detection, COVID-19, Board of Directors

JEL CLASSIFICATION: M41, G34

I. INTRODUCTION

Today, the COVID-19 pandemic has a very significant economic and operational impact on businesses and thus represents a major challenge for everyone. Many companies are now measuring the consequences of this crisis on, among other things, their supply chain, their income, their liquidity and their employees. This new context, which is becoming more and more unstable, has considerably increased the risk of fraud. Two elements of the fraud triangle are now exacerbated, pressure and rationalization. In times of crisis, companies, employees and third parties come under considerable pressure. The line between ethical behavior and fraudulent behavior becomes blurred, and some people justify inappropriate acts (through a rationalization mechanism), which increases the risk of fraud. On the other hand, the great losses caused by financial fraud have attracted the continued attention of academia, industry and regulators. Even more alarming, the ongoing coronavirus pandemic (COVID-19) has dramatically worsened the situation by accelerating the use of digital financial services. New challenges in the effective detection of financial fraud have therefore emerged. In fact, new features of fraud risk are caused by the pandemic which requires smarter fraud detection methods. The importance of governance mechanisms, especially the board of directors in oversight and risk management has been extensively studied in previous studies (Liebenberg, & Hoyt, 2006; Wan Daud et al, 2011; Wachtell et al 2020). However, studies examining the relationship between the board of directors and financial fraud remain timid. The motivations for this study are twofold. First, the failure of boards of directors and senior management is undoubtedly one of the major causes of the bankruptcy of several companies around the world. As such, Nam & Nam, (2004), stipulates that the board of directors is the main actor in the corporate governance process, since it is responsible for the effectiveness of governance mechanisms and specifically of internal control systems. The second motivation is the worsening of financial fraud following the COVID-19 pandemic.

The aim of this paper is therefore to identify the effect of the COVID-19 pandemic on the aggravation of the problem of financial fraud and to emphasize the role of the board of directors in detecting financial fraud

The article is organized into three sections. The second section is devoted to the review of the exploration of the aggravation of financial fraud following the COVID-19 pandemic. We then examine in the third section the role of the board of directors in detecting financial fraud. Finally, the last section concludes the paper

II. FINANCIAL FRAUD FOLLOWING THE COVID-19 PANDEMIC

Financial fraud is defined by the Association of Certified Fraud Examiners (ACFE) as follows: "The deliberate, intentional, misstatement or omission of material facts, or accounting data which is misleading and, when considered with all the information

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made available, would cause the reader to change his or her judgment or decision”.

In fact, the COVID-19 pandemic has resulted in increasing economic pressure and stronger grounds for fraud for businesses and individuals following economic downturns. COVID-19 is already revolutionizing most businesses and their environment, and opening up new areas of risk that fraudsters take advantage of. These changes will persist for long after COVID-19. New procedures and new methodologies must be deployed now to modernize the compliance function and investigations in order to better prevent the risks, exacerbated by the pandemic.

Recently, the increase in cybercrime and financial fraud during the COVID-19 crisis has come to the attention of the general public, politicians, academics etc. in this context, several recent studies have analyzed the effects of the covid 19 pandemic and these repercussions on companies and on the economy in general (Zhu et al ,2021; Widiyati et al 2021, etc) . This is mainly due to threats to computer systems in financial services and data from mobile malware, phishing, botnet attacks, ransomware and insider threats.

Other vulnerabilities include the distraction of telecommuters, unprotected infrastructures such as virtual private networks and endpoints (Remote Desktop Protocol). At the same time, financial pressure has forced many companies to cut budgets for IT security, cybercrime, fraud and risk management departments. These incidents caused stress and tension for many consumers, but they also noticed malicious activity online. Almost a quarter of today's consumers are more interested in cybercrime than physical crime,

Numerous security breaches have left the field to the culprits between the rapid development of online services, the influx of consumers who have carried out many transactions in the real world, and what has been digitized by the situation. As a result, company employees had to adapt quickly to trigger business continuity plans and implement telecommuting measures. Since then, several issues have arisen including congestion in internet speeds, inaccessibility of databases, lack of access to physical tools and documents used in the workplace and lack of specific staff to adapt. to sudden changes. No reception screen), extension of access rights, suspension or suspension of control over time. Therefore, it is possible to stop monitoring during this period and favor the occurrence of errors in processes that were previously considered low-risk controlled processes. Financial institutions are generally shielded from these practices, but the reallocation of social distance and resources places great strain on financial institutions. Identity checks are becoming increasingly complex with physical branch closures, paperless offices, new business relationships and faster time savings. A welcome window for the general public, or an exponential growth of 100% digital offers. Many pending checks have been postponed, in particular due to confinement and lack of personnel. Therefore, scams have many faces consisting of a clear desire to deceive a third party. Scammers Recycle Scenarios and Perform New Financial Scams ... When the first blockade began, the scams that rushed in were straightforward and easy to find. However, given the current crisis, fraudsters are increasing the number of attacks, making the well-known patterns of classic fraud more complex (eg fraud against presidents and bogus vendors) and more difficult to stop. The Observatory for the Security of Payment Instruments (OSMP) shows the trend towards digitization and digitization of companies. The strengthening of these practices has resulted in the loss of benchmarks for the company's employees and customers, the creation of a large pool of vulnerabilities, and the emergence of vulnerabilities. We have found that contactless and internet payments are on the rise, while the use of checks and withdrawals is declining (at least temporarily). Since 2020, wire transfer fraud and technician fraud have also become increasingly important. These allow thieves to remotely control a company's accounting or banking environment. The real thing is to collect personal information (bank cards, bank IDs, current assets and asset information). This allows criminals to purchase remotely or steal their identities later. This approach is mainly aimed at large companies that rely on a large number of suppliers. It's easy for a scammer to impersonate a particular vendor, have the company pay an invoice with a new IBAN, and direct the flow of money to a bank account operated by a scammer. Working from home minimizes telephone conversations, increasing the risk of this type of fraud.

III. THE ROLE OF THE BOARD OF DIRECTORS IN DETECTING FINANCIAL FRAUD

Businesses should be more transparent about current financial fraud campaigns. They also face the challenge of strengthening and improving their security. It continually educates employees on best practices for raising awareness of cybercrime, breaking compliance, fraud, silos between security teams, and adhering to internationally recognized governance frameworks and standards. Also, companies need to improve cybersecurity and fraud detection capabilities with a focus on defense in depth, automation and integration.

Recently, in view of the aggravation of the problem of financial fraud, studies on the importance of internal control in the detection of financial fraud have emerged (Engels et al, 2020; Jarrod et al, 2016). In this context, the recent financial scandals (the Enron affair in the United States: Enron, 2001; Worldcom, 2002; Anderson, 2002; global crossing, 2003; Elf et crédit de Lyonnais 2004) called into question the issue of confidence in the quality of the financial information disclosed. This has prompted regulatory

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authorities as well as businesses to emphasize the primary role of governance mechanisms, especially the board of directors, in detecting financial fraud. Indeed, the board of directors is considered to be one of the main players in the internal control process. Woidtke and Yeh. (2013) argue that policymakers around the world have focused on restructuring corporate governance. Professional reports and regulatory commissions have followed one another at the international level (Treadway in the United States, 1987, Cadbury in the United Kingdom, 1992, Viénot in France, Report of the Toronto Stock Exchange in Canada) to recommend the introduction of specialized committees emanating from the administration board. The purpose of these recommendations was to ensure more adequate control of managers for the benefit of shareholders. A control which leads to improving the quality of financial information and reassuring the various users.

In fact, governance theories assign different roles to the board of directors. According to contractual theory, the firm is considered as a node of contract between the firm and the various providers of resources. As a result, agency conflicts arise because of information asymmetry. According to this current, the board of directors aims, on the one hand, to discipline managers in the service of shareholders, and on the other hand, to facilitate the creation of value for all stakeholders. In fact, two types of governance theories arise from this same current.

First, the financial contractual theory, two agency relationships can exist: on the one hand between the shareholder and the manager and on the other hand between the firm (represented by the managers and the shareholders) and the financial creditors (Jenson and Mekling, 1976). According to which the role of the governance system is to "secure" the profitability of the financial investor; this explains the use of mechanisms such as the board of directors, the general meeting of shareholders, executive compensation systems, public offers, etc. in order to align the interests of directors with those of the shareholders. In contrast, in partnership theory, the board of directors is seen as an instrument facilitating the creation of value for all stakeholders. From these broad approaches to governance, it can be said that the board's missions are not limited to overseeing managers for the benefit of shareholders but also helping to protect all value-creating relationships and to preserve and increase the productive character of the contract node. The board of directors is therefore the main actor in the governance process.

On the other hand, according to strategic theory, the survival of the firm is conditioned by its ability to control certain essential resources, so as to relax, for example, market constraints or stabilize the environment. The firm seeks to establish inter-organizational links with the external environment, in order to control these critical resources; when the environment becomes more uncertain or lacking, the firm strengthens or increases these links. To this end, the firm will incorporate representatives of the most critical resources, such as bankers, into its board of directors, in order to guarantee its survival. This integration of strategic considerations within governance theories will, however, limit the latitude of managers whose decisions will be influenced and constrained by the administrators representing the resources.

However, this integration is not done only from a defensive perspective, by controlling or protecting access to critical resources, but it must help the firm to build strategies for creating sustainable value. Indeed, this approach is said to be offensive, it borrows from the cognitive theories of the firm. The behavioral theory of the firm is inspired by the work of Simon (1997) and Cyert and March (1963), the evolutionary theory of Nelson and Winter (1982), and the theories of resources and skills resulting from the research of Penrose (1959). Indeed, the cognitive theories of the firm, as their name suggests, attach paramount importance to the internal creation of knowledge resulting from organizational learning, as well as to the phenomena of vision and attention. Certain theories are focused (Prahalad and Hamel (1990) and Teece et al., (1997)) on the construction of skills, on the capacity of firms to innovate, to create their investment opportunities and to modify their environment.

Thus, this strategic approach provides new justification for the board of directors, whose role would also be to facilitate the development of skills and help build new strategic options. According to this theory, the board of directors should be composed as a priority of directors who can best contribute to the creation of competence and help the leader to design a vision facilitating organizational learning. Therefore, the qualities required of directors are no longer conceived in terms of independence and expertise in terms of control, according to the internal-external distinction, but in terms of cognitive contributions.

Therefore, the role of the board of directors is very important in stopping fraudulent activities. Of course, different stakeholders must adhere to specific business ethics and corporate values and continuously monitor management to ensure that the focus is on preventing and detecting potential financial fraud. This supervision given to management can both allow this actor to prevent the actor from circumventing the rules, and therefore its importance for the prevention and fight against financial fraud in the company.

IV. CONCLUSION

At the end of this work, we presented the new challenges regarding the aggravation of the problem of financial fraud following the COVID-19 pandemic. We again emphasized the role of the board of directors in detecting financial fraud as a key player in

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internal control. At this stage, we have contributed to the literature on governance and its importance in the detection of financial fraud. Shareholders may find some clarification in this work. They are required to be increasingly vigilant against fraudulent behavior by managers, by adopting the necessary means of control. Businesses must learn the right lessons from the COVID-19 pandemic and take the appropriate steps to be successful in the post-pandemic future.

REFERENCES

- 1) Cyert, Richard M. and March, James G., *A Behavioral Theory of the Firm* (1963). University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship, Available at SSRN: <https://ssrn.com/abstract=1496208>
- 2) Engels C., Kumar K. & Philip D., (2020), Financial literacy and fraud detection *The Europe-an Journal of Finance* Volume 26, 2020 - Issue 4-5: Financial Literacy and Responsible Finance in the FinTech Era: Capabilities and Challenges. Pages 420-442. <https://doi.org/10.1080/1351847X.2019.1646666>
- 3) Jarrod West, Maumita Bhattacharya and Rafiqul Islam (2016). "Intelligent Financial Fraud Detection Practices: An Investigation" School of Computing & Mathematics Charles Sturt University, Australia
- 4) Jensen, M.C. et W.H. Meckling, (1976), « Theory of the Firm, Managerial Behaviour, Agency Costs and Ownership Structure », *Journal of Financial Economics*, vol. 3, p. 305-360.
- 5) Liebenberg, A., & Hoyt, R. (2006). The Determinants of Enterprise Risk Management: Evi-dence From the Appointment of Chief Risk Officers. *Risk Management and Insurance Review*, 6 (1), 37-52. <http://dx.doi.org/10.1111/1098-1616.00019>
- 6) Martin Lipton, Sabastian V. Niles, and Marshall L. Miller, Wachtell Lipton Rosen & Katz, (2020) "Risk Management and the Board of Directors", <https://www.wlrk.com/webdocs/wlrknew/ClientMemos/WLRK/WLRK.27765.21.pdf>
- 7) Models of bounded rationality: Empirically grounded economic reason (Vol. 3), (1997), Cam-bridge, MA: The MIT Press
- 8) Nam, S.W., et Nam, I.C. (2004). "Corporate Governance in Asia: Recent Evidence from In-donesia Republic of Korea, Malaysia, and Thailand. *Asian*"Development Bank Institute. P.17.
- 9) Nelson R., & Winter S.G. [1982], *An Evolutionary Theory of Economic Change*. Cambridge (Mass.), Belknap Press/Harvard University Press.
- 10) Penrose, E. T. (1959).*The Theory of the Growth of the Firm*.Oxford: Basil Blackwell.
- 11) Prahalad, C. K. and Hamel, Gary, *The Core Competence of the Corporation* (1990). Universi-ty of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship, Available at SSRN: <https://ssrn.com/abstract=1505251>
- 12) Teece D.J. , Pisano G & Shuen A (1997), *Dynamic Capabilities And Strategic manage-ment* *Strategic Management Journal*, Vol. 18:7 pp509–533
- 13) Wan Norhayate Wan Daud, Hasnah Haron, Nasir Ibrahim (2011), *The Role of Quality Board of Directors in Enterprise Risk Management (ERM) Practices: Evidence from Binary Lo-gistic Regression*
- 14) Widiyati, D., Valdiansyah, R. H., Meidijati, M., & Hendra, H. (2021). The Role of Public Ac-countants in Fraud Prevention and Detection in the Taxation Sector during Covid-19. *Golden Ratio of Auditing Research*, 1(2), 70 - 82. <https://doi.org/10.52970/grar.v1i2.77>
- 15) Woidtke, T et Yeh, Y-H., (2013), "The role of the audit committee and the informativeness of accounting earnings in East Asia", *Pacific-Basin Finance Journal*, Vol. 23, pp. 1–24.
- 16) Zhu.X., X Ao., Qin.Z., Chang.Y., Liu.Y., He Q., Li.J., (2021) *Intelligent financial fraud detection practices in post-pandemic era*. *The Innovation* Volume 2, Issue 4, 28 pp1-12. <https://doi.org/10.1016/j.xinn.2021.100176>

Cultural Heritage Management. Case study “Tobacco Museum in Kavala”



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ABSTRACT: Cultural heritage in Greece is natural and also, sources from human activity. Thus, it needs to be protected as a whole by the state. For such a reason, local responsible authorities cooperate with the Ministry of Culture and with each other, in order to manage the cultural and natural heritage of the country. A remarkable number of monuments are included in the World Cultural Heritage list of UNESCO. The Tobacco Museum in Kavala is a unique of its kind and an industrial museum. It is located in the building of the National Tobacco Association and is a thematic museum, as it includes documents and material about tobacco and its history in the town. It shows the procedure of manufacturing tobacco, as well as its agricultural and industrial process. By applying the model of Organized Behavior for the visitor, it has been conducted that visitors' intentions are strongly related to the communication with the personnel of the museum and the services provided.

KEYWORDS: Culture, Heritage, Management, Museum, Tobacco

INTRODUCTION

Greece is a country, which counts a cultural wealth for four and a half thousand years. Its monuments, obvious or not, are unique and must be protected. This culture has to be promoted, as it constitutes a part of the global heritage in many cases. So, the country, in order to emerge its heritage, has enacted a variety of legislative regulations and compliances with international provisions and conventions (Hellenic Republic- Greece in the USA, 2021).

In 2002, Greece made an effort to give a definition to its “intangible cultural goods”, which includes the whole the traditional and modern culture of the country (Ministry of Culture and Sports, 2021). As the provisions of the Law, 3028/2002 about the protection of antiquities and the cultural heritage in general define (Official Government Gazette 153 A/ 28.6.2002), the intangible cultural goods are the expressions, practices, and information (myths, dance, music, rituals, etc), which compose evidence of the traditional culture (article 2 of the Law 3028/2002).

In 2003, a Convention was enacted by UNESCO named the Convention for the Safeguarding of the Intangible Goods, based on the previous Greek effort. In this Convention, Greece has participated.

Cultural heritage in Greece is not only a natural treasure. It also concerns human activity. Thus, it needs to be protected as a whole by the state. Good management of cultural heritage can provide an improved quality of life to the Greek citizens. It needs to combine a complex procedure to protect such goods and preserve the cultural identity of societies of the past. Many documents, places, monuments, or activities must be enhanced by giving to them the appropriate care. So, the territorial management of cultural heritage is closely connected with the relevant natural management of it.

Furthermore, the Tobacco Museum in Kavala is an industrial museum. It is located in the building of the National Tobacco Association, which was constructed in 1957-1962. It is a thematic museum, as it includes documents and material about tobacco and its history in the town. It has lots of exhibitions about the production and cultivation of tobacco (Municipality of Kavala, 2021). It shows the procedure of manufacturing tobacco, as well as its agricultural and industrial processes. This Museum is unique. It exhibits the processing of Oriental tobaccos, which are not found in any other museum globally (Municipality of Kavala, 2021).

As it has been proved, the relationship between the services' quality and the satisfaction produced by its supplying is close and especially, the quality of the service leads the satisfaction. The quality of service that every visitor receives depends on the interaction that he or she has with the staff of the museum and his/her total experience is influenced by the place and its natural

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characteristics (Laws, 1998). As a result of the qualitative service are the increasing satisfaction, the intention to visit the museum again, and the propagation of the museum, which is evaluated by using the relevant scale (Albacete-Saez, et al., 2007). Finally, by applying the model of Organized Behavior for the visitor, it has been conducted that visitor go to museums when they feel attracted by the behavior of the staff and comfort by the services provided.

CULTURAL HERITAGE IN GREECE

Greece is a country, which counts a cultural wealth since four and a half thousand years. Its monuments, obvious or not, are unique and must be protected. This culture must be promoted, as it constitutes a part of the global heritage in many cases. So, the country, in order to emerge its heritage, has enacted a variety of legislative regulations and compliances with international provisions and conventions (Hellenic Republic- Greece in the USA, 2021).

Moreover, the country makes good use of its culture by establishing its position in tourism. It incorporates local planning, trade; promotion of antiques, touristic sites, as well as promotes the local life of specific traditional places and small societies (Hellenic Republic- Greece in the USA, 2021). Many of these places have, due to their beauty and cultural rare value has been characterized as European Capitals of Culture, such as Athens, Thessaloniki, or Patra. There are various monuments to be visited dated from the prehistoric, classical, Byzantine, or modern times, which present a remarkable part of Greek culture and civilization (Hellenic Republic- Greece in the USA, 2021). Special beauty appears to the monuments of Central Macedonia, where Thessaloniki places, Southern Aegean, such as Cyclades, Dodecanese, and Crete, and Southern Peloponnesus, where Argolis, Elia, et other places are (Hellenic Republic- Greece in the USA, 2021).

Many programs and initiatives have been created to promote Greek cultural heritage. For example, the Acropolis Restoration project is a powerful program that motivates volunteers from all over the world, while it is combined with the campaign for the return of the Parthenon Marbles and the creation of the Acropolis Museum (Hellenic Republic- Greece in the USA, 2021).

Many Greek archaeological monuments, which date from two and a half thousand years ago, attract every year thousands of visitors. A remarkable number of them are included in the World Cultural Heritage list of UNESCO. These monuments have a rare and unique beauty and constitute a part of the global culture, such as the Acropolis of Athens is, or the archaeological sites of Olympia and Delphi appear.

In 2002, Greece, during its effort to protect its cultural heritage, used the phrase “intangible cultural goods”, which includes the whole the traditional and modern culture of the country (Ministry of Culture and Sports, 2021). As the provisions of the Law, 3028/2002 about the protection of antiquities and the cultural heritage in general define (Official Government Gazette 153 A/ 28.6.2002), the intangible cultural goods are the expressions, practices, and information (myths, dance, music, rituals, etc), which compose evidence of the traditional culture (article 2 of the Law 3028/2002).

In 2003, a convention was enacted by UNESCO named the Convention for the Safeguarding of the Intangible Cultural Heritage (Ministry of Culture and Sports, 2021). This Convention protects additionally the bearers of the elements of the intangible cultural heritage in the communities (Ministry of Culture and Sports, 2021). In this Convention (article 2), intangible cultural heritage is defined the practices, expressions, knowledge, and skills, which are recognized by the communities as part of their cultural heritage. Greece penetrated this Convention in 2006 (Ministry of Culture and Sports, 2021).

The responsible authority in Greece for the implementation of the International Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003) is the Hellenic Ministry of Culture and Sports and especially, the Directorate of Modern Cultural Heritage, which belongs to the General Directorate of Antiquities and Cultural Heritage (Presidential Decree No 104 about the organization of the Ministry of Culture and Sports, Official Government Gazette 171/A/28.6.2014). This body is also responsible for the implementation of the provisions of the National Inventory of Intangible Cultural Heritage of Greece (Ministry of Culture and Sports, 2021).

Thus, cultural heritage in Greece is an important part of its civilization, tourism, and economy. Many activities have been based on its protection and promotion. Soon, the international organizations and authorities have recognized the importance of Greek monuments worldwide by organizing initiatives and advertising their utility to tourists and visitors. So, Greek cultural heritage is a part of the country’s history and characterizes its existence in the world.

MANAGEMENT OF CULTURAL HERITAGE IN GREECE. CARRIERS AND STRATEGIES

Cultural heritage in Greece is not only a natural treasure. It also concerns human activity. Thus, it needs to be protected as a whole by the state. For such a reason, local responsible authorities of every city or village cooperate to manage the cultural and natural heritage of the country, as it constitutes a significant part of its development and economy either locally or nationally.

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Moreover, the good management of cultural heritage can provide an improved quality of life to the Greek citizens. It needs to combine a complex procedure to protect such goods and preserve the cultural identity of societies of the past. Many documents, places, monuments, or activities must be enhanced by giving to them the appropriate care. So, the territorial management of cultural heritage is closely connected with the relevant natural management of it.

The management of cultural heritage in Greece is regulated by an institutional framework, national, European, and international legislation, as well as policies and projects in progress (Beriatis, et al., 2001). These ways of management include every kind of monument, site, traditional settlements, archeological and historic buildings, etc. as they are presented in the administrative units and districts (Beriatis, et al., 2001). The responsible authorities have created specific departments and services for such an aim. These initiatives of cultural heritage management play a catalytic role in the implementation of several strategies for the protection of cultural resources (Beriatis, et al., 2001). They also are the base to create new ones and constitute the natural guidelines to the spatial planning of heritage in Greece (Beriatis, et al., 2001).

Furthermore, the management of the cultural heritage in Greece is accomplished by the sites, which have become a part of UNESCO's world heritage (Papageorgiou, 2015). They also are a part of presenting spatial planning and protection. Although many monuments are elements of multiple protections, some of them need to be added locally protected (Papageorgiou, 2015). This problematic implementation of the protection strategies of cultural heritage must be so either due to the lack of long acceptance of cooperation of zoning and spatial planning by the Ministry for the Environment or due to the disagreement between zoning and planning regulations (Papageorgiou, 2015). So, the Ministry for the Environment makes an effort to elaboration of the local spatial plans for the protection of monuments especially in rural places, while simultaneously, the Ministry of Culture processes the revision of Protection Zones A and B and the provisions that regulate their function (Papageorgiou, 2015). Thus, law 3028/2002 tries to fill the legislative gap about the regulation of these two elements, so that spatial restrictions and regulations cannot be an obstacle to the protection of cultural heritage. However, to be achieved this aim, it is necessary that spatial planners and archaeologists have to collaborate (Papageorgiou, 2015).

The protection and preservation of the cultural heritage have always been a priority of the Greek state since 1830 (Kokra, 2014). There is a rich legal framework that provides guidelines about the management of antiquities and every part of cultural heritage. The management of Greek tangible and intangible heritage is administrated and controlled by the state. Its protection is also based on several programs. For example, the MA in Heritage Management is a program that combines the sectors of archaeology and business (Athens University of Economics and Business, 2021). It is created in Athens at Eleusina and focuses on teaching the skills required for the management of heritage sites globally and the communication with archaeologists, and general specialists (Athens University of Economics and Business, 2021). It also organizes fundamental projects.

As the program above is many other protective programs. All of them promote the high education of managers of archaeological sites. This education concerns financial, managerial, and administrative skills (Athens University of Economics and Business, 2021). In this way, these people contribute to the preservation of these sites, assisting local communities to present their heritage. As the country has the greatest number of monuments of cultural heritage according to UNESCO, the impact of these programs is important. They exploit cultural heritage and develop relevant strategies in management, so that Greece can become one of the most exemplary countries for the management of its archaeological culture all over the world.

Ostensive are referred AUEB and DMST, which participate in the programs for Human Resources Management in Tourism Marketing, as well as the promotion of Cultural organizations (Athens University of Economics and Business, 2021). These practices present the special needs of archaeology and the areas of rural heritage, so that every interested visitor can learn about their characteristics and history.

However, the management of cultural heritage in Greece is an important activity, as it deals with historical monuments and documents of the country, concerns a great touristic part of the country's economy, and builds the country's image internationally.

TOBACCO MUSEUM IN KAVALA

The Tobacco Museum in Kavala is an industrial museum. It is located in the building of the National Tobacco Association, which was constructed in 1957-1962. It is a thematic museum, as it includes documents and material about tobacco and its history in the town. It has lots of exhibitions about the production and cultivation of tobacco (Municipality of Kavala, 2021). It shows the procedure of manufacturing tobacco, as well as its agricultural and industrial processes.

The need for its foundation has its roots in the 19th century when many tobaccos companies were set in Kavala (Dimofelia, 2021). Then, many residents from the villages around Kavala started moving to the city, increasing its population. In 1896, the economic conditions were suitable for the development of tobacco production. It was then that the first strike took place. In 1906, the first tobacco Union was created (Dimofelia, 2021). During 1930-1960, tobacco processing was forced by foreign workers for

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the reduction of the costs and the change of labor relationships. Tobacco workers were disappeared. The city experienced deterioration (Dimofelia, 2021).

Tobacco production is one of the main means of living in Kavala, especially during the 19th and 20th centuries. The creation of this museum in Kavala was accomplished due to its neighboring regions, where the exceptional variety of tobacco named “basmás” was grown, as well as the natural port, which had the opportunity to serve many commercial ships (Dimofelia, 2021). So, from the 19th century, it concentrates on the commercial treatment of tobacco of the Balkan peninsula (Dimofelia, 2021).

This Museum is unique. It exhibits the processing of Oriental tobaccos, which are not found in any other museum globally (Municipality of Kavala, 2021). In 1996, an exhibition named “Kavala, a city of tobacco yesterday” was organized with exhibitions offered by the families of tobacco merchants in Kavala (Iordanidou brothers, Tsimino brothers, et al) (Tobacco’s Museum, n.d). In 2002, this exhibition transferred into the museum, by concentrating material of any kind, such as tools, documents, engines, appliances, etc (Municipality of Kavala, 2021). The Museum was open for the audience on 5th of April 2003 on the ground floor of the building of the National Tobacco Association.

It preserves tobacco by using a debugging system and keeping the exhibitions of tobacco for a long time to a controlled microclimate without oxygen (Dimofelia, 2013). Moreover, it presents the economic, social, and technological history in Kavala, Eastern Macedonia, and Thrace (Municipality of Kavala, 2021). Its exhibitions are based on many collections, which contain several objects, machines, photographs, and documents that are not easily found. Its collections also consist of books about tobacco, articles of the Greek Tobacco Organization, documents, maps, etc.

Its main priorities of action are the showcase of tobacco’s processing and the reserving of a historical record, which will protect the historic memory and be available to the researchers (Dimofelia, 2013). It also aims to inform the citizens and sensitize them about the tobacco history of the city. Furthermore, it tries to assist researchers and students to proceed social research relative to the history of the city of Kavala and also, to develop the procedure of tobacco and the cooperation and conduction of common research programs with Universities and Research Organizations in Greece and internationally (Dimofelia, 2013). Finally, the Museum has as an additional mission to organize seminars, meetings, leaflets’, books and magazines’ publication, and the production of visual and acoustic products relative to tobacco in Kavala (Dimofelia, 2013).

There is a specific strategy for the marketing of Greek museums. An aim is the satisfaction of the visitors (Mavragani, 2011). To succeed in such a strategy, deep knowledge about the needs of the visitors must be applied, as well as detailed information about their level of satisfaction. So, the touristic development of Greek touristic destinations can be sustainable, as satisfaction is a priority for touristic marketing.

As De Ruyter et al. (1997) have mentioned, the relationship between the services’ quality and the satisfaction produced by its supply, is close and especially, the quality of the service leads the satisfaction. The quality of service that every visitor receives depends on the interaction that he or she has with the staff of the museum and his/her total experience is influenced by the place and its natural characteristics (Laws, 1998). As a result of the qualitative service are the increasing satisfaction, the intention to visit the museum again, and the propagation of the museum, which is evaluated by using the relevant scale (Albacete-Saez, et al., 2007).

One of the most popular evaluative scales is the SERVQUAL of Parasuraman, Zeithaml, and Berry (1985, 1988, 1991), which evaluates the expectations of the clients and the service that finally is received. According to Lee et al. (2004), the motives of the visit and the kind of visitors affect their total satisfaction. The responsible carriers for the marketing have to be interested in the visitors’ satisfaction so that a positive WOM can be created and a mood to visit again the place (Mavragani, 2011). Different techniques of marketing must be followed for foreign visitors, who are most affected by the touristic offices, friends, and relatives, while the locals are mostly affected by the mass transit (Mavragani, 2011).

As the International Council of Museums (ICOM) refers, museums function for the public interest, and their marketing success depends on the providing of qualitative service and the offering of an unmemorable experience to the visitor (Mavragani, 2011). McLean marks that museums still have not a specific marketing strategy, as the products they offer are evaluated by the visitor, who chooses to come to the place (Mavragani, 2011).

The quality of the providing services and the level of satisfaction of the visitors can be analyzed by the assistance of the Theory: “Service Quality Gaps” (Parasuraman, et al., 1985). This theory helps to detect the gaps that exist between visitors’ expectations and the opinions of the museum directors about visitors’ expectations and the final receivable service value offered by the museum (Mavragani, 2011). So, gap 1 refers to the difference between visitors’ expectations and the opinions of the museum directors about them, gap 2 refers to the administrative conception, gap 3 refers to the qualitative standards of the service and the providing of them, gap 4 refers to the difference between the service providing and the external communication with the

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visitors, and gap 5 refers to the difference between the expectative service and the conceivable service by the visitors (Mavragani, 2011).

By applying the model of Organized Behavior for the visitor, which emphasizes the visitors' intentions as a main mean of behaviors prediction, to be examined the visitors' behavior; we can see that the stronger is the intention for an individual to express a behavior, the more likely he/she is to show it (Mavragani, 2011). The model's variables depend on the questionnaire used in five museums, including the museum of the present study. It has been conducted that visitor consider as significant for the service provided to element Personnel, with whom they create a positive attitude. On the opposite, they have a negative opinion about the elements of educational functions and price in comparison to the service provided. Furthermore, the service quality has not been assured that is relative to behavioral beliefs, so this suggestion is rejected.

Moreover, by applying this model to the five museums, attitude toward behavior has been studied, in comparison to behavioral beliefs. It has been conducted that there is a relationship between behavioral beliefs and the visitors' behavior toward attitude, according to model TPB. Also, a relationship between normative beliefs and subjective norms has been ascertained, as well as a positive relationship between perceived behavioral control and control beliefs (Mavragani, 2011). So, it has been answered that most visitors visit the museums because they are generally interested in the history of the place they have visited or in history issues, while less have answered that they want to enrich their knowledge or travel to other cities and centuries with their imagination. Finally, a few of the respondents have answered that they visit the museum to have a new experience, or a unique experience for their friends and relatives, or to visit another country from the one they live in.

Finally, from the research is conducted that most of the visitors, if they do not have adequate information, they do not visit museums in foreign cities, while they act in the same way also when they do not have suitable company. They also do not visit museums in a foreign country when they do not have the time or the strength to do so (Mavragani, 2011). So, as it is proved, according to the behavioral theories, visitors go to museums when they feel attracted by the behavior of the staff and comfort by the services provided.

CONCLUSION

In conclusion, cultural heritage is a significant part of the Greek civilization. It constitutes the base of its tourism and a big part of its economy. The management of this heritage is important too, as it contributes to the improvement of the total life of the Greeks. So, the responsible authorities organize a variety of initiatives to promote and simultaneously protect the country's cultural heritage. For example, the museum of tobacco in Kavala is one of the Greek monuments, as it is unique of its kind globally. People visit the museum, basing their behavior on the relationship that they develop with the museum personnel and the services provided. Most of them are interested in learning about the history of the place visited. However, the right museum management can contribute to better sustainability of such cultural monuments.

REFERENCES

- 1) Athens University of Economics and Business, (2021). *Ma in Heritage Management*. Retrieved From <https://www.dept.aueb.gr/en/dmst/content/ma-heritage-management> [3 Dec 2021].
- 2) Beriatos, E., Papageorgiou, M., Lainas, I., & Nikolakopoulou, C. (2011). *Towards A Sustainable Management Of Cultural Heritage In Greek Regions. The Role Of Spatial Planning*. Conference: 47th Isocarp Congress "Livable Cities - Urbanizing World: Meeting The Challenge" At: China. Project: [Cultural Heritage](#).
- 3) Dimofelia, (2013). *Δραστηριότητες*. Municipality of Kavala. Retrieved from <https://www.tobaccomuseum.gr/informations/drastiriotites/> [8 Noe 2021].
- 4) Dimofelia, (2021). *Tobacco Museum*. Retrieved from http://www.kavalagreece.gr/en/?page_id=221 [9 Noe 2021].
- 5) Hellenic Republic – Greece in the USA, (2021). *Cultural Heritage: A treasure to be cherished and preserved*. Culture. About Greece – History and Culture. Retrieved from <https://www.mfa.gr/usa/en/about-greece/history-andculture/culture.html?page=1> [1 Dec 2021].
- 6) Kokra, E. (2014). *Greece: Cultural Heritage Management. Encyclopedia of Global Archaeology*. Springer Link. DOI: https://doi.org/10.1007/978-1-4419-0465-2_1152.
- 7) Laws, E. (1998). Conceptualizing visitor satisfaction management in heritage settings: an exploratory blueprint analysis of Leeds castle, Kent. *Tourism Management*, Vol. 19, No 6, pp. 545-554.
- 8) Lee, C. K., Lee, Y. K., & Wicks, B. (2004). Segmentation of festival motivation by nationality and satisfaction. *Tourism Management*, Vol. 25, pp. 61-70.

Cultural Heritage Management. Case study “Tobacco Museum in Kavala”

- 10) Mavragani, E. (2011). *Η στρατηγική μάρκετινγκ μουσείων ως στοιχείων ανάπτυξης των ελληνικών τουριστικών προορισμών*. Thesis. University of Aegean. Department of Business Administration. Retrieved from <https://thesis.ekt.gr/thesisBookReader/id/30134#page/1/mode/2up> [1 Dec 2021].
- 11) Ministry of Culture and Sports, (2021). *Intangible Heritage of Greece*. Retrieved from <http://ayla.culture.gr/en/introduction/> [1 Dec 2021].
- 12) Municipality of Kavala, (2021). *Tobacco Museum*. Dimofelia. Retrieved from <https://www.visitkavala.gr/en/sightseeing/mouseio-kapnou-dimou-kavalas/> [9 Noe 2021].
- 13) PAPAGEORGIU, M. (2015). PLANNING PRACTICES FOR THE PROTECTION OF CULTURAL HERITAGE: LESSONS LEARNT FROM THE GREEK UNESCO SITES. *EUROPEAN SPATIAL RESEARCH AND POLICY* 22(2). ARISTOTLE UNIVERSITY OF THESSALONIKI. DOI:[10.1515/esrp-20150028](https://doi.org/10.1515/esrp-20150028).
- 14) Parasuraman, A., Zeithaml, A. V. and Berry L. L. (1985). A Conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing*, vol. 49, pp. 41-50.
- 15) Parasuraman, A., Zeithaml, A. V. and Berry L. L. (1988). SERVQUAL: A Multiple- Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, Vol. 64(1), pp. 12-40.
- 16) Parasuraman, A., Zeithaml, A. V. and Berry L. L. (1991). Refinement and Reassessing of the SERVQUAL Scale. *Journal of Retailing*, Vol. 67, pp. 420-450.

Issues of Developing Innovative Activities of Enterprises



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ABSTRACT: The existence of innovative activities in this article leads to technological changes, which are carried out using other technological regime technologies. In this context, it is stated that the innovative activity of enterprises, which serve as a basis for sustainable economic development, is an important component and condition of sustainable economic development. At the same time, the analysis of the essence of innovative activity of enterprises, the issues of ensuring sustainable economic development through the development of a mechanism of innovative activity, taking into account the innovative area of the enterprise.

KEY WORDS: innovation, venture capital, fund, global marketing, science, risk.

INTRODUCTION

The globalization of the world economy and its transition to new technological developments lead to increased competition in the world commodity and financial markets, the introduction of digital technologies and ways to solve the growing socio-economic problems of the population. The main solution to these problems should be to become one of the leading countries in the field of science and innovation, to achieve international competitiveness during the Fourth Industrial Revolution, to find new solutions to the accumulated institutional problems, and also to resolve the controversial issues caused by globalization. In this competitive environment, the main task is to form an ecosystem that implements research and innovation, which will ensure the development of priorities in the economy (Sh. Mirziyoyev, 2020). Therefore, developing countries should actively master high-tech manufacturing and global marketing to increase and strengthen competitiveness, create their own science schools in priority areas, attract experienced and qualified specialists, support promising start-ups with innovative potential, finance long-term sustainable development and take action. measures such as the targeted use of state benefits to create an institutional base (Mirziyoyev Sh., 2020).

THE MAIN RESULTS AND FINDINGS

The country's science sector consists of more than 100 academic and sectoral scientific institutions, currently there are 65 research institutes, 31 research centers (including 14 specialized scientific and practical centers) and 8 other types of scientific organizations. In addition, research is carried out in higher education institutions and their branches.

A strategic plan aimed at developing human capital to achieve the ambitious goal of making Uzbekistan one of the top 50 countries in the world by 2030 has been announced. This goal is to adapt the science sector to the requirements of the modern economy (G. Bekimbetova, 2020), in turn, to implement fundamental structural, organizational, financial, personnel and infrastructure reforms regulated by the relevant legal framework in science.

The development of innovations in enterprises is an integral part of its core business and affects the competitiveness of the product and the enterprise as a whole. Competitiveness is reflected in profitability and production efficiency. The experience of developed countries has shown the importance of the role of innovation in the economy (G. Bekimbetova, 2019). Innovation is the essence of scientific and technological progress, which adapts and improves not only goods and services, but also the activities of a joint-stock company in accordance with modern requirements (Shaturaev, Dzhumayev, 2019). Enterprise innovation is a representative of scientific and technological progress at the micro level. The main directions of innovation in modern enterprises (N. Safutdinova, 2020):

- complex mechanization and automation;
- electrification;
- electrification of production;

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- introduction of new materials;
- mastering new technologies.

The decline in production during the period of economic reforms will be associated with serious problems in the innovation sphere of domestic enterprises. The main difficulties are associated with the financing of innovative projects, and its role in the growth of the innovative activity of the enterprise is special (Yusupov, 2018). But since these enterprises are associated with high risk, shareholders do not prefer to invest their capital in financing it. However, most businesses are adapting to new market conditions and achieving stability.

The transition of enterprises to self-financing, attracting funds from their own and foreign investors, stimulated their innovative activity. (M. Mardonov, 2021). Innovations require significant investments and effective management of the financial resources allocated to them and the achievement of high performance.

In our opinion, in practice, venture capital enterprises have a complex structure, and we consider it appropriate to test developments related to the transformation of scientific ideas into technologies and products, optimize work, and apply it as an innovation in the industry. Today's small venture capital enterprises are flexible and mobile, highly motivated, which are characterized by a direct interest of employees and investors in the successful implementation of the developed idea, technology, object, research at low costs and speed.

Venture companies are established on a contractual basis at the expense of legal entities and individuals. Venture capital is a type of activity with a high level of risk inherent in financing, where direct investments are exchanged for a certain part of the shares of enterprises, where venture activities are carried out only on a trust basis and do not independently conduct research.

There is an opportunity to sell your share in order to use the business for the implementation of promising technologies for commercial purposes (R. Karlibaeva, 2021). The main feature of investing in venture capital business is that it is carried out without any guarantees, there is no material support from venture capital enterprises.

Thus, investing in a venture capital enterprise can be divided into the following features:

- 1) Financial investments are made without any guarantees and material support;
- 2) The investor will necessarily have a share in the authorized capital;
- 3) Funds are provided for a long time and on a non-refundable basis;
- 4) The investor is actively involved in the management of the enterprise.

Venture capital is widespread in high-performance sectors of the economy where businesses specialize in research and development, and as a result, we see that the role of small businesses in R&D has grown significantly in recent years. high-tech technologies and developments with a relatively low cost, the dimensions of which correspond to modern technology.

The initiators of such an enterprise are a small group of talented engineers, inventors, scientists, managers who apply innovations to produce innovations, working on the basis of a strict program and a centralized program established in the laboratories of large firms dedicated to promising ideas. This method of organizing research makes it possible to effectively use the potential of the research team. Risk-averse businesses remain a unique form of skill retention early in the innovation process. The advantages of venture capital: flexibility, mobility, very flexible, fast change of research, quick understanding and evaluation of new ideas. Competitive competition in the marketplace requires developers to conduct research aimed at quick profit (B.A. Reisberg, 2010).

Large enterprises have expensive tools and strong market positions, but they do not want to carry out technological restructuring and various experiments in production. This is why they fund small firms that choose to follow the tried and true path of success.

So, venture business:

- changes traditional scientific research and the structure of the country's economy with the emergence of new economic units;
- Increases the employment of highly qualified specialists;
- enhances the re-equipment of traditional sectors of the economy;
- the principles of managing large enterprises encourage the improvement of the organizational structure;
- indicates the need to form a special credit and financial system in the form of venture capital to achieve future goals.

There are two different organizational forms of venture enterprises:

- 1) venture enterprises as part of independent enterprises;
- 2) venture enterprises within large enterprises.

Investors have the right to receive a share of the profits from the enterprises they finance, in proportion to their funds. Funds are

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provided for a long period of time and are not returned, in some cases, investors wait 3-5 years to find out if their funds have a future. Investors take an active part in the management of the financed company because they are interested in its activities. Investors are usually not limited to placing funds. They also provide supportive advice, clarify funding directions, and monitor the allocation of financial resources to effectively manage innovation. Ventures are the main company that provides them with research, computing and other tools, provides the necessary management services. Upon completion of the work, venture capital enterprises cease to exist or merge with the founders of another enterprise, otherwise they enter the market on their own when the developments are competitive and continue their entrepreneurial activities.

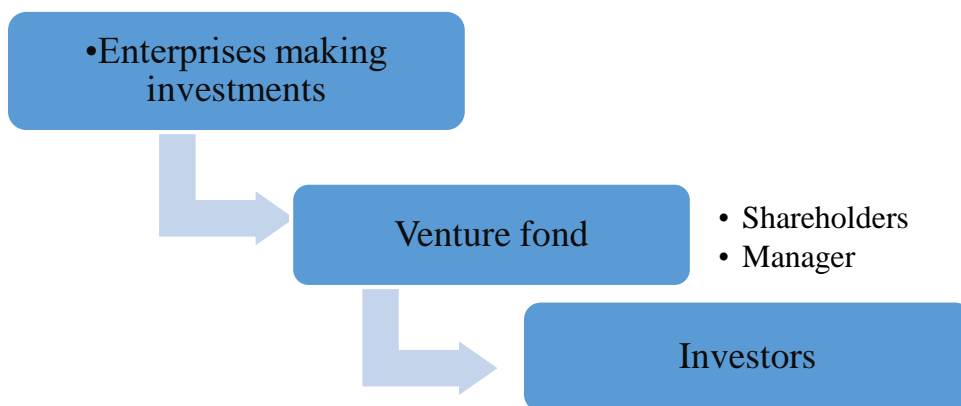


Figure 1. Financing innovative enterprises

Typically, an internal enterprise becomes one of the production units of the parent company when it successfully operates and sells its products with the help of the parent company. Today, venture capital is an important source of innovation. The organization of such enterprises requires the presence of the above content (Figure 1).

The decision to create venture enterprise is made by the shareholders. When choosing ideas on the basis of which a "risky" scientific project is adopted, of course, two factors are taken into account (Sh. Atamuradov, 2019):

- First, the objectives of the project should not be in the traditional interests of the parent company, ie the purpose of the venture company should be to seek new innovations;
- Secondly, when summarizing the ideas that will be implemented in the framework of the internal venture, experts need to analyze the level of innovation, the cost of creating, introducing and selling the product should be 50-75%.

Most companies set up multiple venture businesses at the same time. For example, in 2020, 15 "risky" enterprises were established. Based on them, products such as telecommunications, equipment, new types of displays, personal computers have been launched (N.Raupova, 2020).

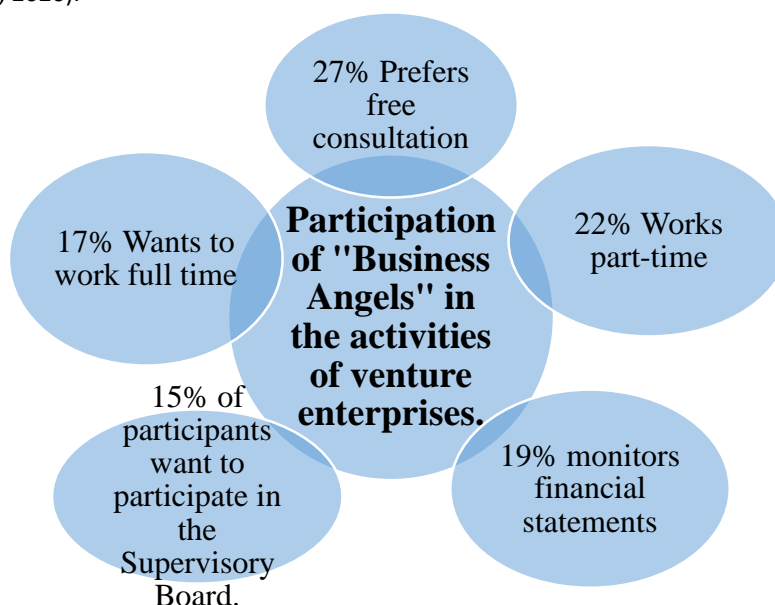


Figure 2. Participation of "Business Angels" in the activities of venture enterprises

After the implementation of this project in practice, a significant increase in the total volume of products is expected during the

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year. In the future, it is planned to transform small venture capital enterprises into large production joint stock companies. Startups selected by accelerators to support innovative businesses will present their projects to business angels after several months of training programs. Of these, those most likely to succeed and deemed worthy by the angels are invested in exchange for a certain share of the firm. The “angels” are often experienced entrepreneurs who are also interested in the success of startups and help with their ideas and tips (Figure 2).

"Angel investors" and venture funds, which play a significant role in the business community of economically developed countries, serve the growth of the country's economy. Since terms such as venture funds and “angel investors” are new concepts for many, their essence and mode of operation have aroused the interest of many. This type of investment sources, sometimes called "equity capital", is also important in the financing of innovative projects, startups with a high level of risk in return for a certain share.

One of the prerequisites for the development of venture capital is the existence of small fast-growing innovative enterprises that are attractive for venture financing, because venture capital is essentially irrelevant - it simply consists of financial resources.

CONCLUSION

In conclusion, before you start looking for a business angel to implement a project, it is important to understand that every business angel is an investor, but not every investor is a business angel. The main characteristics of such investors are: their own funds are spent on projects; it is assumed that it will have more management powers due to the low rate of return on funds; sufficient funds will need to be spent in the early stages of project implementation; be willing to assist in the project development process in the form of advice, communication, experience and knowledge.

REFERENCES

- 1) G.Bekimbetova. (2019). General methods of analysis in decision-making and selection efficiency of investment projects. *Bulletin of Science and Practice*. <https://doi.org/10.33619/2414-2948/40/36>
- 2) G.Bekimbetova. (2020). Theoretical Aspects of the Methods and Goals in Assessment of Young Leaders. *Bulletin of Science and Practice*. <https://doi.org/10.33619/2414-2948/54/45>
- 3) N.Raupova. (2020). WAYS OF EFFECTIVE DEVELOPMENT OF INNOVATIVE ACTIVITIES AT PRODUCTION ENTERPRISES OF THE REPUBLIC OF UZBEKISTAN. 7838(October), 30–31.
- 4) R.Karlibaeva. (2021). THEORY OF FINANCE AND FINANCING STRATEGIES. *International Journal of Advanced Research*. <https://doi.org/10.21474/ijar01/12480>
- 5) Shaturaev, J. N., & Jumaev, H. S. (2019). Small Business, Innovation and Entrepreneurship. *International Journal of Advanced Research*, 7(11), 303–307. <https://doi.org/10.21474/ijar01/10008>
- 6) B.A. Raizberg. (2010). State management of innovation processes.
- 7) M.Mardonov. (2021). Improving the accounting of sources of funding for innovative activities in enterprises. 2021, 85–95.
- 8) N.Safutdinova. (2020). Ways to effectively organize innovation processes in Uzbekistan. 2020, 134–140.
- 9) Sh.Atamuradov. (2019). Innovative design models of venture in foreign countries. 2019, 1–18.
- 10) Sh.Mirziyoev. (2020). ON APPROVAL OF THE CONCEPT OF DEVELOPMENT OF SCIENCE UNTIL 2030.
- 11) B.Yusupov (2018). Use of small business opportunities in the development of innovation in Uzbekistan. 1–5.

A Study of The Effect of Brand Ambidexterity on Brand Performance, Brand Reputation and Brand Commitment (Case Study: Kaleh Brand in Iran)



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ABSTRACT: Today, brand is a strategic requirement for organizations, which allows the creation of greater values for customers and sustainable competitive advantages of companies. Creating a strong brand in the market is the primary goal of many organizations. A strong brand can build up customer confidence for the purchase of goods and services, giving them a greater appreciation of the intangibles. Given the importance of the brand in marketing studies, this paper was conducted to investigate the effect of brand ambidexterity on brand performance and commitment. The research population consists of all customers of Kaleh brand in Rasht, Iran. Since the population size was not known, a sample size of n= 384 people was selected using the Cochran's formula for infinite population as well as Krejcie & Morgan table to ensure sampling adequacy. Structural equation modeling (SEM) using partial least squares (PLS) method were also used for data analysis. The results show that brand ambidexterity (exploitation and exploration) affects brand performance. The results also suggested that brand performance affects brand image, brand reputation and brand commitment.

KEY WORDS: brand ambidexterity, brand performance, brand reputation, brand commitment.

INTRODUCTION

In today's complex and challenging world, individuals and business managers have an increasing number of options at their disposal, making efforts to reduce decision-making and selection time. One major task of the senior management in any organizations is to establish a strong brand, which while fulfilling their promises and commitments, fosters their capacities over time. By creating perceptual distinctions between products through branding and amassing loyal customers, marketers create value beyond financial returns for the organization (Rasouli and Esfandiarpour, 2018). As one of the most important communication tools in the customer relationship management (CRM), brand is valuable to customers for two reasons: it diminishes consumer risk and cuts decision-making costs. Brand is also one of the key factors in the market, which is exploited by companies to compensate for information asymmetry in the market (Chiang et al., 2013). Brand is part of the operational and emotional characteristics attributed to a product or service by customers, serving as a tool that guides customers' purchase decision (Chang and Ma, 2015). Iranian dairy industry is currently dealing with a dilemma. The price spike induced by the rising price of milk and therefore the higher price of dairy products together with increased tariffs on exporting dairy products to Iraq are among the critical challenges facing dairy companies in Iran. The price of purchasing raw milk has soared dramatically in recent months, to the extent that some dairy companies refuse to produce certain expensive products these days. Moreover, since production is not economically viable, the production capacity has been reduced. The dairy industry also deals with the problem of rising export tariffs to Iraq. With the spike in tariffs, exports to Iraq is no longer economically justified. However, although dairy exports have a low profit margin, selling a share of product to Iraqi market will generate revenues that can partially make up for company expenses in other areas.

Accordingly, dairy companies need to pay a greater attention to issues such as branding and organizational ambidexterity. Hence, considering the above points and the growing importance of the brand concept, this study seeks to investigate the impact of brand ambidexterity on performance, reputation and commitment to the brand of Kaleh Company.

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LITERATURE AND RESEARCH BACKGROUND

One of the key concepts associated with brand is "brand commitment ". Commitment has been defined as the relative strength of consumer positive emotions towards a brand (Lassar et al., 1995). Brand commitment is the "persistent desire of consumers to sustain a relationship with the brand" (Erciş et al., 2012), so that they forge a close emotional connection with the brand that inspires a sense of pleasure and happiness (Keh et al., 2007). Customer brand commitment is a relatively new concept. The customer's expected outcomes and the consequences of purchasing a product have a bearing on brand identity brand. According to Moorman et al. (1992), customer commitment is "a firm attitude or desire towards a particular company or brand to the extent that customers, as members of an organization, become psychologically dependent on that organization, its brand or products, and their relationship with the organization is strengthened by a desire to maintain membership (Samadi et al., 2009). Brand commitment is initiated with consumers with a low level of commitment. These consumers opt for and purchase a brand based on its price. The second group are regular buyers, i.e. those who prefer a specific brand but are drawn to competitors as a result of their promotional sales activities. The next group consists of buyers who are committed to the brand (Crosby and Taylor, 1983).

One of the major factors that influence customer commitment to products and services in particular, and to a brand in general, is brand reputation and brand image. As defined by American Marketing Association, brand reputation describes the status of a company's brand. This status may appear as leading market in terms of quality, price, innovation, originality, etc. In another definition of brand reputation, Fombrun, Gardberg & Sever (2000) describe brand reputation as the attributes that people associate to a brand. Finally, Siltaoja (2006) posits that brand reputation is an indicator of the brand's success in fulfilling promises and meeting the expectations of stakeholders in the past and predicting their behavior in the future. Melo & Garrido-Morgado (2012) argue that a brand typically gains reputation when it succeeds to distinguish itself from competitors by offering unique features such as innovation, high-quality service, distinctive and comprehensive service, etc. This reputation can be a source of remarkable competitive advantage for the brand. The importance of brand reputation is underlined by the fact that consumers trust a brand reputation, making decisions about its purchase when they have little information about the product (Schinietz & Epstein, 2005). Another point about brand reputation is that it is not easily imitated (Smaiziene & Jucevicius, 2009).

Also, Keller (1993) offers a definition of brand image: "It is a perception of the brand that is formed by the associations of the brand concept in the customer's mind." The brand image in the customer's mind is shaped by their beliefs about a particular brand, which are in turn influenced by a customer's perception of the characteristics of a product or service (Michaelidou et al., 2015). Brand image is the emotional and logical perceptions of consumers in connection with a particular brand (Keller, 1993).

Marketing studies have shown that "brand performance" is another variable that can explain brand reputation, brand image and brand commitment". The success of a business is undoubtedly linked to its brand performance (De Chernatony et al., 2004). The need to measure organizational performance from diverse aspects and levels has often been stressed in the marketing literature as a dependent variable. Hence, there is a view that evaluates performance through products and services provided by an organization called "brand performance" (Chirani et al., 2012). There is no inclusive approach to evaluating and measuring brand performance in the marketing literature (Ambler, 2003). However, a broad range of measures has been used to investigate brand performance. A framework including three dimensions of customers, finance and employees has been proposed for organizing, introducing and reviewing brand performance. Since the introduction of marketing organization, researchers have mainly examined brand performance from the standpoint of customers (Coleman, 2010). Non-financial indicators can provide a clear picture of marketing activities and strategies compared to financial indicators (Ambler, 2003). De Chernatony and Segal-Horn (2003) assert that most business performance evaluations have been developed for manufacturing organizations and both service organizations and employees play a key part in such assessments.

In addition to the above, brand ambidexterity is another variable that has received growing attention on the account of its impact on brand performance. Organizational ambidexterity can be defined as an organization's ability to focus on both exploitation and exploration activities (March, 1991). In fact, ambidexterity represents one of the fundamental ideas of organizational management. According to this notion, the organization should be able to draw on its existing capabilities, endeavoring on acquire new fundamental capabilities in addition to the implementation of its previous activities (Mihalache & Mihalache, 2016). At the psychological and behavioral levels, individuals capable of using both hands with equal dexterity are called ambidextrous. In organizational theory, the concept of organizational ambidexterity is used as a metaphor to describe organizations that are able to perform two distinct tasks simultaneously (Hoefs, 2012). Duncan (1976) conceptualizes organizational ambidexterity as the ability of an organization to align the management of today's business demands with environmental change at the same time (Duncan, 1976). Tushman, & O'Reilly (1996) describe this concept by focusing on how organizations can manage both evolutionary and revolutionary changes (Birkinshaw & Gupta, 2013). Although the conceptual framework of ambidexterity was first proposed

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by Duncan, it was March who developed the concept in 1991. According to the literature, an organization is called ambidexterity when it is capable of "exploiting existing competencies" and "exploring new competencies". Also, achieving ambidexterity enables an organization to boost its performance and gain competitive advantage (Membini et al., 2015).

There are extensive studies on brand ambidexterity, brand reputation, brand performance and brand commitment, some of which are briefly listed in Table 1.

Table 1. Review of Research Background.

	Authors	Year	Title	Results
1	Nguyen et al.	2016	A review of the university's ambidexterity strategy and its effect on the brand image, reputation and commitment in postgraduate course	Ambidexterity leads to the improvement of the brand image through exploration and exploitation strategies with indirect effects on commitment
2	Poonjiseri et al.	2009	Investigating the role of internal branding in brand supportive behavior	Internal branding has a positive effect on brand supportive behavior. Brand performance leads to improved brand commitment.
3	Hosseinnejad et al.	2018	The effect of exploration and exploitation strategies on brand image and customer commitment through brand performance	Exploration and exploitation strategies have a substantial effect on brand performance. The impact of brand performance on commitment and brand image is positive.
4	Khalilian Ashkazari and Konjkav Monfared	2018	Investigating the effect of brand ambidexterity strategies on brand performance	Exploration strategies and ambidextrous exploitation exert a positive effect on brand performance
5	Darzi et al.	2017	Explaining the effect of brand ambidexterity on brand performance of Mazandaran University	Exploration strategies and ambidextrous exploitation are positively related to brand performance.
6	Azizi and Asnaashri	2013	Internal branding and brand performance in banks: the moderating role of competitive atmosphere and job satisfaction	There is a relationship between internal branding and brand identity and commitment. Also, brand performance and brand commitment are related.
7	Parhizkar et al.	2013	Investigating the effect of brand on customer loyalty in the Iranian food industry	Brand image had a significant relationship with brand reputation, but brand image and reputation were not significantly related to customer loyalty.

Given the relationships between research variables, the conceptual model of this study could be drawn as follows:

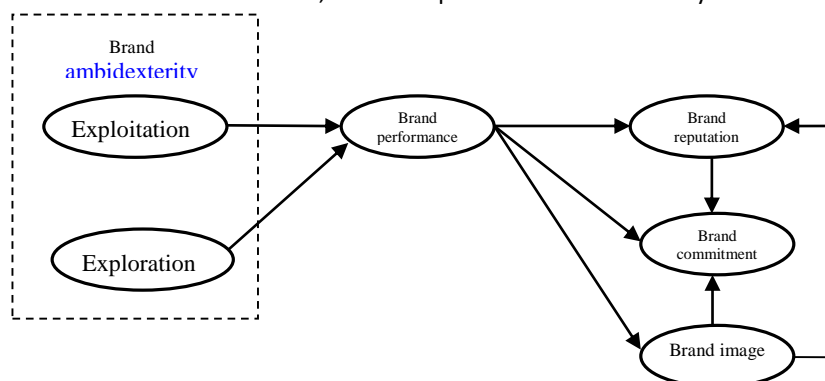


Figure 1. Conceptual model of research.

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RESEARCH HYPOTHESES

According to the conceptual model of the research, the research hypotheses are as follows:

H1: Brand exploitation (of existing competencies) has a positive effect on the performance of Kaleh brand.

H2: Brand exploration (new competencies) has a positive effect on Kaleh brand performance.

H3: Brand performance has a positive effect on Kaleh brand reputation.

H4: Brand performance has a positive effect on commitment to Kaleh brand.

H5: Brand performance has a positive effect on Kaleh brand image.

H6: Brand image has a positive effect on Kaleh brand reputation.

H7: Brand image has a positive effect on commitment to Kaleh brand.

H8: Brand reputation has a positive effect on commitment to Kaleh brand.

RESEARCH METHOD

This is a descriptive-applied study that utilizes a survey research method for data collection. The statistical population of the study comprises all customers of Kaleh brand products in Guilan province, Iran. Cluster sampling method was used for sampling. The sample size of the study was estimated at 384 with 5% error level using the Cochran's formula. For data collection, a questionnaire based on a 5-point Likert scale (strongly disagree=1 to strongly agree=5) was developed. The localized questionnaire developed by Nguyen et al. (2016) was employed to measure the research variables. Cronbach's alpha coefficient was used to measure reliability. As shown in Table 2, Cronbach's alpha coefficient for all research variables was higher than 0.7, and therefore acceptable. The validity of the measurement tool was assessed using confirmatory factor analysis and convergent and divergent validity assessment methods by PLS software. The results are presented in the research findings section (measurement model test)

RESEARCH FINDINGS

Data analysis was performed using structural equation modeling (SEM). This method tests the model in two stages, which include measurement and structural models.

MEASUREMENT MODELS

The measurement model involves an assessment of reliability and validity. To examine the validity and reliability of the measurement model, the average variance extracted (AVE), index, composite reliability and Cronbach's alpha were used. The results are shown in Table 2. Fresnel and Larker (1981) suggested values greater than 0.5 for the AVE. As shown in the table below, all values are greater than 0.5. Since a value of 0.5 or higher is desirable for composite reliability and Cronbach's alpha, all values obtained in our study were acceptable.

Table 2. Validity and reliability indices of the research.

Variable	Number of items	Composite reliability	Cronbach's alpha	AVE
Brand performance	4	0.85	0.89	0.54
Brand ambidexterity (exploitation)	3	0.84	0.73	0.58
Brand ambidexterity (exploration)	6	0.75	0.81	0.51
Brand reputation	4	0.87	0.82	0.69
Brand commitment	3	0.77	0.76	0.55
Brand image	3	0.81	0.71	0.52

STRUCTURAL MODEL TEST

After ensuring the suitability of the measurement model, we tested the structural model. The model fitness and structural model testing are performed by the PLS method, and research hypotheses are tested by examining path coefficients (Beta) and R^2 values (explained variance). (Table 6) Also, Boot Strap method with 200 sub-samples was employed to calculate the values of t-statistic in order to determine the significance of path coefficients, the results of which are presented in Table 3:

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Table 3. Explained variance of research variables.

Variable	(R ²) Explained variance
Brand ambidexterity (exploration)	-
Brand ambidexterity (exploitation)	-
Brand performance	0.74
Brand image	0.29
Brand reputation	0.36
Brand Commitment	0.28

Table 3 displays the variance of the dependent variable explained by the independent variables. According to the findings of this study, 28% of brand commitment, as the dependent variable, could be explained by independent variable. In other words, independent variables explain 28% of variation in commitment to the Kaleh brand. Table 7 presents the path coefficients and test results of the research hypotheses. Another measure of the association between constructs in the structural model is t-statistic. In this statistic, values greater than 1.96 exhibits the accuracy of the relationship between the structure, which thus confirms the research hypotheses at a 95% confidence level (Davari and Rezazadeh, 2013).

Table 4. Path coefficients and test results of research hypotheses.

Hypothesis	From	To	Path coefficient	T statistics	Result
1	Ambidexterity (exploitation)	Brand performanc	0.64	19.74	Confirmed
2	Ambidexterity (exploration)	Brand performane	0.31	8.75	Confirmed
3	Brand performance	Brand Reputation	0.01	0.19	Rejected
4	Brand performance	Brand Commitme	0.17	2.96	Confirmed
5	Brand performance	Brand image	0.54	12.52	Confirmed
6	Brand image	Brand Reputation	0.58	12.81	Confirmed
7	Brand image	Brand Commitment	0.08	1.37	Rejected
8	Brand Reputati	Brand Commitment	0.38	6.74	Confirmed

Figure 2 shows the conceptual model of the research in terms of path coefficients and factor loading of items. The numbers displayed on the paths show path coefficients between the independent and dependent variables. As shown in Table 4 and Figure 2, the direct effect of brand performance on brand commitment is not significant. With the exception of this path, other paths are significant at the 0.01 level.

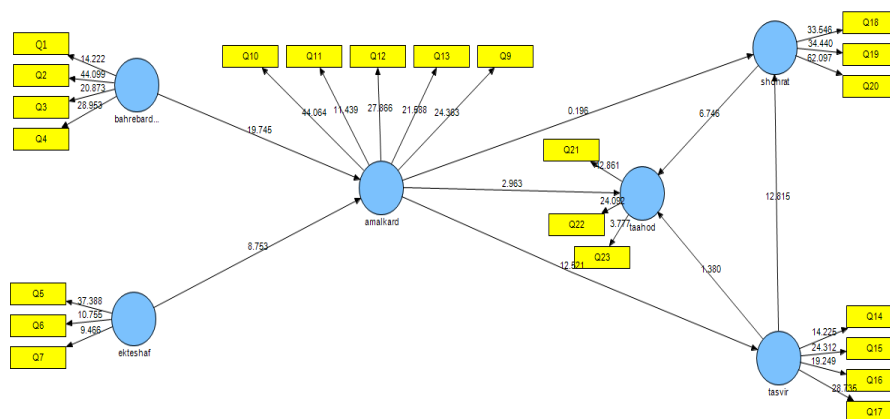


Figure 2. T statistics of the structural model of research.

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According to the first research hypothesis, brand ambidexterity (exploitation) has a significant effect on brand performance. Based on the results of assessing the fit of the structural model concerning the relationship between brand ambidexterity (exploitation) and brand performance, it can be argued that the path coefficient of this relationship ($\beta = 0.64$) and its significance number ($t=19.74$) are significant at the level of 0.01. Therefore, the first research hypothesis is confirmed. That is, with improved brand ambidexterity (exploitation), the performance of Kaleh brand is upgraded. The second research hypothesis posited that brand ambidexterity (exploration) has a significant effect on brand performance. According to the results of evaluating the fit of the structural model of the research regarding the relationship between brand ambidexterity (brand exploration) and brand performance, it can be concluded that the path coefficient of this relationship ($\beta = 0.31$) and its significance number ($75.75 T = 8$) are significant at the level of 0.01. Therefore, the second research hypothesis is confirmed, meaning that with improved brand ambidexterity (exploration), the performance of Kaleh brand is boosted. According to the third hypothesis of the research, brand performance has a significant effect on brand reputation. Based on the results of measuring the fit of the structural model concerning the relationship between brand performance and brand reputation, it can be concluded that the path coefficient of this relationship ($\beta = 0.01$) and its significance number ($t = 0.19$) are not significant at the level of 0.01. Therefore, the third research hypothesis is rejected, meaning that improved performance of the Kaleh brand does not contribute to its reputation. The fourth research hypothesis asserted that brand performance has a significant effect on brand commitment. According to the results of measuring the fit of the structural model of the research regarding the relationship between performance and brand commitment, it can be argued that the path coefficient of this relationship ($\beta = 0.17$) and its significance number ($t = 2.96$) are significant at the level of 0.01. Therefore, the fourth research hypothesis is confirmed, meaning that improved brand performance fosters brand commitment. According to the fifth research hypothesis, brand performance has a significant effect on brand image. Based on the results of measuring the fit of the structural model of the research concerning the relationship between performance and brand image, it can be argued that the path coefficient of this relationship ($\beta = 0.54$) and its significance number ($t=12.52$) are significant at the level of 0.01. Therefore, the fifth research hypothesis is confirmed, meaning that improved brand performance promotes the desirability of the brand image. The sixth hypothesis of the research states that the brand image has a significant effect on brand reputation. According to the results of measuring the fit of the structural model regarding the relationship between image and brand reputation, it can be concluded that the path coefficient of this relationship ($\beta = 0.58$) and its significance number ($t=12.81$) are significant at the level of 0.01. Therefore, the sixth research hypothesis is confirmed, meaning that enhanced desirability of the brand image bolsters brand reputation. According to the seventh research hypothesis, brand image has a significant effect on brand commitment. As suggested by the results of assessing the fit of the structural model concerning the relationship between image and brand commitment, it can be argued that the path coefficient of this relationship ($\beta = 0.08$) and its significance number ($t = 1.37$) are not significant at the level of 0.01. Therefore, the seventh research hypothesis is rejected, meaning that the brand image does not affect commitment to Kaleh brand. The eighth research hypothesis assumes that brand reputation has a significant effect on brand commitment. According to the results of assessing the fit of the structural model of the research on the relationship between reputation and brand commitment, it can be concluded that the path coefficient of this relationship ($\beta = 0.38$) and its significance number ($t=6.74$) are significant at the level of 0.01. Therefore, the eighth research hypothesis is confirmed, suggesting that improved brand reputation fosters commitment to Kaleh brand.

DISCUSSION AND CONCLUSION

For many marketers, the business world is a relentless battleground for market expansion, and the most influential companies are those with the strongest brands. A prestigious brand is one of the main factors of competitive advantage, acting as the main source of future income for the organization. The study of brand performance can provide profound insights for managers and marketers to evaluate the strengths and weaknesses of their brands and compare them with other brands. In this regard, the brand ambidexterity, i.e. exploration and exploitation strategies in the organization, can have a significant impact on market performance. Ambidextrous companies are able to merge exploration and exploitation strategies, so that by enhancing efficiency and revenues, they can improve their performance in the short term. Besides, through flexibility and adaptation to environmental developments, they can explore new structures to ensure their long-term growth and survival.

The marketing unit have a tendency for exploration strategies and the sales department prefers exploitation strategies. In this study, the positive coefficient of the path indicates that with greater adoption of exploration and exploitation strategies, brand performance improves. The results of testing the first hypothesis are aligned with those reported by Khalilian Ashkzari and Konjkav Monfared (2018), Darzi et al. (2017) and Nguyen et al. (2016). The results suggested that improved company's performance in fulfilling brand promises will strengthen company's commitment to the brand. This finding is consistent with the

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study of Azizi and Asnaashari (2013) and Poonjansiri et al. (2009). Moreover, the results of the present study revealed that brand performance has a significant effect on brand image. A desirable brand image comes from the evaluation of the appropriate performance. When brand performance is acknowledged, it leaves a positive impact on brand image. Therefore, a desirable performance creates a positive image of Kaleh brand in the mind of customers, contributing to the company's reputation and attraction of new customers. This finding aligns with the reported by Hosseinnejad et al. (2018) and Nguyen et al. (2016). On the other hand, the results showed that the brand image significantly affects the brand reputation. A positive image amplifies the pleasure of shopping experience, thus contributing to customers' experiences of social enjoyment and emotional outcomes. Ultimately, persistent shopping can promote brand reputation in the eye of customers. This finding is in agreement with the study of Parhizgar et al. (2013).

In general, the study of path coefficients and research hypotheses suggested that the strongest correlation between variables was related to the effect of ambidexterity (exploitation) on brand performance. For that reason, the management of Kaleh Company is suggested to improve their performance by focusing on utilization of their existing capacities. The second greatest impact was exerted by two variables of brand image and brand reputation. The effect of brand image on Kaleh brand reputation was estimated to be 0.58. According to this finding, Kaleh brand managers are recommended to promote their brand image in the community by adopting an effective strategy.

According to the research findings, food industry brands, including Kaleh, are suggested to expand exploration and exploitation activities within the framework of brand ambidexterity in order to improve their performance. They are also recommended to foster brand commitment to their brand by promoting commitment to quality, building a technical support system, and supporting after-sales service and online services. Brands should effectively expand or limit the range of services offered in the form of new products in response to customer demand. For this reason, they are suggested to employ creative techniques and sustainable improvement methods to upgrade products and product technology (exploration). Also, by drawing on marketing and advertising methods, while promoting the reputation of their brand, they can bolster customer commitment to the brand.

REFERENCES

- 1) Amani, J. Khezri Azar, H. & Mahmoudi, H. (2012). Introduction of structural equation modeling by PLS method and its application in behavioral research. *Online Journal of Psychology*, 1, pp. 41-55.
- 2) Azizi, Sh. and Asnaashari, M. (2013). Internal branding and brand performance in the bank: the moderating role of competitive atmosphere and job satisfaction. *Management Research in Iran*, 17 (3), pp. 85-69.
- 3) Hassani, A. Mousavi Bazargani, S.J. & Ghadirinia, M. (2013). Brand Performance, Conceptualization and Measurement. *Tourism Journal of the University of Science and Culture*, 1, pp. 38-1.
- 4) Hosseinnejad, Z. Nazemi, Sh. & Rahimnia, F. (2018); the impact of exploration and exploitation strategies on brand image and customer commitment through brand performance. *Strategic Management Research*, 68, pp. 13-36.
- 5) Khalilian Ashkazari, M.M. & Konjkav Monfared, A. (2018). Investigating the impact of brand ambidexterity strategies on brand performance. *The Fifth National Conference on Applied Research in Management and Accounting*, pp. 12-1.
- 6) Membini, Y. Ebrahimpour, M. & Moradi, M. (2015). Investigating the ambiguities and typology of organizational ambidexterity in technology-based organizations. *Bi-Quarterly Journal of Industrial Technology Development*, 23, pp. 71-59.
- 7) Moradi, M. Ebrahimpour, M. & Membini, Y. (2014). Explaining organizational ambidexterity as a new concept in the management of knowledge-based organizations. *Technology Development Quarterly*, 40, pp. 18-27.
- 8) Parhizkar, M.M., Ramezani, S. & Halvaiha, V.R. (2013). Investigating the impact of brand on customer loyalty in iranian food industry. *Quarterly Journal of Development and Transformation Management*, 12, pp. 80-75.
- 9) Samadi, M. Farsizadeh, H. & Noorani, M. (2009). Investigating the effect of consumer personality traits on shopping behavior in chain stores. *Journal of Marketing Management*, 4, pp. 72-55.
- 10) Ambler, T. (2003); marketing: the trouble with finance. *Business Strategy Review*, 14(3), 54–62.
- 11) Ayden, Y., Alpan, L, Şanal, M (2012); Market Orientation, Ambidexterity and Performance Outcomes, *International Conference on Leadership, Technology and Innovation Management*, 1-1.
- 12) Birkinshaw, J. & Gupta, K. (2013); clarifying the distinctive contribution of ambidexterity to the field of organization studies. *The Academy of Management Perspectives*.
- 13) Chang. H.P, Ma. C.C (2015); managing the service brand value of the hotel industry in an emerging market, *International Journal of Hospitality Management*: 1-13.

A Study of The Effect of Brand Ambidexterity on Brand Performance, Brand Reputation and Brand Commitment (Case Study: Kaleh Brand in Iran)

- 14) Chiang, H. H., Chang, A., Han, T. S., & McConville, D. (2013); corporate branding, brand psychological ownership and brand citizenship behavior: multilevel analysis and managerial implications. *Journal of General Management*, 39(1), 55-80.
- 15) Chirani, E., Taleghani, M., & Esmailie Moghadam, N. (2012); Brand Performance and Brand Equity. *Interdisciplinary Journal of Contemporary Research in Business*, 3(9): 1033-1036.
- 16) Coleman, D.A. (2010); Service brand identity: definition, measurement, dimensionality and influence on brand performance. (PhD thesis). University of Birmingham Research Archive.
- 17) Crosby, L. A. & Taylor, J. R. (1983); Psychological commitment and its effects on post-decision evaluations and preference stability among voters”, *Journal of Consumer Research*, 9: 413-431.
- 18) De Chernatony, L. & Segal-Horn, S. (2003); the criteria for successful services brands. *European Journal of Marketing*, 37(7/8), 1095-1118.
- 19) De Chernatony, L., Harris, F. J., & Christodoulides, G. (2004); Developing a Brand Performance Measure for Financial Services Brands. *The Service Industries Journal*, 24(2): 15–33.
- 20) Derbyshire, James (2014). The impact of ambidexterity on enterprise performance: Evidence from 15 countries and 14 sectors, *Technovation*, 1-8.
- 21) Duncan, R. B.(1976); The ambidextrous organization: Designing dual structures for innovation”. *The management of organization*, 1: 167-188.
- 22) Erciş, A., Unal, S., Candan, F.B., & Yildirim, H. (2012); the effect of brand satisfaction, trust and brand commitment on loyalty and repurchase intentions. *Procedia - Social and Behavioral Sciences*, 58: 1395-1404.
- 23) Fombrun, C., Gardberg, N. A., & Sever, J. M. (2000); the reputation quotient: A multi-stakeholder measure of corporate reputation. *Journal of Brand Management*, 7 (4): 241-55.
- 24) Hoefs. j. (2012); “The relationship between Contextual Ambidexterity and Innovative Ambidexterity: The mediating role of Knowledge Sharing Ambidexterity”. Master thesis. University of Amsterdam.
- 25) Keh, H.T., Pang, J., & Peng, S. (2007); Understanding and measuring brand love. *Advertising and Consumer Psychology, New Frontiers in Branding: Attitudes, Attachments, and Relationships*. Santa Monica, CA.
- 26) Keller, Lane Kevin. (1993); Conceptualizing, Measuring and Managing Customer-Based Brand Equity. *Journal of Marketing*, 51(1): 1-22
- 27) Lassar, W., Mittal, B., & Sharma, A. (1995); measuring customer-based brand equity. *Journal of Consumer Marketing*, 12(4), 11-19.
- 28) March, J. G. (1991); Exploration and exploitation in organizational learning. *Organization science*, 2(1): 71-87.
- 29) Melo, T., & Garrido-Morgado, A. (2012); corporate reputation: A combination of social responsibility and industry. *Corporate Social Responsibility and Environmental Management*, 19: 11–31.
- 30) Michaelidou. N, Micevski. M, Cadogan. J. W (2015); an evaluation of nonprofit brand image: Towards a better conceptualization and measurement, *Journal of Business Research*: 1-10.
- 31) Mihalache, M. & O. Mihalache,. (2016); Organizational ambidexterity and sustained performance in the tourism industry, *Annals of Tourism Research*, 101: 165-181.
- 32) Moorman, C., Zaltman, G. & Deshpande, R. (1992); Relationship between providers and users of market research: The dynamics of trust within and between organization, *Journal of Marketing Research*, 29 (3): 314-329.
- 33) Nguyen, B. Yu, X. Melewar, T.C. & Hemsley-Brown, Jane. (2016); Brand ambidexterity and commitment in higher education: An exploratory study, *Journal of Business Research*, 69 (8): 3105-3112.
- 34) Punjaisri K, Evanschitzky H., WilsonA. (2009); Internal branding: An enabler of employees’ brand-supporting behaviors, *Journal of Service Management*, 20 (2): 209-226.
- 35) Schinietz, K. E., & Epstein, M. J. (2005); exploring the financial value of a reputation for corporate social responsibility during a crisis. *Corporate Reputation Review*, 47: 327–345.
- 36) Siltaoja, M. E. (2006); Value priorities as combining core factors between CSR and reputation—a qualitative study. *Journal of Business Ethics*, 68 (1): 91–111.
- 37) Smaiziene, I., & Jucevicius, R. (2009); corporate reputation: Multidisciplinary richness and search for a relevant definition, *Engineering Economics*, 2: 91- 100.
- 38) Weiss, A. M., Anderson, E., & McInnis, D. J. (1999); Reputation management as a motivation for sales structure decisions. *Journal of Marketing*, 63: 74–89.

Women's Empowerment through the Development of Tourism Villages: A Case Study of Bina Usaha Wanita Small-Medium Industry



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ABSTRACT: This research aims to analyze the forms of women's empowerment and their benefits for women and for tourist villages. This research uses qualitative methods with a case study approach in the tourist village of Tetebatu, on the island of Lombok, Indonesia. The data was obtained through observations, interviews and documentation which were then analyzed using the Miles and Huberman models.

The results of the study found that the form of women empowerment in Tetebatu village consists of three categories, namely economic empowerment where this empowerment emphasizes increasing entrepreneurship skills, increasing ability in marketing, improving trying skills and increasing employment opportunities. The second category is socio-cultural empowerment where this empowerment emphasizes increasing women's capacity including the capacity of Tetebatu village such as improving foreign language skills, communication, skills and marketing. Likewise with the increase in village capacity in the form of maintained cultural sustainability, infrastructure progress and environmental cleanliness. The latter is political empowerment where this empowerment emphasizes the ability of women in making decisions and able to mobilize aspirations related to personal and group life through deliberation or consensus.

KEYWORDS: Women's Empowerment, Economic Empowerment, Socio-Cultural Empowerment, Political Empowerment, Tourism Village

INTRODUCTION

Tetebatu is a village on the island of Lombok, Indonesia that has been crowned as a tourism village long before Indonesia's independence. In this village there are many tourism potential such as waterfalls, mongkey forest, the beauty of panoramic rice fields and mountains, maintained socio-cultural and so on.

The progress of the construction of Tetebatu village continues to be improved, ranging from infrastructure improvements, streetlights, tourist arenas and so on. All of that can not be separated from the village funds poured by the government in the hope of equitable development and realizing village independence by means of local economic empowerment, women's empowerment and the creation of transportation access (Mardikanto, 2019)

The reality of women empowerment programs through village funds is far behind compared to infrastructure development programs that are currently truly the favourable of development. This greatly affects women who are the main actors of decision-making in the family. From data on the economic condition of the community in 2020 as many as 3423 women aged 15-56 years who became housewives in non-working status.

The high unemployment rate is inseparable from the low participation of women in the productive labor force. According to ILO Indonesia (2015) the participation rate of women in the labor force is still very low. The selection of women as a target of empowerment as quoted by Rehman (2015) which asserts that by providing resources into the hands of women accompanied by efforts to encourage gender equality at the household level and in society will be able to produce a huge development impact. Expanding women's opportunities in public jobs, agriculture, finance, and other sectors will be able to accelerate economic growth, which in turn can address future economic crises.

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The same is also confirmed by the results of research conducted by the American Jewish World Service (AJWS) in 2006, mentioning that empowerment with women's goals is an effective way to fight poverty. This is because women tend to spend their income on food, health care, and education for their children.

Departing from this, various efforts have been made by various organizations, both government and non-government to encourage women's empowerment, especially in rural areas, and one of these efforts is done through women's empowerment in the field of tourism.

Tourism is an activity that directly touches and involves the community so that it has an impact on the local community. Even tourism is said to have an energy trigger that makes the local community experience metamorphose in various aspects (Mardikanto, 2019).

Rural tourism can accelerate: (a) economic growth, diversification, and stability, (b) the need for employment opportunities, (c) reduction of potential migration to cities as well as the balance of population distribution, (d) improvement and maintenance of public services and basic infrastructure, (e) revitalization of the industry of capital, tradition and cultural identity (Rusyidi & Fedryansah, 2019).

The concept provides an overview that empowerment in the context of tourism development is an effort to strengthen and increase the capacity of women's roles and initiatives as one of the stakeholders to participate both as subjects and beneficiaries in the development of tourism.

However, the condition of the field shows that the role and position of women as subjects and recipients of tourism is still not running optimally. So this research is very important to do to find out how the forms of women empowerment carried out in Tetebatu village and what benefits are obtained in the empowerment that has been done.

METHODOLOGY

This research uses a qualitative method that is descriptive that re-describes data that has been collected from research objects with a case study approach. This approach is used as an attempt to express phenomena in depth that are explored through the views and experiences of society. The advantages of this approach can get a more natural perspective of a community life and open opportunities for a more detailed deepening of the views of individuals in society (Moleong, 2007).

In this study that will be observed are women living in the village of Tetebatu who participate in empowerment. The informant in this study was the choice using purposive techniques, namely women who know the most about the problem to be studied.

Data analysis is done through observation by looking at the location of empowerment, forms of empowerment and anyone who participates in empowerment. Then conduct interviews with informants to find out more about the issues to be investigated and the last is to do documentation by recording, photographing women's empowerment activities and equipped with data obtained from the village office and various sources that are in accordance with what is studied.

RESULTS AND DISCUSSIONS

Empowerment of women through tourism activities in Tetebatu Village occurs in three categories, namely economic, socio-cultural and political empowerment.

Economic Empowerment

Empowerment of women through the economic sector results in increased entrepreneurial ability, increased growth in marketing, increased employment opportunities and business skills.

1. Increased entrepreneurial ability

The tourism industry with various economic activities has encouraged an increase in entrepreneurial ability. Where the previous community business only provides the fulfillment of the basic needs of the local community (local), providing products that are common in the market in the sense of basic needs such as sembako, school supplies and so on, without designing what products will be provided to meet the needs of tourists who show the characteristics of Tetebatu village.

Small and Medium Industries (IKM) built by Women's Business which was inaugurated on January 6, 2020 when the covid 19 pandemic was sweeping the world followed by the declining economic condition of the community became one of the new spirits for

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the village of Tetebatu. It is in this place that women are accompanied and taught how to process natural products such as making coconut oil, making coffee, processing garbage, becoming tour guides, processing restaurants, serving guests and given directions related to tourism both by tourism conscious groups (*Pokdarwis*), *LHK* offices, Industrial services and so on sent by the government to succeed potential tourism villages. With the expectation of meeting the needs of tourists and to create an expansion of jobs.

From the increase in the ability to try women show the magnitude of women's enthusiasm to be involved in tourism and in increasing income. This affects the power of women as the results of research conducted by Karwati, (2017) women can be empowered through entrepreneurial training that provides knowledge, attitudes, skills that are able to make them independent and can improve their quality of life. In line with the results of research conducted by Nazar (2020) Empowerment of women through the Independent Business Literacy program in the process of learning activities emphasizes on the education of skills that have the opportunity to become a business field that is in accordance with the interests and potentials possessed by women.

So that empowerment is a container that is used as an effort to provide a vehicle for women to meet the educational needs in the form of knowledge and skills that are in accordance with the potential of natural resources and women's expertise. So that women will be better prepared to face competition in the era of globalization that demands the quality of human resources that can ultimately improve the quality of life of women by developing aspects of skills skills to encourage the development of tourist villages that lead to increasing women's incomes.

2. Marketing

Marketing is the most important thing in building a business. Without marketing a production would never work. Considering one form of women empowerment in the economic field, namely more to home *industries* such as coconut oil manufacturing, coffee making, fiber utilization, waste management requires extra marketing to maintain the rate of production.

In fact, the villagers of Tetebatu experienced obstacles in marketing. The main obstacles experienced by women who pursue the *home industry* sector such as the manufacture of coconut oil, coffee making in marketing that cannot compete with other products. Other obstacles also hamper the development of the business, such as the absence of business partners who can be invited to cooperate well that can help market the product. In addition, the lack of government intervention and products that do not have a brand, so it is not yet known by the public.

This factor then caused *the home industry* products of Tetebatu village to be unable to get out into the global market and only remain local. So, it can not grow and is not able to compete in the market. In the end, the economic fulfillment of the community, especially the women of Tetebatu village, has not been resolved properly because the profit obtained is also not large.

In addition, raw materials that are not difficult to obtain, sufficient production, a lot of labor, but what is the capacity of the container to market the product only in that place and make the business that has been pioneered for many years less known by the market. In addition, there are certain groups that only attach importance to a handful of groups.

3. Trying Skills

The role played by empowerment is essentially to strengthen the power (ability) so that women are able to maintain a bargaining position in themselves (Mardikanto, Totok, Soebiato, 2019). In accordance with the results of the study, empowerment makes women more skilled in applying the empowerment results obtained from the IKM Bina Usaha Perempuan group. Such as the involvement of women in managing fibers, where women can take advantage of the remaining fibers from the manufacture of coconut oil to be used as plant containers or pots that can be sold directly either through the *marketplace* or from the mouth of the mouth.

The role of empowerment for women is very influential on increasing human resources in terms of increasing women's creativity. To be able to present skilled women who are ready to peddle their creativity well through the local market maupaun universally. If this continues to be honed it is not impossible that the creation of new products that reflect the characteristics of the village can soon be presented in the midst of tourism of Tetebatu village which is global so that there is no need to bring products outside the region previously marketed in Tetebatu village.

Cooperation between all cuttingholders became the determining factor in realizing a successful Tetebatu village. In the sense of successfully prospering his people want to succeed in bringing Tetebatu village into a village that is always missed by tourists.

4. Job Opportunities

Tourism acts as an effective tool for regional development, equitable development, related business drivers, community empowerment and poverty reduction. Tourism industry activities can leverage and move business sectors. The tourism sector has a huge ability to create economic impacts including employment for people living in destinations (Sunaryo 2013).

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The results of research conducted by (Syafuruddin et al., 2020) pariwisata industry has encouraged the creation of new types of jobs. In the aspect of job mobility there has been a change in the status of contract / freelance work. Meanwhile, according to Suardana, (2012) female workers are more filling employment opportunities in kiosk business types (14.3%), while men (9.2%). In the service sector women workers are concentrated in restaurant and souvenir businesses (36.6%) and food stalls (6.3%).

Female workers are more involved in the informal sector because these types of jobs relatively do not require special skills. For women in poor working households is not an offer, but a strategy to sustain the family economy to be stronger. With the development of the tourism industry in the village of Tetebatu began to show rapid results. This encourages women who were originally just housewives to take part in the tourism sector.

The existence of tourist villages is very grateful by the local community especially women because of business opportunities and new jobs that continue to grow as more tourists come to Tetebatu village.

Likewise, the type of community business that is increasingly varied ranging from accommodation providers, culinary and other local products because tourists who come to Tetebatu village every year continue to increase so that the community continues to improve themselves to provide tourist attractions and improve the quality of service and complement village facilities.

Economically women benefit from the existence of tourism destinations in the village of Tetebatu. Such as the expansion of employment opportunities where it affects women's income even though only as additional income in the family. But it is very influential on the power of women who are often in rural patriarchal culture is still thick. So that even women in getting their own wealth makes them have added value (addedvalue)in society more and morefamily. This makes them feel valued rather than just being ordinary housewives or being women who don't work.

Socio-Cultural Empowerment

In addition to empowerment through women's economy is also empowered through socio-culture in the hope of creating social and cultural resilience such as the results of research conducted by Lestari, (2016) the parameters of socio-cultural resilience success in The Village of Pentingsari Tourism can be observed from the formation of community welfare. This well-being is measured from the increasing economic power and skills as a quality of life for the community. Another parameter of increasing socio-cultural resilience is the power of society.

When viewed from the socio-cultural resilience of Tetebatu village through the tourism sector itself produces several things, namely increasing women's capacity including increasing the capacity of Tetebatu village.

1. Increase in women's capacity

Efforts to empower women through the development of tourist villages in Tetebatu village are carried out by increasing capacity such as improving foreign language skills. This is in accordance with the condition of Tetebatu village which is a tourist village with most foreign tourists. Where the community must certainly be able to use foreign languages to create harmonious circumstances so that the culture of *hospitality (hospitality)* of the community to tourists can be maintained properly.

The facilitator team in this case cooperates with the tourism conscious group accommodates all masyarakat including women to learn English directly accompanied by a tour conscious group at no charge.

In addition, to support the development of tourism and increase human resources, the East Lombok Regency government continues to work with various strategies such as requiring each village to send village daughters to be given training in BLK in the hope of more skilled people.

This is one of the efforts in supporting the development of tourism with the hope that more workers can be absorbed in the tourism sector to minimize the unemployment rate.

That way the increase in community resources will be able to bring change for itself in utilizing opportunities that are in accordance with its potential. As well as being able to be *an agent of change* for his own village, where the community can introduce the state of the village to tourists so that this will also have an impact on the development of Tetebatu village.

In line with the results of research conducted by Galela, (2014) The function of language in the tourism sector is to facilitate communication, avoid misunderstandings, further strengthen relationships and can create a familial atmosphere between foreign tourists and people related to tourists themselves.

The emphasis on the language skills of women involved in tourism has an impact in maintaining *hospitality* which is one of the hallmarks of the tourist village of Tetebatu.

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In addition to hospitality, women's ability to explain and promote culture certainly requires reciprocity with tourists so that harmony is established, to be able to maintain and increase the number of tourist visits that will lead to providing economic benefits to villages and local communities.

Tourists who visit Tetebatu are dominated by foreign tourists so that language skills are certainly a supporting factor in developing tourist villages. The efforts that have been made by the facilitator team have paid off, with the involvement of women as guides, *hiking*, home *stay* waiters, restaurant waiters and so on. In line with the results of research conducted by Suardana,(2012) from the aspect of negotiating the role of women is higher than men. From the results of the study 76% of the negotiation process of tourism business was completed by women while 24% was carried out directly by men. Public communication skills and beauty maturity are the main reasons for women's success in tourism.

Although the involvement of Tetebatu village women as tour guides today is still fairly lacking due to various societal stereotypes such as the assumption of women who become guides assumed to be prostitutes, unruly, free women and various kinds of negative assumptions. So that the understanding of tourism to the community must continue to be improved to be more *openminded*.

In addition to various classical assumptions, the lack of involvement of women as tour guides is also due to language factors that are only partially in the category of being able. If reviewed from the average level of education of women who participate in empowerment through IKM Bina Usaha Perempuan is the End of Elementary School, of course, this is a challenge that must be faced together to be able to get out of the HR crisis and find effective solutions in supporting the development of tourism in the future by continuing to strive and provide the right state.

In addition to training in foreign languages women are also required to have skills in communicating, where communication is a contributing factor that is no less important to attract the interest of visitors in introducing Tetebatu village either in introducing tourist products, culture or customs of Tetebatu village.

In addition, empowerment also makes women skilled in processing natural resources such as processing coconut into oil, processing yams into chips, processing serbut into pots and processing waste into corse and tables. Women also could develop potential tourist attractions such as preserving the fried culture of coffee (*siong kupa*) using traditional tools shown to tourists.

2. Capacity Building of Tetebatu village

Empowerment also has an impact on the village of Tetebatu because with the power of the people who live in the village of Tetebatu of course this will affect the existence of Tetebatu village, which is increasingly considered, starting from the preservation of cultural / customs.

Of course, this will be an added value and attraction for tourists who want to get to know more about the socio-cultural life of the people of Tetebatu village. The best impression given by the community to tourists will affect tourist visits so that it will also have an impact on other sectors related to the socio-cultural sector of the community.

The maintenance of socio-cultural, adequate infrastructure and maintained environmental cleanliness shows the increase in the capacity of Tetebatu village as well as the benefits of tourism are not only felt by Tetebatu village women but also affect the village of Tetebatu which continues to show changes.

Political Empowerment

The involvement of women in politics in the village of Tetebatu is still relatively still a little because the patriarchal culture that has long been attached to society has built various stigmas (stereotypes) that harm women to jump in and active career in the political sphere and become leaders. Various assumptions that often sound like the expression of women are not suitable to be leaders for religious reasons prohibit, women are more emotional and various negative stigmas, although the struggle for gender equality has long been bridged but women as leaders still reap a lot of criticism, especially at the village level.

The development of the role of women in politics in the village of Tetebatu so far is still lacking due to various factors but the involvement of women in deliberation or consensus gets the widest space. Women's empowerment through politics in general access and control of women in institutions and organizations both formal and informal, only limited to institutions that are closely related to gender equality. For example, in pkk organizations, arisan, studies and so on. There is even a tendency that organizations formed and introduced by the government can only be reached by households capable or in the category of close relatives. Because according to the findings when on the ground often find answers that do not match the expectations of many who do not know at all what programs are run by the government to empower women let alone get involved in politics, it's just that the full involvement of women

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is limited as election participants.

CONCLUSION

The form of women empowerment in tourism in Tetebatu village is carried out through three categories, namely economic, socio-cultural, and political empowerment. Economic empowerment emphasizes on improving women's ability to entrepreneurship producing natural products in the village of Tetebatu. The second emphasizes the ability of women in marketing the results of production through the utilization of social networks and women's social capital. The third is the improvement of trying skills such as waste processing, fiber, coconut, coffee and others and the latter emphasizes on increasing women's employment opportunities in the tourism sector both as tourist guides, accommodation providers, service offerings and the formation of SMEs. Socio-cultural empowerment emphasizes the improvement of women's capacity through foreign language skills, communication skills, and increasing the capacity of Tetebatu village with maintained cultural sustainability, infrastructure progress, and environmental cleanliness. Meanwhile, political empowerment emphasizes the ability of women to make decisions and be able to mobilize aspirations related to personal and group life through deliberation or consensus.

The benefits of women empowerment include for Tetebatu village, namely: The increasing role of women who initially only as housewives, as workers, as TKW, now women are more skilled in creating their own businesses both in the field of food and beverage, waste management and as tour guides. While the benefits of empowerment for Tetebatu village are increasing village income, infrastructure is increasingly organized, the more known Tetebatu village and the creation of a beautiful environment.

BIBLIOGRAPHY

- 1) Galela, D. (2014). *Peranan Bahasa Inggris di Bidang Industri Pariwisata di Tabela*. 1–18.
- 2) Indonesia, I. (2015). *Tren Ketenagakerjaan dan Sosial di Indonesia 2014 – 2015: Memperkuat daya saing dan produktivitas melalui pekerjaan layak*. Jakarta: publikasi Kantor ILO untuk Indonesia.
- 3) Karwati, L. (2017). Pemberdayaan Perempuan Melalui Pelatihan Kewirausahaan Berbasis Potensi Alam Setempat. *JIV-Jurnal Ilmiah Visi*, 12(1), 45–52. <https://doi.org/10.21009/jiv.1201.5>
- 4) Lestari. (2016). Partisipasi Pemuda Dalam Mengembangkan Pariwisata Berbasis Masyarakat Untuk Meningkatkan Ketahanan Sosial Budaya Wilayah (Studi di Desa Wisata Pentingsari, Umbulharjo, Cangkringan, Sleman, D.I. Yogyakarta). *Jurnal Ketahanan Nasional*, 22(2), 137–157.
- 5) Mardikanto, Totok, Soebiato, P. (2019). *Pemberdayaan Masyarakat dalam Perspektif Kebijakan Publik* (V). Alfabeta.
- 6) Moleong, L. (2007). *Penelitian Kualitatif*. PT Remaja Rosdakarya.
- 7) Perempuan, P. (2020). *SAMPOLAWA KABUPATEN BUTON SELATAN MELALUI PROGRAM*. 1(3), 175–182.
- 8) Rehman, Huma., Amani Moazzam., & N. A. (2015). Role of Microfinance Institutions in Women Empowerment: A Case Study of Akhuwat, Pakistan. *A Research Journal of South Asian Studies*, Vol. 30.
- 9) Rusyidi, B., & Fedryansah, M. (2019). Pengembangan Pariwisata Berbasis Masyarakat. *Focus : Jurnal Pekerjaan Sosial*, 1(3), 155. <https://doi.org/10.24198/focus.v1i3.20490>
- 10) Services, A. J. W. (2006). Women's Empowerment: Global Perspectives. An AJWS High School and Adult Education Module. *An AJWS High School and Adult Education Module*.
- 11) Suardana, W. (2012). Pemberdayaan Perempuan Di Kawasan Kuta Sebagai Upaya Peningkatan Kualitas Pariwisata Bali. *Piramida*, 6(2), 1–16.
- 12) Sunaryo, B. (2013). *Kebijakan Pembangunan Destinasi Pariwisata Konsep dan Aplikasinya di Indonesia* (satu). Gava Media.
- 13) Syafruddin, S., Wadi, H., Sosiologi, D. P., & Keguruan, F. (2020). *Industri Pariwisata dan Mobilitas Pekerjaan Perempuan di Kawasan Ekonomi Khusus (KEK) Mandalika Kuta Lombok*. 8(1), 141–152.

Accounting Information and Dividend Pay-Out in Nigerian Listed Oil and Gas Firms



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ABSTRACT: Dividend pay-out policy plays an important role in firm's decision to determine the amount to be declared as dividend. The study aim to analyse the impact of accounting information on the dividend pay-out of listed oil and gas firms in the Nigerian Stock Exchange. The study employs the use of secondary data obtained from annual reports and accounts. The population of the study is ten oil and gas firms listed in the Nigeria Stock Exchange, the sample of the study ten oil and gas firms and the period covered by the study is from 2015-2019. The data is panel in nature and regression was used to analyse the data. The result shows profitability is having a positive and significant relationship on dividend pay-out of the listed oil and gas firm in Nigeria. Whereas, liquidity revealed a negative and insignificant relationship. On the other hand, firm size was found to be negative and significant influence on the listed oil and gas firms in Nigeria. Finally, a positive and insignificant relation was found respectively. This implies that individual investor who prefers high dividend should invest on profitable company, while management should announce the dividend after considering their profit. Also, Investors who are trying to predict future dividends will therefore need to get some relevance and useful information on the firm to invest in. Furthermore, Managers may also use the study when determining the dividend pay-out since they will be given relevance information for decision making.

1. INTRODUCTION

The two important characteristics of good accounting information are that the information is relevant and fairly presented in order to assist users in decision making. Relevant and well-presented information enables users to make investment decisions by examining past and current financial statements in other countries to be able to predict future events through them (ICAN, 2014). The importance of accounting information can be judged by the ability of the financial information contained in the financial statements (Paul and Juliana, 2015). Reliable accounting information is a basic requirement for growth as investors require sufficient information about the nature of dividend for the company before making an investment decision (Oyerinde, 2006). Hence, it is important to note that financial statements will only be employed by the investor when valuing the shares of a company in the stock market only if they provide useful information for them. As such, inform the accounting (Patrick 2016).

Accounting information plays an important role in corporate management and is seen as important tool in implementing the guidelines and policies of entities and their continuous development in the field of information suitable for both managers and external users. This information focuses on providing relevant, reliable and timely information to decision makers who use this information in making decisions about their investments in the oil and gas sector. Investors are often recognized as one of the end users of accounting information because they are eager to get more information regarding their capital and returns in the form of dividend. However, the accounting information is expected to serve as a guide in anticipating the returns on their investment in the company. Nwidobie (2016) states that the investor's perceived earnings as a measure of good performance thus encouraging potential investors to invest more in companies that pay high dividends. As stated by Mayer (2007), accounting information plays an important role in the generating and communicating the wealth of companies. Its importance has led standard-setters and stock market regulators to formulate means to constantly improve the quality of information (Halonen, Pavlovia, & Pearson, 2013).

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Gordon (1963) stressed that in an environment surrounded by economic and political instability along with exchange rate instability, hyperinflation and high interest rate. Investors will prefer to have their returns in form of dividends over capital gains. With regard to the important investments needed for the success of companies, profit plays a major role in determining the dividends of companies because it is from the profit earned from operating activities that dividend are paid. Profitability ratio is used in evaluating the ability of management to generate additional profit from the operating activities of companies for the period. As such, profitability is viewed as the backbone of every business being it a small scale or large scale as such all operating activities depend on the profit earned by the company. Theoretically, increasing company profitability tends to increase the dividend payout due to profit as a signal for investors. The higher the profitability of the company the more investors are confident in the shares of the company (Tui, Nurnajamuddin, Sufri and Nirwana, 2017). Rahel and Serkalem (2010) posited that profitability also helps a firm to ensure its solvency for owners to invest in the future and firms can go out of business, if it incurs loses and become insolvent and profit is generally attained only when company operates effectively and efficiently (Mayliza and Sari 2018).

In a firm the proportion of capital financed through debt as opposed to equity causing an increase in the debt capital an also resulting to an increase in the shareholders' wealth and financing risk is associated to leverage. Enekwe, Agu and Eziedo (2014) reported that leverage is a measure to how a firm uses its equity and debt to finance its operational activities. However, leverage is an important financing decision component for achieving a favourable capital structure of the firm. It also serves as a tools used in measuring the firm's level of exposure to financing risk. Therefore, a careful use of leverage help the firm in achieving higher return on the fixed interest sources of financing than their costs and this consequently results in the maximization of shareholders' wealth. Leverage arises because the firm will carry out its operations using assets and funding income which has flat costs and can increase returns for the company (Hasibuan, 2017).

The percentage of distributable profits payable to investors as returns is directly related to the firm size. Larger firms have the tendency to pay higher dividends (Kumar and Sujit, 2018). Firm size is considered to have an impact on the dividend payout due to continuous increase in company value thereby making it easy for the company to source fund that can be used in financing the affairs of the firm (Indriyani, 2017). Suwardika and Mustanda (2017) state that, if the firm size is observed from sales or total assets the increasing assets of the company can be an indication that the company has reached its maturity stage. Companies that are already in their maturity stage is a sign the firm is having a positive cash flow and is expected to have a long term profitable outlook.

However, a poor liquidity position may mean fewer dividends due to shortage of cash (Omaliko and Okpala, 2020). Liquidity of a company is an essential aspect that must be considered before taking a decision on how to determine the amount of dividend to be paid to shareholders because dividend is seen as cash outflows (Riyanto, 2015: 202). It is important to compare a firm's liquidity position in relation to its dividend payment. Logically, a firm will only pay dividend if it has a strong cash position. According to Liu and Hu (2005) if the cash dividend is less than the cash flow, it means the firm has residual cash, if cash dividend is more than the cash out flow then it means the firm needs financing to be able to issue out dividend. A poor liquidity position is likely not able to issue dividend due to shortage of cash. Payments depend more on cash flows, which reflect the company's ability to pay dividends than on current earnings which are less heavily influenced by accounting practices.

The Nigerian economy entered a technical recession in the second quarter of 2016, leaving domestic companies especially oil and gas companies which are vulnerable to threats due to liquidity fears. Due to the continuous rise in non-performing bank loans, financial institutions are reluctant to provide credit to companies. This may be due to the recent oil price shock (a sharp drop in the price of Oil), which had a significant impact on banks exposed to the oil and gas sector. In addition, the Nigeria economy has experienced an increase in inflation and a chronic devaluation (Patrick 2018). Limento and Djuariah (2013) and Aliyu (2015) argue that macroeconomic factors such as interest rate, gross domestic product, inflation rate, money supply, and risk free rate also cause movement in the share prices of companies. On the other hand, it is also argued that dividend could be influenced by microeconomic variables like dividend pay-out, return on equity, earnings per share, profitability, firm size, and leverage (Stephen and Okoro, 2014, Taimur, Harsh, and Rekta, 2015, Zeeshan, Ali, Sohail and Sulaiman, 2015 and Adenugba, Ige and Kesinro, 2016).

However, given the importance and the viability of the oil and gas sector which according to Odularu (2008) has contributed to the Nigeria economy in the area of job creation, contributing to government revenues, Gross Domestic Product (GDP), which according to the Nigerian Bureau of Statistics (2016), contributed 10.29% of total real GDP, foreign reserves and supply of energy to industry and commerce. A high dividend pay-out policy means more current dividends and less retained earnings on

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the other hand, Low pay-out policy means less current dividends and more retained earnings. Companies are established with the sole aim of maximizing the wealth of their shareholders and the value of the company as well. Efficient dividend pay-out will enhance the growth of the oil and gas sector thereby increasing the rate of investment and also help in the growth and development of the country at large. Reliable accounting information is set to be considered as an essential factor for growth in investment as investors will require adequate information about the oil and gas firms before taking any investment decision.

Following the shock caused by the global financial crisis which had an adverse effect on the prices of the equity shares of companies in Nigeria, most companies had made efforts in raising funds to finance their investment and projects in order to recover and continue with their business. The oil and gas firms in Nigeria especially Oando Plc, Conoil and several others create capital reserve for long term capital investment projects, there reserve is made to guarantee availability of fund to finance their anticipated projects which might include fixed asset replacements that are neither expenditure on purchase of goods nor period expenses. The oil and gas firms are highly capital intensive industry in Nigeria which largely automated their production lines. In October 2021 Total Nigeria took the lead in oil & gas sector with N2.06 billion pay-out. The COVID-19 pandemic has significantly hampered the growth of the market, mainly due to global oil and gas demand contraction and global economic slowdown. The outbreak of COVID-19 led to the crude oil price crash of April 2020, leading to a significant reduction in CAPEX spending by oil and gas companies globally. The country's national oil and gas companies were already struggling with liquidity and cash shortage, and due to the outbreak of COVID-19, the situation has further deteriorate. However, some of the major factors driving the market include increasing investments in the upstream sector and the development of large-scale and modular refineries in the country. Oil and gas production had been hampered in Nigeria in the past few years due to the attack on oil and gas infrastructure by militants. Furthermore, oil theft has been one of the major issues faced by the oil and gas market in Nigeria, which resulted in huge losses to operating companies in the country. Such factors are expected to have a negative impact on the market growth during the forecast period.

As part of the effort to regain the confidence of shareholders, companies had also adopted dividend policies that would maximize the market values of their shares and boost the shareholder's wealth. Adamu , (2009) contended that the companies in Nigeria that were affected by the global financial crisis were mostly those in the oil and gas sector and this has had a severe effect on the economy as revenue from the sector is the major source of financing the Nigerian budget. This sector has suffered challenges posed by the fall and fluctuation in the price of crude oil at the international market over the years, which affected the revenue of the sector in particular and Nigerian economy in general (Adamu, 2015 and Ogochukwu, 2016). In the world today, crude oil is the major source of foreign exchange and energy that powers the global economy and its industrialization processes and fluctuation in the price of crude oil in the global market is expected to have significant impact on both importing countries and the exporting countries of the product (Abubakar and Umar, 2013 as cited in Inyiama and Ugah, 2015).

The oil and gas sector was mostly dominated by multinational corporations until the early 1990's when Nigerian companies began to venture into the industry. Local participation was boosted with the implementation of the Nigerian Content Directives issued by the Nigerian National Petroleum Corporation (NNPC) about a decade ago, and eventually, by the promulgation of the Nigerian Oil and Gas Industry Content Development (NOGIC) Act (The Act) in 2010. The Act seeks to promote the use of Nigerian companies/resources in honour of oil licenses, contracts and projects. In terms of structure, the industry is broadly divided into: Upstream sector and Downstream Sector, The Upstream sector is characterized by exploration and production of crude oil and gas (petroleum operations). The upstream oil sector is the single most important sector in the Nigerian economy, accounting for over 90% of the country's exports and about 80% of the Federal Government (FG's) revenue. The Downstream Sector on the other hand consists of; Transmission and Conveyance which involves the transportation of oil and gas to the refinery and gas stations. There is a pipeline network from the wellhead to the refinery or plant tankers and purpose built vessels are also used for this purpose. Refining which involves transforming the crude oil to various products such as petrol (PMS), diesel, kerosene, etc. Distribution involves the transportation of refined petroleum products from the refineries through pipelines, coastal vessels, road trucks, rail wagon etc. to the storage/sale depots.

According to Odularu, (2008) 80% of Nigeria's energy revenues flow to the government and about 4% go to investors. It is worthy to note that this revenue figures run into billions of dollars. Over the years, the petroleum industry has attracted stakeholders from foreign and local explorers whom have benefited as a result of increase in its price. Oil and gas firms in the Nigerian Stock Exchange (NSE) are believed to be financially viable and as a result, shareholders require favourable dividend policies which will maximize their wealth as a result of effective utilization of resource and firms' performance. Managers are saddled with the responsibility of making optimal investment decisions on behalf of the firm and ensuring the maximization of

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shareholders' wealth. This can be achieved when firms generate profits and deliberately decide the amount to be reinvested into the firm or distributed to shareholders. The distributed funds to shareholders are known as dividends.

Research in dividend policy shows not only that a general theory of dividend policy remains elusive, but also that dividend payout varies over time among firms and across countries. The pattern of dividend policies does not only vary over time but also across countries, especially between developed and emerging financial institutions. However a large number of firms in the developing economies are still apathetic about their dividend decisions as they are unaware of the connection between accounting information and dividend decisions. Based on this observation, this study considered it imperative to examine the relationship between accounting information and dividend pay-out of listed oil and gas firms in Nigeria (Ross 2009). Many dividend theories have been propounded to give an explanation on how the dividend decisions are being undertaken. Many factors affect the distribution of cash dividends such as the profitability, assets size, low level of current liabilities, good relations with suppliers, and sound liquidity position. The main purpose of this study is to examine the impact of profitability, liquidity, leverage and firm size on dividend pay-out of listed oil and gas firms in Nigeria.

Triani and Tarmidi, (2019) for companies, the choice to distribute profits in the form of dividends will reduce their source of internal funding; on the other hand, if the company retains its earned profits in form of retained earnings, the ability to ascertain internal funds will be greater which can be used to finance operational activities of the companies, thus reducing dependence on external funds and minimizing the risk of the company simultaneously. It is the responsibilities of management to make decision on the percentage of profit realized to be distributed in form of dividends (Uzomah, 2021). The payment of dividend in oil and gas firms differs as each firm decide on how and when dividend is to be paid to shareholders. Some firms may decide to pay high dividend due to profit realized. Managers tend to be efficient when distributing excess cash flow as dividend to shareholders rather than investing in an unprofitable venture. Zayol, Mya and Muolozie (2017) clearly see dividend policy as policy that managers follow in deciding the pattern and size of cash distribution to shareholders in the form of dividend. Dividend pay-out is important for investors because dividends provide certainty about the company's financial well-being, dividends are attractive for investors looking to secure current income and dividends also help maintain the market price of shares. This research will be conducted due to the incompatibility phenomenon between the theories and the results of prior study. For instance, profitability in the theory has a positive impact on dividend pay-out, however the results of Pratama's and Wiksuana's (2016) reported profitability having a negative impact on dividend pay-out, firm size which theoretically has a positive impact on dividend, yet Hirdinis (2019) reported firm size having a negative impact on dividend; leverage in the theory has a negative impact on dividend, but Markonah (2020) reported leverage to be having a positive impact on dividend pay-out.

The relationship between accounting information and dividend pay-out is well documented in developed economies few studies been carry out in emerging economies. According to the standards of Wall Street, London, and Tokyo, the emerging capital markets in the post-communist countries are very small, but they can be a major source of capital for economic growth and development. In addition to the economic development role, the emerging markets may provide external investors with a good source of diversification for international portfolio management. The International Finance Corporation, a development institution of the World Bank, has been actively involved in the development of emerging markets. For investors, investment decisions about stock should be made by analysing factors that can influence their return in investment. Investors need to have information to determine whether they can benefit from the shares they bought.

This study seeks to address the issue of the dividend puzzle, studies carried out in this area of dividend policy, shows that there is no conclusive consensual solution in the aspect of dividend. Investor's curiosity on the worth of their investment could be resolved with the availability of sufficient information in predicting their returns. Studies has linked dividend pay-out to performance of the oil and gas firms in Nigeria but few consider information as a signal, the study examine the impact of account information in predicting investors returns. The study seek to address the following questions,

- i. To what extent is profitability impacting on dividend pay-out of listed oil and gas firms in Nigeria?
- ii. Does leverage have a positive relationship on dividend pay-out of listed oil and gas firms in Nigeria?
- iii. Is firm size of significant influence on dividend pay-out of listed oil and gas firm in Nigeria?
- iv. Does liquidity have a significant influence on dividend pay-out of listed oil and gas firms in Nigeria?

The study tend to shade more light on how manager can decide on the dividend pay-out and what should be consider before making decision which is essential to management and it will also help in creating a benchmark and maintaining an overall health of the company. The amount declared as dividend in the listed firms is decided by various boards of directors of the listed firms on when and how dividends are paid to shareholders. Some companies may decide to pay high dividends because of their

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financial strength and on the basis of profits earned during the year. The question now is how the oil and gas companies set their dividends, as there is no unified amount to be paid as a dividend in the listed firms.

This paper addresses some determinant of accounting information variables that determine the dividend payment behaviour of listed oil and gas firms in Nigeria.

Therefore this study seeks to examine the impact of accounting information and dividend pay-out of listed oil and gas firms in Nigeria. With the following specific objectives;

- I. To determine the influence of profitability on dividend pay-out of listed oil and gas firms in Nigeria
- II. To evaluate the impact of leverage on dividend pay-out of listed oil and gas firms in Nigeria
- III. To examine the impact of firm size on dividend pay-out of listed oil and gas firms in Nigeria
- IV. To investigate the exam the impact of liquidity on dividend pay-out of listed oil and gas firms in Nigeria

In order to achieve these specific objectives, the following hypothesis were formulated:

Ho1: Profitability has no significant relationship on dividend pay-out of listed oil and gas firms in Nigeria.

Ho2: Leverage has no significant impact on dividend pay-out of listed oil and gas firms in Nigeria.

Ho3: Firm size has no significant impact on dividend pay-out of listed oil and gas firms in Nigeria.

Ho4: Liquidity does not have significant relationship on dividend pay-out of listed oil and gas firms in Nigeria.

The study is structured as section two is based on review of relevant literature, section three methodology of the study, section four results and discussion while section five is based on summary and conclusion.

2. LITERATURE REVIEW

Dividends are paid by companies to their shareholders. It is the part of the companies that distribute the profits paid to shareholders subject to which the companies have been able to pay their debit at maturity. The dividend can also be seen as the distribution of profits from companies to their shareholders, which is usually decided by the directors. It is basically the proportion of profits that is paid as a dividend to shareholders. The payment of dividend to shareholders depends on the company management's willingness to distribute their surplus from their net income to shareholders or to retain it for re-investment opportunities.

According to Sadalia (2010), the payment of dividends to current shareholders is decided by the board of directors. The Board meets to determine the amount to be paid as a dividend, as well as to determine the amount to be declared, it is necessary to evaluate the financial situation of the last period and that of the following period.

2.1 Profitability and dividend pay-out

Profitability is the company's ability to earn profits with sales, total assets, and its capital. According to Kasmiasi and Santosa (2019), profitability ratios are beneficial for the survival of the company because it help companies to determine the profits in the short or long run. Profitability is a measurement in detecting profit as a criterion for evaluating the results of the company's activities in a certain period. Pandey (2004) describe profitability as the state of yielding financial earnings or gain. Furthermore, profits depend on three primary structural aspects of financial institutions: financial leverage, net interest margin and non-portfolio income sources. Blakely, (2017) view profitability as the ability of the firm to create profit through the effective utilization of firm's resources in generating more revenue in excess of its expenses. Dividend is paid out of the profit generated annually by the firm. As profit increases, it is an indication the availability of cash flow to managers in other to increase the firm's growth. Dividend came be seen a payment made by firm to its shareholders as a reward for their investment. Pander (2010), defines dividend as the portion of a company's net earning which the directors recommend to be distributed to shareholders in proportion to their shares.

Profitability is the ability of a firm been able to make profits at the expense of sales, assets and capital. Long-term investors will be mainly interested in the profits made. Gitman (2003), profitability shows the relationship between revenues and costs generated by the use of company assets. As profitability is increasing, the amount to be paid as dividend will also increase, so the amount to be declared as a dividend will be based on the profit realized after which the firm has fulfilled all its obligations.

The amount to be declared as dividend is determined by the company. Fama and French (2005), Amidu and Labor (2006) and Al-Malkawi (2007) in their studies conducted in advanced countries found that a positive and a significant relationship linking profitability and dividend pay-out while. Malik et al. (2013) in his studies found an insignificant relationship existing between profitability and dividend pay-out.

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2.2 Leverage and dividend pay-out

The primary objective of every financial manager in an organization is to maximize the value of the company. This can be achieved by creating an appropriate financing mix that includes careful selection of the level of debt capital with equity capital for investment in a profitable venture. Leverage primarily relates to financial activities that involve raising funds from external sources and incurring fixed fees for them (Javid, 2012).

Radeviv, Lekpek, and Siljkovic (2013) see leverage as a measure of the impact of an enterprise's business activities in the presence of constant financial outlays. The effect of financial leverage can be positive or negative depending on whether the interest expense is covered by EBIT, and strong or weak, depending on the participation of borrowed resources in the total resources. As long as a higher rate of return can be earned on assets than is paid for the capital used in acquiring the assets, the rate of return to owner can be increased.

Leverage is the total debt a company uses to finance its operation with the expectation of profit. It also indicates the ability of companies to obtain higher returns through the use of fixed assets or debt. Debt is one of the tools used by many companies to leverage their capital in order to increase their profits. When the firms leverage is high, it is believed that the firm is connected with more liabilities. The demand for external finance by the company usually arises on account of constraints imposed by its internal resources since the company cannot continue with the investment opportunities with the limited internal resources.

Baker and Powell (2001) also stated that firms with less financing outside will lower dividend pay-outs. In his research, he states that firms with higher levels of debt will need higher levels of liquidity to allow payoffs on potential implicit claims and firms will normally choose to use more equity instead of financing outside to avoid costs of financial distress.

Muyoka (2015) in his study on the effect of dividend policy on the financial performance of listed firms in Nairobi stock exchange, were 20 companies were used as the sample size for the period of 5 years. From the result shows that all the variables have a significant relationship except leverage and firm size which has a negative effect.

Nuredin (2012), in his study on the determinant of dividend policy, using growth, size profitability and liquidity of insurance company in Ethiopia, using panel data. The result revealed that profitability and liquidity has a positive and significant impact on dividend with growth been negative and insignificant.

Faris (2011), Gul et al (2012), Mushtaq (2016) and Mahdzan et al (2016). In their studies, found a positive and significant relationship on dividend payments. Also, Al-Twaijry (2007), Al-Kawari (2009), Morakinyo et al (2018), Madeem et al (2018) and Okoro et al (2018) found a negative and significant relationship exist connecting leverage and dividends. In contrast, the study of Pandey and Ashvini (2016) and Brahmaiah (2018) reveal a significant an negative impact connecting leverage and dividend payout.

2.3 Firm size and dividend payout

Firm Size describes the size of a company in which large companies will find it easier to get loans from outside both in the form of debt and share capital because usually large companies will be accompanied by a fairly good reputation in the eyes of the community. The size of the company can determine the level of investor confidence, with the bigger the company, the more it will be known and recognized by the wider community, which means the easier it is to get information. Basically, the size of the company is only divided into categories, namely large, medium, and small (Hirdinis, 2019).

In real world, it is claimed bigger firms are projected to pay more dividend since the bigger firms tend to be matured with a high cash flow. Bigger firms have more liability than the smaller firms. Also debt holders and creditors tend to be confident in bigger firms and the bigger firms can easily assess funds from the capital market at a lower cost without much constraint. Firm size have great influence, not only on whether firms pay dividends or not, but also on the profitability of the firm. Big companies are more liable to pay high dividends, compare to the smaller companies. This is consistent with Aivazian (2003) who mentioned that larger firms tend to have easy access to the market and are expected to pay more dividends.

The reason is that when firms pay dividends they limit their cash available for investments. If new investment opportunities present themselves the firms have to fund them with either retained earnings or by issuing new debt or equity.

Firm size (SIZE) is measured as natural logarithm of market capitalization. A wide series of financial literature have documented that firm size is a significant determinant of corporate dividend payment policy and which is positively associated with dividend payment rates in developed and emerging markets.

However, previous studies by Al-Kuwari (2009), Alzomaia and AlKhadhiri (2013) and Amina (2015) report a related results of firms listed under the Gulf Cooperation Council (GCC) stock markets. However, studies conducted by Al-Ajmi and Abo Husain

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(2011) shows that, there is no significant relationship between firm size and dividend payment in Saudi Arabia. It is argued that, bigger companies are liable to disburse high dividends as larger companies are more established and have higher cash flows.

2.4 Liquidity and dividend pay-out

Investors may define liquidity as the ability to turn an investment portfolio into cash with little or no loss of value (Patrick 2018). These concepts are critical to a company's success since a firm's understanding of liquidity and how to manage it ensures the company's survival, even as a stakeholder. Liquidity is seen as a complex but important concept that defines the reliability and stability of the financial system. Because capital is essential at the beginning of any business, thus emphasizing on the relevance of liquidity not only to the financial system but to all industries. Most business failures in the past is been attributed to business owners' incapacity to properly manage their firms' liquidity. Ehiedu (2014) argued that liquidity should not be excessive or insufficient. Excess liquidity refers to accumulated cash that does not generate profit for the firm or organization.

The cash flow or liquidity is essential when it comes to dividend payout. Bhunia (2010) defines liquidity as a means by which a firm been able to meet up its short term obligation. Liquidity is significant in the success of a firm. A firm with weak liquidity position imposes a threat to its solvency as well as its profitability and also making it unsafe and unsound. Brealey (2012) defines liquidity as assets which can be easily transformed into quick cash at a lower cost which can be express in term of liquidity ratio. Liquidity is the degree at which an asset's property been sold and easily converted into cash without affecting its value. Liquidity also defines as the ability of a firm to be able to easily convert its assets into cash to settle debt and other obligation. The payment of dividends by firms is basically based on the revenue generated and it also reveals the firms' ability to pay its shareholders dividend.

Aivazian (2007), Kuwari (2009) and Baker and Wurgeler (2004). Suggested that, liquidity is an essential factor affecting the payment of dividend. A firm can only pay dividend base on the strength of the firms' cash flow. The level of dividend payment is determined once a firms financing and investment decision is been made, also the decision is taken alongside with that of financing and investment.

2.5 Theoretical Framework

2.5.1 Bird in the Hand Theory (Dividends Preference)

According to the bird-in-the-hand theory, investors prefer dividends (certain) to retained earnings. This proposed by Gordon (1959,1963) and Lintner (1956, 1962), if all other factors are equal, investors prefer dividends to capital gains because they perceive dividends today as a certain cash flow, as opposed to capital gains in the future which are uncertain.

The name "bird in hand" is the umbrella term for all studies arguing that dividends are positively correlated with company value, and therefore company value acts as a catalyst to drive dividends. It is based on the statement that "a bird in the hand is worth more than two in the bush." Expressed in financial terms, the theory says that investors are more willing to invest in stocks that pay current dividends than in stocks that hold dividends and pay dividends in the future. They argue that the combined value of dividends and capital gains diminishes when the dividend pay-out ratio increases.

According to Bird in Hand theory, in a world of uncertainty and imperfect markets, dividends are said to be valued differently than capital gains. Hence, investors will have a preferential dividend pay-out ("bird in hand") today rather than "two per bush" (capital gains) due to uncertainty. Gordon and Shapiro (1956) recommend that shareholders prefer cash dividend payments over capital gains, and companies with high dividend ratios tend to have higher market value. The rationale behind this theory is that a higher dividend yield ratio is positively correlated to cash flows rather than the pattern in which profit will be distributed as dividend. As a result, they disagreed with the theory by calling it a "bird-in-hand fallacy". Similarly, Bhattacharya (1979) shares the same view with Miller and Modigliani (1961), by suggesting that the reasoning behind the bird-in-hand theory is wrong. He went on to say that fixed dividend payments are affected by the cash flow threat, although any increase in dividends will not mitigate the company's risk. In conclusion, dividends fall while company risk increases, which goes against the theory of birds on hand.

2.5.2 Life Cycle Theory

The life cycle theory is also cited as one of the explanations for dividend payment. Mueller (1972) proposed a formal theory that a firm has a relatively well-defined life cycle, which is fundamental to the firm life cycle theory of dividends. The theory explains that as firms pass through the various stages in their lives, they tend to alter the dividend policy depending on the financial needs of each stage. Implied in this theory is the fact that firms that are in their growth stages are less likely to pay more dividends as compared to firms that are at their maturity stages. Old firms therefore, because they do not have a lot of growth

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opportunities to fund, are expected to pay more dividends. Therefore, the underpinning theory for the study is the bird in hand theory.

3. METHODOLOGY

The objective of this section is to describe the methodology of use for this study. The section will be discussed under the following headings, 3.1 research design, 3.2 variable measurement, 3.3 model specification and 3.4 on diagnostic test.

3.1 Research Design

The study employs co relational research design because it examine the relationship between accounting information and dividend pay-out of listed oil and gas firm in Nigeria.

The study uses panel regression this is because the data is panel in nature. The population of the study include the listed oil and gas firms listed in the Nigeria stock exchange and the sample size include the listed firms. Secondary data was use for the study which was extracted from the audited financial report and accounts of the listed firms from the period of 2015 -2019.

3.2 Variable Measurement

The study aim to establish the relationships that exist between accounting information and dividend payout of listed oil and gas firms in Nigeria. The measurements of the variables are shown in a tabular form below,

Measurement of Variables

Variables	Acronyms	Measurement	Source
Dividend pay-out	Dvd pay-out	DPR = Total dividends/Total net earnings X 100%	Moghri and Galogah, 2013
Profitability	Prof	ROE = $\frac{EBIT}{Equity}$	Cruiz and Luiz, 2015
Firm size	Fsize	Natural Logarithm of Total Assets	Hamza and Lakhali, 2010 Bonga (2015), Dada, Malomo and Ojediran (2015)
Leverage	Lev	$\frac{\text{Short Term \& Long Term Liability}}{\text{Total Assets}}$	Arise, 2015
Liquidity	Liq	Current ratio = $\frac{\text{Current Asset}}{\text{Current Liability}}$	Gupta and Parua (2012); Bonga (2015), Dada, Malomo and Ojediran (2015)

3.3 Model Specification

The regression model below was use for the study.

Formulation of model

$$DVP_{it} = \beta_0 + \beta_1 PROF_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 LIQ_{it} + e_{it}$$

Where;

DVP= Dividend pay-out

PROF = Profitability

SIZE = Firm size

LEV = Leverage

LIQ = Liquidity

β_0 = Constant

$\beta_1 - \beta_4$ = Coefficients of slope parameters

e = Error term

i = Firm

t = Time

3.4 Diagnostic Test

Post estimated test were carried out for the study whereby the p-values found to be insignificant.

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4. RESULT AND DISCUSSION

This section of the studies present the descriptive statistics describing the nature of the variables, followed by the correlation matrix which analyses the relationship that exist between dependent and each independent variable individually. In addition, the regression result examines the model which captures the dependent variable together with all the independent variables.

4.1 Descriptive Statistics of Variables

Variables	Mean	Std. Dev.	Min	Max
DVD	1.12	1.01142	0	3.64
PROF	4.45	3.73412	.1988	12.49
LIQ	1.36	.644141	.0994	3.08
LEV	0.847	.592797	.0549	3.80
FSIZE	17.94	1.99169	13.0036	21.23

The above table represent the result of the descriptive statistics of the variable for the period of study. The mean dividend payout as 1.1206 and standard deviation of 1.0114 while the minimum value of dividend is 0 and the maximum of dividend is 3.64. Looking at profitability the mean was found to be 4.4492 with standard deviation of 3.7342 with maximum value 12.49 and minimum of 0.1988. The mean value of debt in the case of leverage in the oil and gas firms is found to be 0.8476 with the highest debt of 3.80 and the lowest as 0.0549.

In addition, the mean for liquidity ratio was found to be 1.36 with the maximum ratio of 1.36 and the minimum of 0.10 for the year also, the standard deviation was found to be 0.6441 for the year.

Finally, the mean natural logarithm of total assets over the period was found to be 17.94 with a standard deviation of 1.99 and the value of 21.2537 as the maximum and 13.0036 as the minimum respectively.

4.2 Correlation Matrix

	DVD	PROF	LIQ	LEV	FSIZE
DVD	1.0000				
PROF	0.4194	1.0000			
LIQ	-0.2743	-0.1332	1.0000		
LEV	0.2730	0.1853	-0.2868	1.0000	
FSIZE	-0.1741	-0.0422	-0.2660	0.0595	1.0000

The correlation matrix in the regression model which shows the correlation between all variables in the model. The result indicates that, profitability and leverage has a positive relationship on dividend payout with correlation coefficient of 0.4194 and 0.2730 respectively. On the other hand, Liquidity and firm size indicate a negative relationship with the correlation coefficients of -0.2743 and -0.1741.

4.2.1 Variance Inflation Factor

Variables	VIF	1/VIF
LEV	1.12	0.895706
FSIZE	1.08	0.923075
PROF	1.05	0.952645
LIQ	1.18	0.846516
Mean VIF		1.11

From the result of the variance inflation factor (VIF), the check for multicollinearity was carried out and the test is necessary as multicollinearity can change the parameters of the regression model. The mean VIF is 1.11 which is an indication that there is no multicollinearity in the variable since the VIF is less than 5.

4.3 Regression Result

Variables	Coefficient	t-value	p-value
PROF	.0512731	0.96	0.034
LIQ	-.2712189	-1.34	0.190

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LEV	.2553629	1.12	0.271
FSIZE	-.5978631	-2.55	0.015
Constant	11.77382	2.80	0.008
R-sq.			0.2658
Adj. R-sq.			0.0993
Prob > F			0.0222

From the result of regression analysis shown in Table 4, looking at the relationship between profitability and dividend pay-out of listed firm oil and gas in the Nigeria, the result indicates a positive and significant relationship between profitability (PROF) and dividend pay-out (DVD) of listed firms. This was proved by the value of coefficient which is (0.5127) with p-value (0.0346) found to be significant at 5%, it means the relationship is statistically significant. It implies that any increase of #1 in the profit of the listed firms, will also lead to an increase of (0.5127) in the amount to be paid as dividend to the prospective shareholders. However, this result is in line with the researcher's expectation which is the higher the profit, the higher the amount to be declared as dividend to the shareholders and also in line with the result of Jensen (1992), Fama and French (2005), Amidu and labor (2006) and Al- Malkaidi (2007). However, the result also formed a basis for the rejection of the null hypothesis which states that, there is no significant influence connecting profitability and dividend pay-out.

In the case of liquidity and dividend pay-out of listed oil and gas firms, the sign is negative with the value of (-0.2712) and with p-value of (0.190) found to be greater than 10%. It therefore implies that, a negative and insignificant relationship exist between liquidity and dividend pay-out. Which implies that as liquidity is increasing by 1, dividend is pay-out is reducing by #0.2712

However, in the case of leverage and the dividend pay-out, the coefficient found is positive with coefficient value of (0.2553) and with p-value of (0.271) which is greater than 10%, it implies that a positive an insignificant relationship exists between liquidity and dividend pay-out of listed oil and gas firms in Nigeria. However, the end result is in line with the result of Faris (2011), Gulet et al. (2012), Mushtaq (2016) and Mahdzan et al. (2016). Hence, the result forms the basis for accepting the null hypothesis and fails not to accept the alternate hypothesis

Finally, In the case of firm size and dividend pay-out, the result found is negative with the coefficient value of (-0.5978) which is statistically significant at 1% this is because the p-value found is (0.015). This implies that, a negative and significant relationship exist between firm size and dividend payout. This implies that the larger the firm in terms of assets and revenue generation the higher the amount to be declares as profit. A firm with many assets tends to generate more revenue thereby determining the amount to be declared as dividend due to the revenue generated. Also, the result is in agreement with reality and also in line with the findings of Alzomaia and AlKhadhiri (2013), Amina (2015) and Al-Ajmi and Abo Husain (2011). Hence base on the result, we reject the null hypothesis

The regression result, it shows cumulatively, the relationship between the proxies which was given by the value of R-square which is 0.2658. Going by the result probability of F-statistics is significant since it's less than 5% which implies that collectively profitability, liquidity, leverage and firm size have significant impact on dividend payment.

4.4 Summary

The chapter aimed to present findings and discussion on the findings. STATA was use to run descriptive statistic, correlation analysis and regression analysis results. The result revealed that profitability is having a positive and significant relationship on dividend pay-out of the listed oil and gas firm in Nigeria. Whereas, liquidity revealed a negative and insignificant relationship. On the other hand, firm size was found to be negative and significant influence on the listed oil and gas firms in Nigeria. Finally, a positive and insignificant relation was found respectively.

5. CONCLUSION

The study is conducted on the impact of accounting information and dividend pay-out of listed oil and gas firms in Nigeria stock exchange. In line with the findings, the model of this study is explaining and predicting the dividend behaviour of the sampled listed oil and gas firms. From the analysis of the study, it was found that profitability has a positive significant impact on dividend pay-out of listed oil and gas firms in Nigeria. This implies that individual investor who prefers current high dividend should invest on profitable company, while management should announce the dividend after considering their profit. Whereas, Liquidity was found to be negative and insignificant respectively. Also the result of firm size was found to be negative and significant relationship on dividend payout of listed oil and gas firms in Nigeria. Therefore investor should invest on larger company to earn higher dividend despite its negative coefficient value found.

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Finally, the result of leverage was found to be positive and insignificant on dividend pay-out of listed oil and gas firms in Nigeria. Despite the fact that shareholders usually prefer company with stable and predictable dividend. Investors who are trying to predict future dividends will therefore need to get some relevance and useful information on the firm to invest in. Furthermore, Managers may also use the study when determining the dividend pay-out since they will be given relevance information for decision making.

REFERENCE

- 1) Adeyemi, S.B. and Fagbemi, T.O. (2010). Audit Quality, Corporate Governance and Firm Characteristics in Nigeria, *International Journal of Business and Management*, vol. 5, 5, pp. 169-179
- 2) Aivazian, V., Booth, I. and Cleary, S. (2003). Do Emerging Market Firms Follow Different Dividend Policies from U.S. Firms? *Journal of Financial Research*, 26(3), pp. 371-387.
- 3) Al-Kuwari, D 2009, 'Determinants of the Dividend Payout Ratio of Companies Listed on Emerging Stock Exchanges: The Case of the Gulf Cooperation Council (GCC) Countries,
- 4) Al-Malkawi (2007). Determinants of corporate dividend policy in Jordan: an application of the Tobit model, *Journal of Applied Accounting Research* Al-Twaijry, A 2007, Dividend policy and payout ratio: evidence from the Kuala Lumpur stock exchange, *The Journal of Risk Finance*, Vol. 8 No. 4, pp. 349-363.
- 5) Al-Najjar, B and Hussainey, K 2009, the Association between Dividend Payout and Outside Directorships, *Journal of Applied Accounting Research*, pp. 1-28.
- 6) Amidu M, Abor J. Determinants of dividend payout ratios in Ghana. *Journal of Risk Finance*, 2006;7: 136-45.
- 7) Barclay M. J., (1987), Dividends, taxes, and common stock prices - The ex-dividend day behaviour of common stock prices before the income tax, *Journal of Financial Economics* Vol. 19 No. 1, pp. 31-44.
- 8) Brahmaiah B (2018). Determinants of corporate dividend policy in India: a dynamic panel data analysis. *Academy of Accounting and Financial Studies Journal* 22(2):1-13.
- 9) Black, F. (1996). The dividend puzzle. *The Journal of Portfolio Management*: 8-12.
- 10) Fama, Eugene F., and Kenneth R. French, 2002, Testing Trade-Off and Pecking Order Predictions about Dividends and Debt, *The Review of Financial Studies* 15, 1-33.
- 11) Fama, E. F. and Blasiak, H., (1968). Dividend Policy: An Empirical Analysis, *Journal of the American Statistical Association*, pp. 1132-1161.
- 12) Faris Nasif AL- Shubiri 2011. Determinants of Changes Dividend Behavior Policy: Evidence from the Amman Stock Exchange Amman Arab University Jordan College of Business, Department of Finance and Banking Groppelli and Nikbakht. *Finance* 5th Ed.
- 13) Gill, A., Niger, N. and R. Tibrewala. 2010. Determinants of dividend payout ratio: Evidence from United State, *The open business journal*, Vol.3, 8 -14
- 14) Gordon MJ (1963). Optimal investment and financing policy. *The Journal of Finance* 18(2):264-272.
- 15) Graham B, Dodd DL (1934). *Security Analysis*. New York: Whittlesey House.
- 16) Gul S, Mughal S, Shabir N, Bukhari S A (2012). The determinants of corporate dividend policy: An investigation of Pakistani Banking Industry. *European Journal of Business and Management* 4(12):1-5.
- 17) Jensen, G., D. Solberg & T. Zorn, 1992, Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies, *Journal of Financial and Quantitative Analysis*.
- 18) Miller MH, Modigliani F (1961). Dividend policy, growth and the valuation of shares. *Journal of Business* 34(1):411-433.
- 19) Morakinyo FO, David JO, Adeleke EO, Omojola SO (2018). Determinants of dividend policy of listed deposit money banks in Nigeria. *World Journal of Finance and Investment Research (International Institute of Academic Research and Development)* 3 (1):25-40.
- 20) Nimalathasan B (2009). Profitability of listed pharmaceutical companies in Bangladesh: An inter and intra comparison of AMBEE and IBN SINA Companies Ltd, *Economic and Administrative series*, 3:139-148.
- 21) Okoro CO, Ezeabasili V, Alajekwu UB (2018). Analysis of the determinants of dividend payout of Consumer goods Companies in NIGERIA. *Annals of Spiru Haret University Economic Series*
- 22) Pandey SN, Ashvini N (2016). A study on determinants of dividend policy: Empirical evidence from FMCG sector in India. *Pacific Business Review International* 1(1):135-141.
- 23) Redding, L., 1997, 'Firm Size and Dividend Payouts', *Journal of Financial Intermediation*.
- 24) Robinson, T., Henry, E., Pirie, W., Broihahn, M. (2015), *International Financial Statement Analysis*. 3rd edition. New Jersey: John Wiley & Sons, Inc.

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APPENDIX

. summarize dvd prof liq lev fsize

Variable	Obs	Mean	Std. Dev.	Min	Max
dvd	50	1.1206	1.011425	0	3.64
prof	50	4.449285	3.73419	.1988	12.49
liq	50	1.362132	.6441409	.0994	3.0887
lev	50	.8476318	.5927975	.0549	3.8094
fsize	50	17.94454	1.991696	13.0036	21.2537

. sktest dvd prof liq lev fsize

Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	joint	
				adj chi2(2)	Prob>chi2
dvd	50	0.0109	0.6485	6.20	0.0450
prof	50	0.0238	0.3812	5.60	0.0608
liq	50	0.0460	0.1982	5.42	0.0665
lev	50	0.0000	0.0000	42.56	0.0000
fsize	50	0.0718	0.1994	4.85	0.0886

. corr dvd prof liq lev fsize
(obs=50)

	dvd	prof	liq	lev	fsize
dvd	1.0000				
prof	0.4194	1.0000			
liq	-0.2743	-0.1332	1.0000		
lev	0.2730	0.1853	-0.2868	1.0000	
fsize	-0.1741	-0.0422	-0.2660	0.0595	1.0000

. ovtest

Ramsey RESET test using powers of the fitted values of dvd
Ho: model has no omitted variables
F(3, 42) = 1.03
Prob > F = 0.3902

. imtest

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	7.91	14	0.8938
Skewness	8.18	4	0.0851
Kurtosis	3.13	1	0.0769
Total	19.23	19	0.4423

. vif

Variable	VIF	1/VIF
liq	1.18	0.846516
lev	1.12	0.895706
fsize	1.08	0.923075
prof	1.05	0.952645
Mean VIF	1.11	

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```
. xtreg dvd prof liq lev fsize, fe
```

```
Fixed-effects (within) regression      Number of obs   =      50
Group variable: id                    Number of groups =      10

R-sq:  within = 0.2658                 Obs per group:  min =      5
      between = 0.0927                 avg =           5.0
      overall  = 0.0993                 max =           5

corr(u_i, Xb) = -0.7971                F(4,36)         =      3.26
                                          Prob > F        =      0.0222
```

dvd	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
prof	.0512731	.0536545	0.96	0.346	-.0575433	.1600895
liq	-.2712189	.2028291	-1.34	0.190	-.6825754	.1401377
lev	.2553629	.228451	1.12	0.271	-.2079572	.718683
fsize	-.5978621	.234224	-2.55	0.015	-1.07289	-.1228338
_cons	11.77382	4.202006	2.80	0.008	3.251753	20.29588
sigma_u	1.148253					
sigma_e	.80817344					
rho	.66872864	(fraction of variance due to u_i)				

```
F test that all u_i=0:      F(9, 36) =      2.00      Prob > F = 0.0678
```

An Analysis of Individual Taxpayers' Behavior on the Use of E-Filing and E-Form in Submitting Annual Tax Return by Implementing a Phenomenological Approach



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ABSTRACT: E-filing and e-form are considered as online tools that may be utilized as an alternative for taxpayers to report their annual tax returns. These two applications are expected to be used as the right solution for taxpayers to carry out their tax obligations during the Covid-19 pandemic. Reporting of the Annual Individual Income Tax Return at Regional Office of Directorate General of Taxes of North Sumatra I in 2021 was found to increase by 16.13% compared to 2020. However, in the preliminary survey results, the taxpayers were found tending to queue at the Tax Service Office to report the Annual Tax Return manually. Referring to this phenomenon, this study was conducted to identify the behavior of individual taxpayers towards the use of e-filing and e-forms in the submission of the Annual Tax Return. This study was classified as a qualitative study with a naturalistic model. This interpretive study was carried out by using a phenomenological approach. 12 Individual Taxpayers were involved in this study as participants, which were determined through criterion sampling technique. The data of this study were collected by means of the natural setting method with observation techniques, in-depth interviews, and literature study. The collected data were then analyzed by using data analysis techniques of phenomenological study according to Creswell with the assistance of NVivo 11 plus software through the stages of analysis, including data input, coding, exploration, visualization, and presentation. The results showed that e-filing and e-form information systems, which tend to have complexities in terms of procedures and various features in data entry in Annual Tax Return reporting, were found to be capable of creating lazy behavior of taxpayers in the submission of the Annual Tax Return. The complexity faced by taxpayers tended to be caused by a complete lack of knowledge of the use of e-filing and e-form information systems. This was caused by the lack of socialization distributed to individual taxpayers by the DGT. Nevertheless, taxpayers were still found to be reporting their Annual Tax Return, out to avoid tax penalties.

KEYWORDS: Behavior, Individual Taxpayer, E-Filing, E-Form, Annual Tax Return Submission

INTRODUCTION

In the course of time, tax reform is likely to be carried out in Indonesia, specifically by changing the tax collection system from an official assessment system to a self-assessment system. Regarding to this self-assessment system, the Directorate General of Taxes (DGT) has launched e-filing and e-form as online applications for reporting Annual Individual Income Tax Return and Value Added Tax (VAT). As of April 1, 2018, the Ministry of Finance has also demanded the use of e-filing services, thereby achieving transparency and eliminating Corruption, Collusion and Nepotism (CCN) practices. As stated by Haryaningsih & Abao (2020), e-filing and e-form systems in Annual Tax Return reporting are implemented with the aim of facilitating the public to pay taxes without attending the Tax Service Office (TSO) to submit their Annual Tax Return (ATR) data. The ease and simplicity of the process in tax administration through the systems of e-filing and e-form are expected to be capable of increasing the compliance of taxpayers.

Referring to the results of a study conducted by Suhardi & Laksito (2020), the application of e-filing was found to provide a positive influence on taxpayer compliance in the Tax Service Office of Pratama Semarang Gayamsari area. These results are in line with the study by Indah & Setiawan (2020), which reported that the implementation of the e-filing system had a positive and substantial effect on individual taxpayers' compliance, because the e-filing system was capable of providing convenience for taxpayers in carrying out their tax obligations.

An Analysis of Individual Taxpayers' Behavior on the Use of E-Filing and E-Form in Submitting Annual Tax Return by Implementing a Phenomenological Approach

In Medan, Regional Office of Directorate General of Taxes of North Sumatra I is divided into nine Tax Service Offices. Having regard to the results of the researchers' initial survey by means of secondary data collection methods on March 22, 2021 in a press release number: SP-06/WPJ.01/2021, it was found that the percentage of annual tax return reporting in 2021 at the Regional Office of Directorate General of Taxes of North Sumatra I was amounted to 173,777 annual tax returns, with tax revenue of Rp. 2.83 trillion. The revenue performance of the Regional Office of Directorate General of Taxes of North Sumatra I for 2021, from the 2021 target to 30 April 2021 of Rp 19.48T, had succeeded in realizing Rp 5.41T or 27.75%. Furthermore, the compliance rate for reporting the Annual Individual Income Tax Return as of April 30, 2021 was recorded at 287,693 Annual Individual Income Tax Returns, which have been reported both online and manually. When compared with the same period last year, the compliance rate for the Annual Individual Income Tax Return in 2021 has been found to grow by 16.13%, where in the first quarter of 2020, the reported Annual Individual Income Tax Return was amounted to 247,729 Annual Tax Returns.

Even though e-filing and e-form have been implemented, the payment and reporting of annual tax returns in a manual way is still likely to be encountered at the Regional Office of Directorate General of Taxes of North Sumatra I. In fact, the government has stipulated policies related to restrictions on public physical activity during the Covid-19 pandemic since 2020 to 2021. Online applications such as e-filing and e-form should be capable of being used as a solution for individual taxpayers in reporting their annual tax returns via online, without violating policies of the government. However, crowds and long queues of taxpayers who intend to pay and report their annual tax returns tend to be found at the Regional Office of Directorate General of Taxes of North Sumatra I, even though strict health protocols have been implemented in the office area, and tax volunteers from students have been added to assist in reporting the tax returns.

Regarding to this phenomenon, it shows that the significant increase in tax reporting is not caused by the use of online systems of Annual Tax Return, either through e-filing and e-form, because if e-filing and e-form have been utilized by individual taxpayers, there should be no more crowd activity during the reporting process of Annual Tax Return. Moreover, there is no need for additional volunteers to assist individual taxpayers in the reporting process of Annual Tax Return. Readiness to use information technology is capable of influencing the interest of taxpayers to become technology users. The success of the e-filing and e-form programs can be indicated by the level of effectiveness of the application in eliminating the factors that provide influence on the level of taxpayer compliance in reporting or submitting their Annual Tax Return (Suhardi & Laksito, 2020). In this matter, e-filing and e-form are defined as an information technology innovation product that is intentionally provided to facilitate taxpayers in obtaining rights and fulfilling their tax obligations. However, researchers are still likely to encounter many obstacles related to individual taxpayers' behavior towards the use of e-filing and e-form in submitting Annual Tax Return. Therefore, this study was conducted with the aim of identifying individual taxpayers' behavior towards the use of e-filing and e-forms in the submission of the Annual Tax Return. The results of this study are expected to succeed in helping the Government and DGT to evaluate weaknesses in the Annual Tax Return reporting system by using e-filing and e-form, which causes taxpayers to still perform manual reporting. Consequently, the government in the future is expected to be capable of developing better systems and regulations for submitting Annual Tax Return, especially for individual taxpayers.

METHOD OF THE STUDY

This study was classified as a qualitative study with a naturalistic model, carried out from April to October 2021. This interpretive study was carried out by using a phenomenological approach, specifically an approach to find, identify and explore actions, daily habits and actions performed by participants (Creswell, 2016). 12 Individual Taxpayers were involved in this study as participants, which were determined through criterion sampling technique. The criteria for the participants include: participants who have a NPWP, domiciled in the city of Medan, experienced firsthand situations related to the study topic (involved in reporting Annual Tax Return, either online or manually), and able to describe the phenomena that have been encountered.

The data of this study were collected by means of the natural setting method with observation techniques, in-depth interviews, and literature study. This method was carried out in the following stages: 1) Describing personal experiences with the phenomena being studied; 2) Creating a list of important questions and statements; 3) Taking the important statements and then grouping them into meaning units or themes; 4) Writing a textual description of the participants' experiences; and 5) Describing the structural description. The collected data were then analyzed by using data analysis techniques of phenomenological study according to Creswell with the assistance of NVivo 11 plus software through the stages of analysis, including data input, coding, exploration, visualization, and presentation.

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RESULTS OF THE STUDY

Demographic Characteristics of Participants

The selected participants in this study were classified as taxpayers registered at the Tax Service Offices of Medan Timur, Medan Barat, and Medan Petisah. The characteristics of the participants will be presented in Table 1 below:

Table 1: Demographic Characteristics of Participants

Participants	Sex	Age (Year)	Employment	Length of Work (Year)
P-1	M	41	Principal	17
P-2	W	27	Entrepreneur	4
P-3	W	29	Private Employee	2
P-4	M	28	Operator of PLTU	4
P-5	M	25	Private Employee	2
P-6	W	26	SPV	2
P-7	M	27	Administrative Staff	10
P-8	W	27	Administrative Staff	9
P-9	M	32	Entrepreneur	6
P-10	W	28	Teacher	5
P-11	W	27	Private Employee	3
P-12	W	30	Honorary of Local Government Agencies	4

Source: Data of the Study, 2021.

Most of the participants involved in the study were female, amounted to 7 people (58.33%). In addition, 4 participants were mostly 27 years old, and 3 participants were found to have worked for 4 years. Referring to the documentation data for Annual Tax Return of individual taxpayers' report at the Regional Office of Directorate General of Taxes of North Sumatra I until June 30, 2021, it was found that 305,536 individual taxpayers out of a total of 420,001 individual taxpayers had reported their Annual Tax Return both manually and electronically. Thus, the number of Individual Taxpayers who had reported their Annual Tax Returns at this regional office had reached 72.75 percent until Semester I of 2021, and Taxpayers who had not reported their Annual Tax Return were found as many as 114,465 or reaching 27.25 percent.

Results of Data Analysis

The data in this study were analyzed by utilizing NVivo to show a description of the various conditions faced by participants in the use of e-filing and e-form information systems. The results would be indicated by percentage coverage, comparison, word cloud, project maps

1. Percentage Coverage

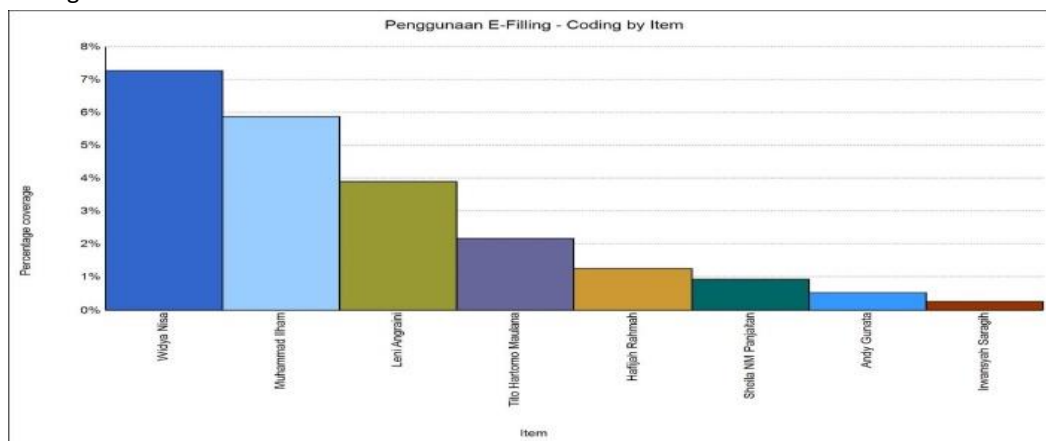


Figure 1: Diagram of the Use of E-filing

Source: NVivo 11 Plus Data Processing, 2021

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Referring to the percentage coverage of the use of e-filing as presented in Figure 1 above, only 8 out of 12 participants chose to use the e-filing information system.

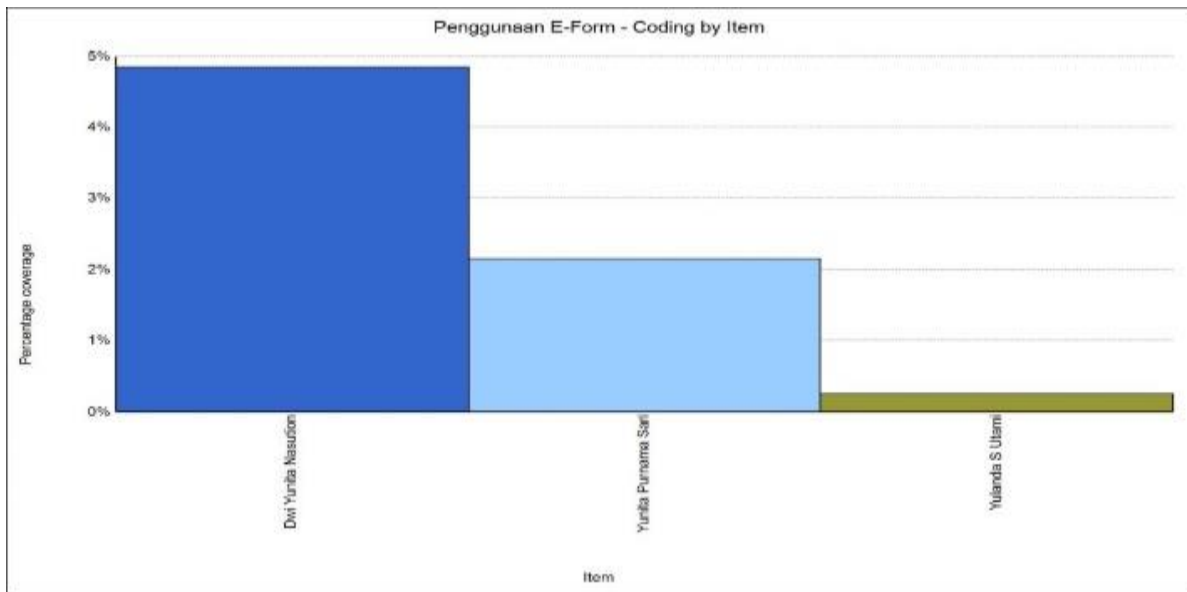


Figure 2: Diagram of the Use of the E-form

Source: NVivo 11 Plus Data Processing, 2021

Based on Figure 2 above, the percentage coverage of using e-forms only indicates 3 out of 12 participants who choose to use the e-form information system.

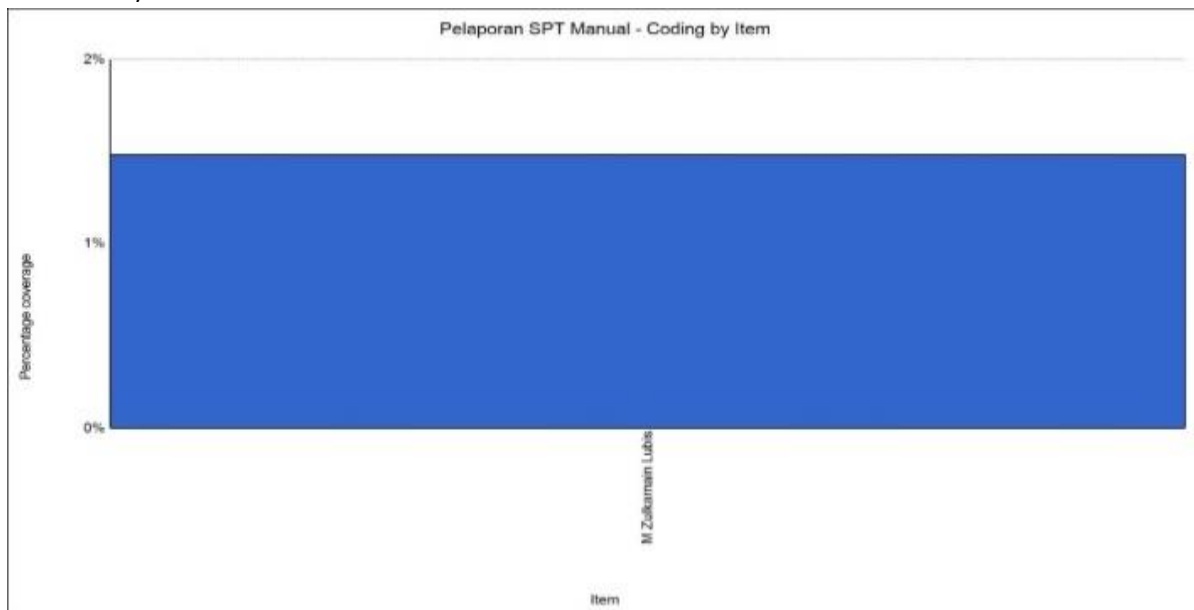


Figure 3: Diagram of the Use of Manual Reporting of Annual Tax Return

Source: NVivo 11 Plus Data Processing, 2021

Having regard to Figure 3, the percentage coverage shows that only 1 participant out of 12 participants chose to use Annual Tax return reporting manually.

2. Comparison

Comparison is commonly regarded as a feature of NVivo, which is capable of generating comparison diagrams to compare two types of the same data in an item-analysis project, for example information contained in data sources, nodes or cases.

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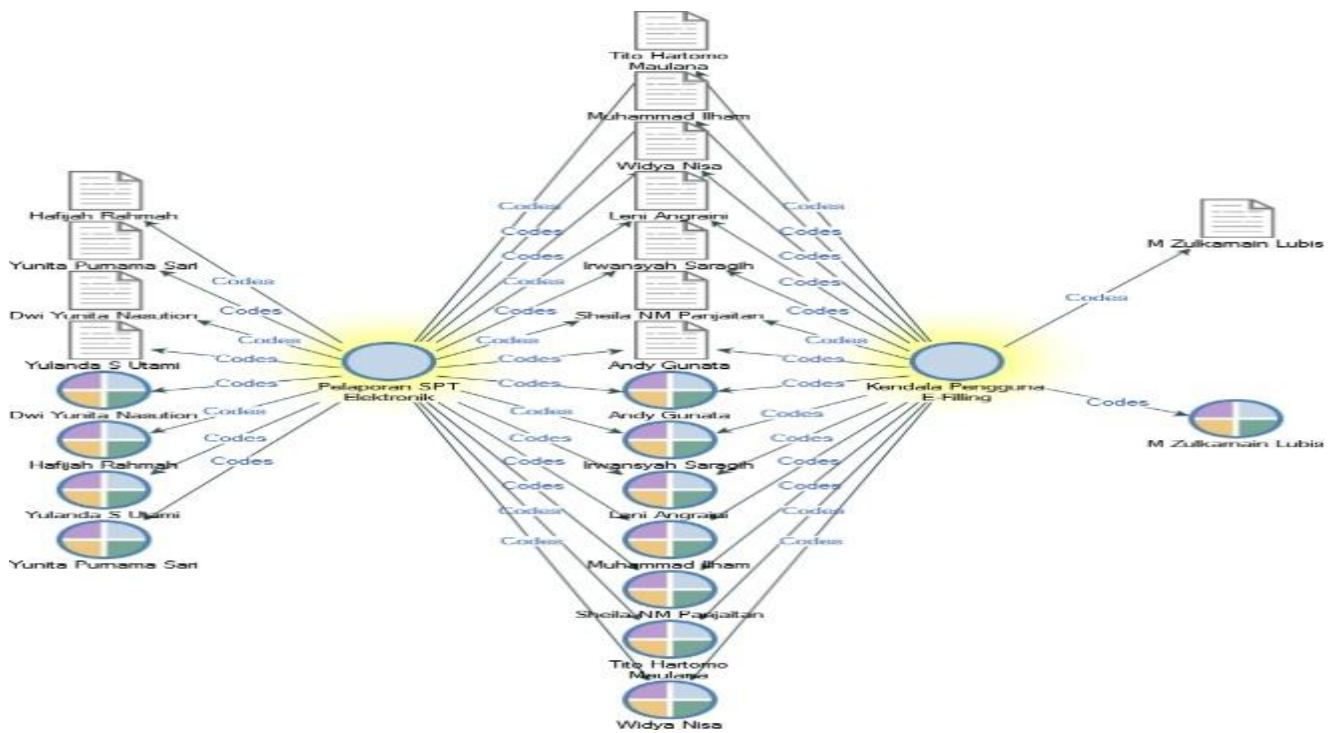


Figure 4: Comparison of Electronic Annual Tax Return Reporting and E-filing Constraints.
Source: NVivo 11 Plus Data Processing, 2021

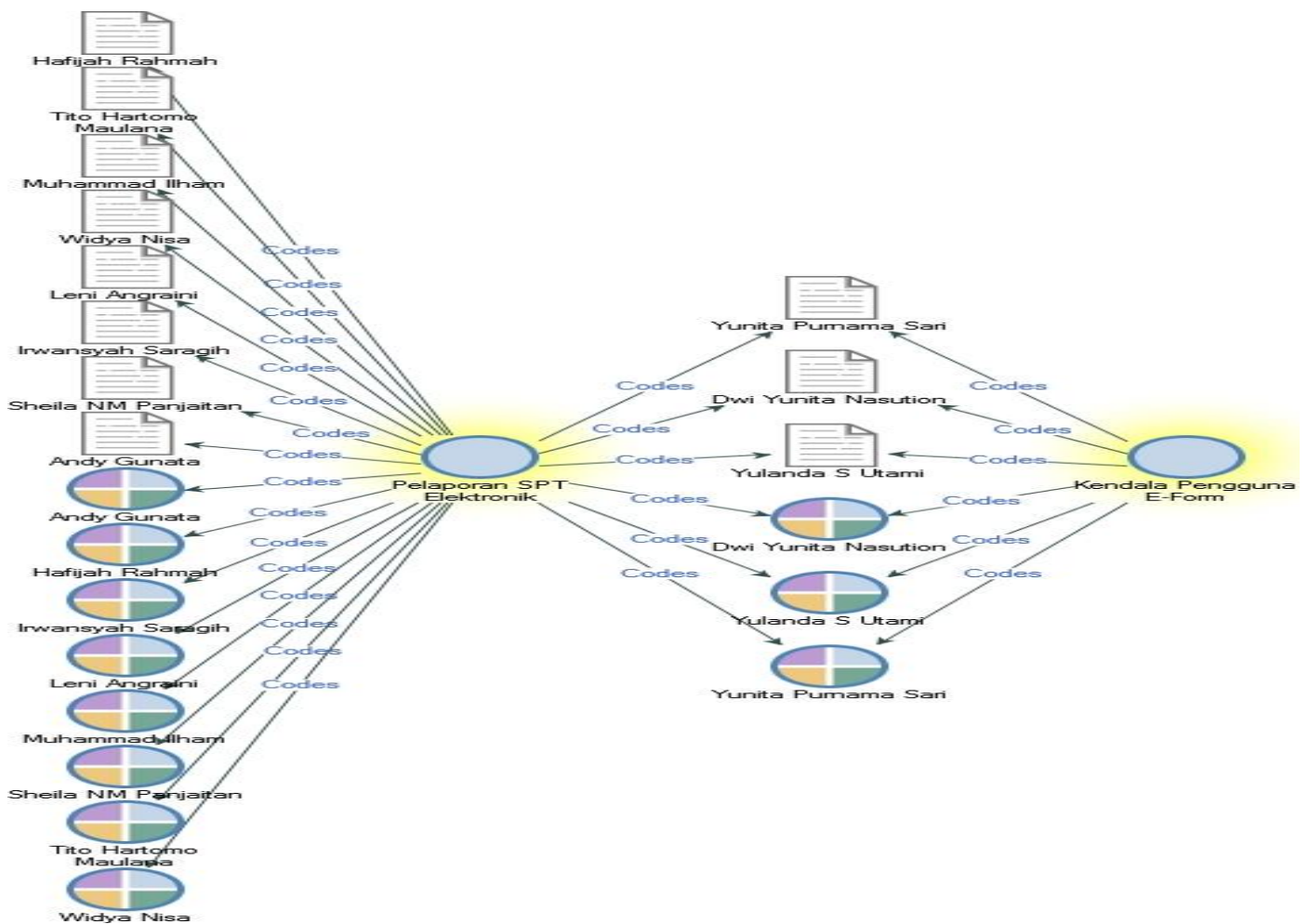


Figure 5: Comparison of Electronic Annual Tax Return Reporting and E-form Constraints
Source: NVivo 11 Plus Data Processing, 2021

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Referring to the comparison results in Figures 4 and 5, eleven participants were found to have reported Annual Tax Return electronically, and seven of them had expressed obstacles in the use of e-filing, while three others revealed various obstacles found in the use of e-form. Moreover, one participant had also stated the problems in using e-filing, and that participant did not use electronic Annual Tax Return reporting.

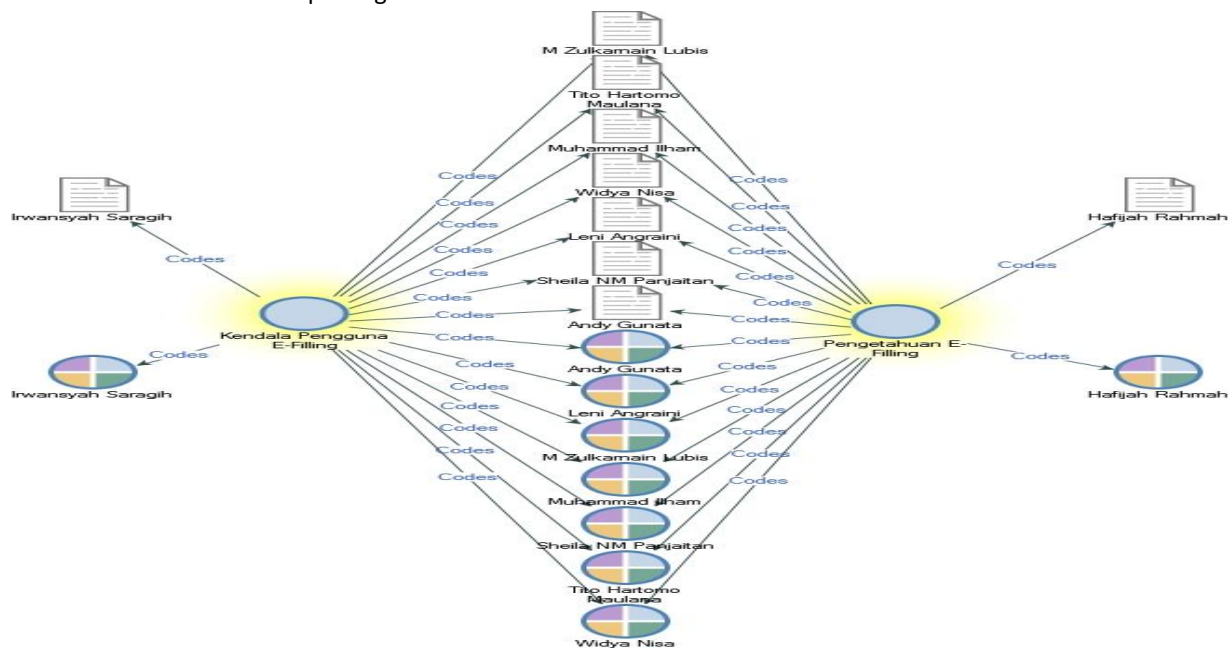


Figure 6: Comparison of E-filing Constraints and E-filing Knowledge

Source: NVivo 11 Plus Data Processing, 2021

Based on Figure 6 above, nine participants seemed to provide statements regarding constraints in the use and knowledge of e-filing. Seven of the participants stated various obstacles in using e-filing and obtaining e-filing knowledge. Moreover, only one participant gave a statement regarding the obstacles to using e-filing, and one other participant only gave a statement regarding e-filing knowledge.

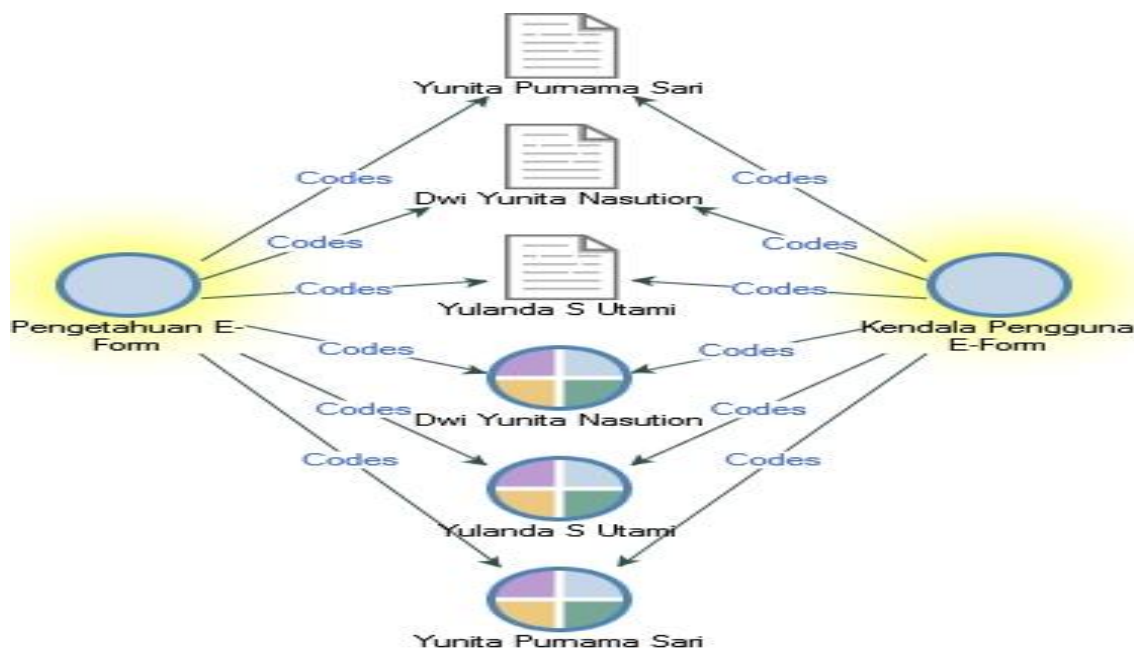


Figure 7: Comparison of E-form Constraints and E-form Knowledge

Source: NVivo 11 Plus Data Processing, 2021

Referring to the results of the analysis in Figure 7, three participants were found to provide the same statements regarding the constraints in using e-forms and obtaining e-form knowledge.

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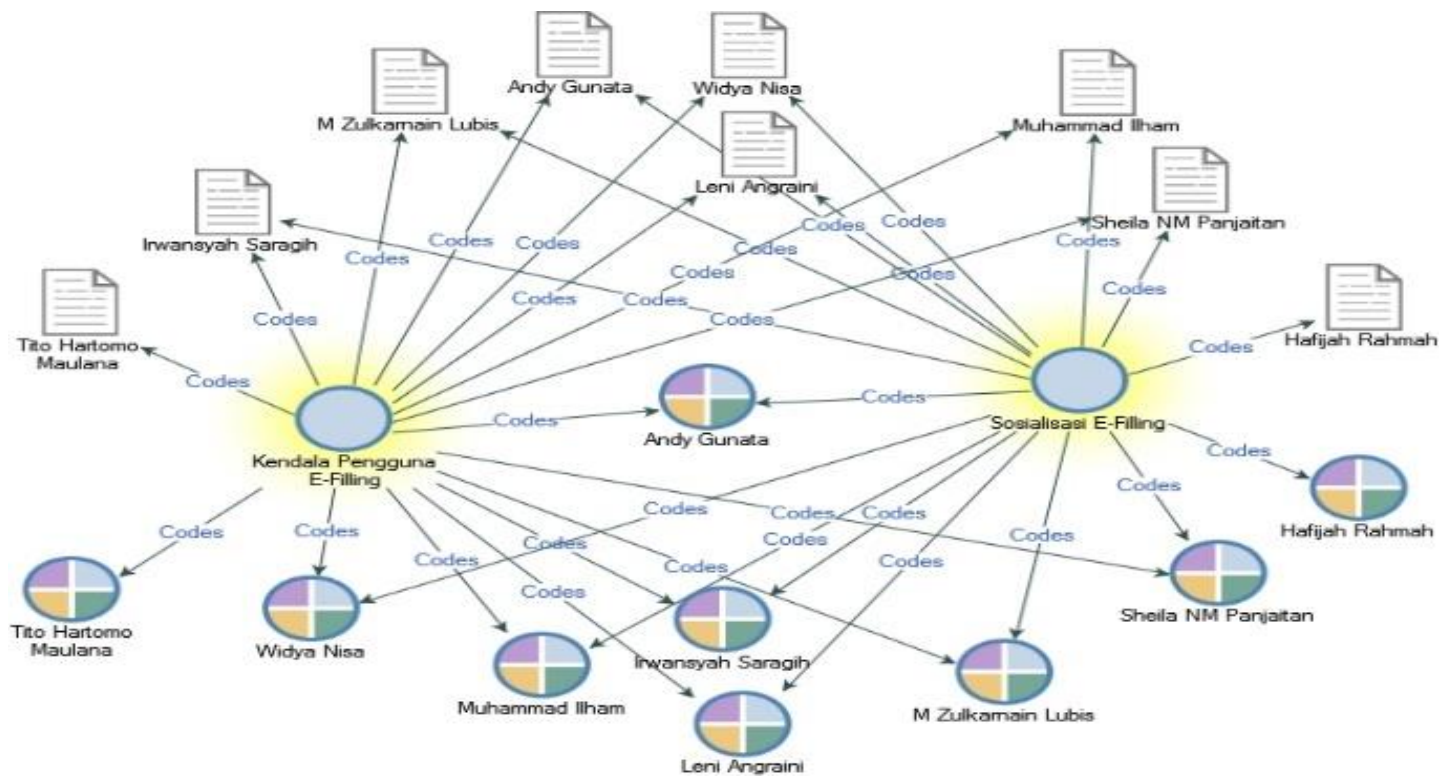


Figure 8: Comparison of E-filing Constraints and E-filing Socialization

Source: NVivo 11 Plus Data Processing, 2021

Based on Figure 8, the results of the analysis show that nine participants had provided statements regarding the obstacles found in the use of e-filing and e-filing socialization. Seven of the participants gave the same statement regarding the obstacles to using e-filing and e-filing socialization. In addition, only one participant revealed the obstacles faced when using e-filing, and one other participant only gave a statement regarding the socialization of e-filing.

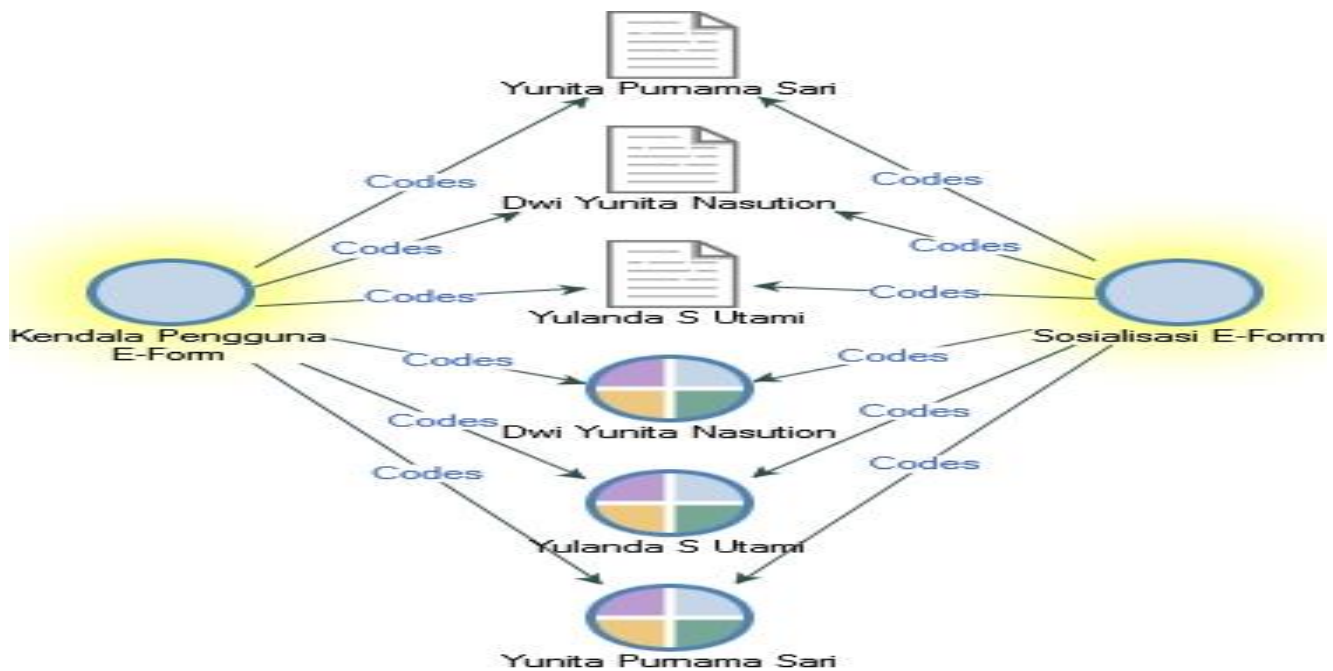


Figure 9: Comparison of E-form Constraints and E-form Socialization

Source: NVivo 11 Plus Data Processing, 2021

Having regard to Figure 9, three participants have provided the same statement regarding the constraints of using e-forms and e-form socialization.

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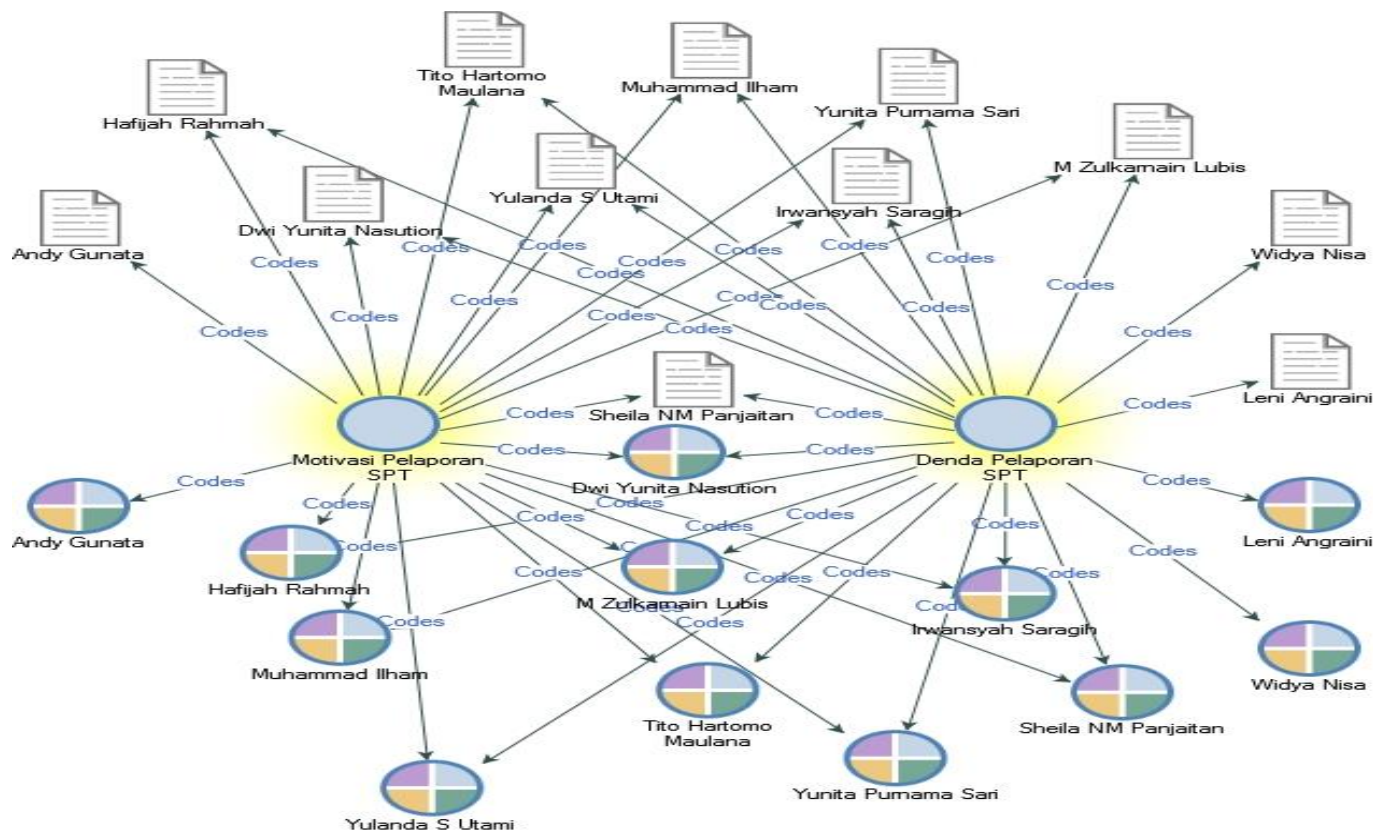


Figure 10: Comparison of Annual Tax Return Reporting Motivations and Annual Tax Return Reporting Fines
Source: NVivo 11 Plus Data Processing, 2021

Based on Figure 10, nine participants were found to express the same statement regarding the motivations for reporting the Annual Tax Return, and also the fines in the Annual Tax Return reporting. However, two participants only expressed one of the two statements being compared. Where, one participant only expressed a statement regarding the motivations for reporting the Annual Tax Return, and one other participant only disclosed statements regarding Annual Tax Return reporting fines.

3. Word Cloud

Subsequently, the researchers used the word cloud feature on NVivo to identify the words most frequently expressed by the participants and some of the documents that were coded. Moreover, the output of Word Cloud has been obtained as follows:



Figure 11: Word Cloud
Source: NVivo 11 Plus Data Processing, 2021

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4. Project Maps

The last feature used in this study is maps, which aims to visualize the data in a map form of images or maps.

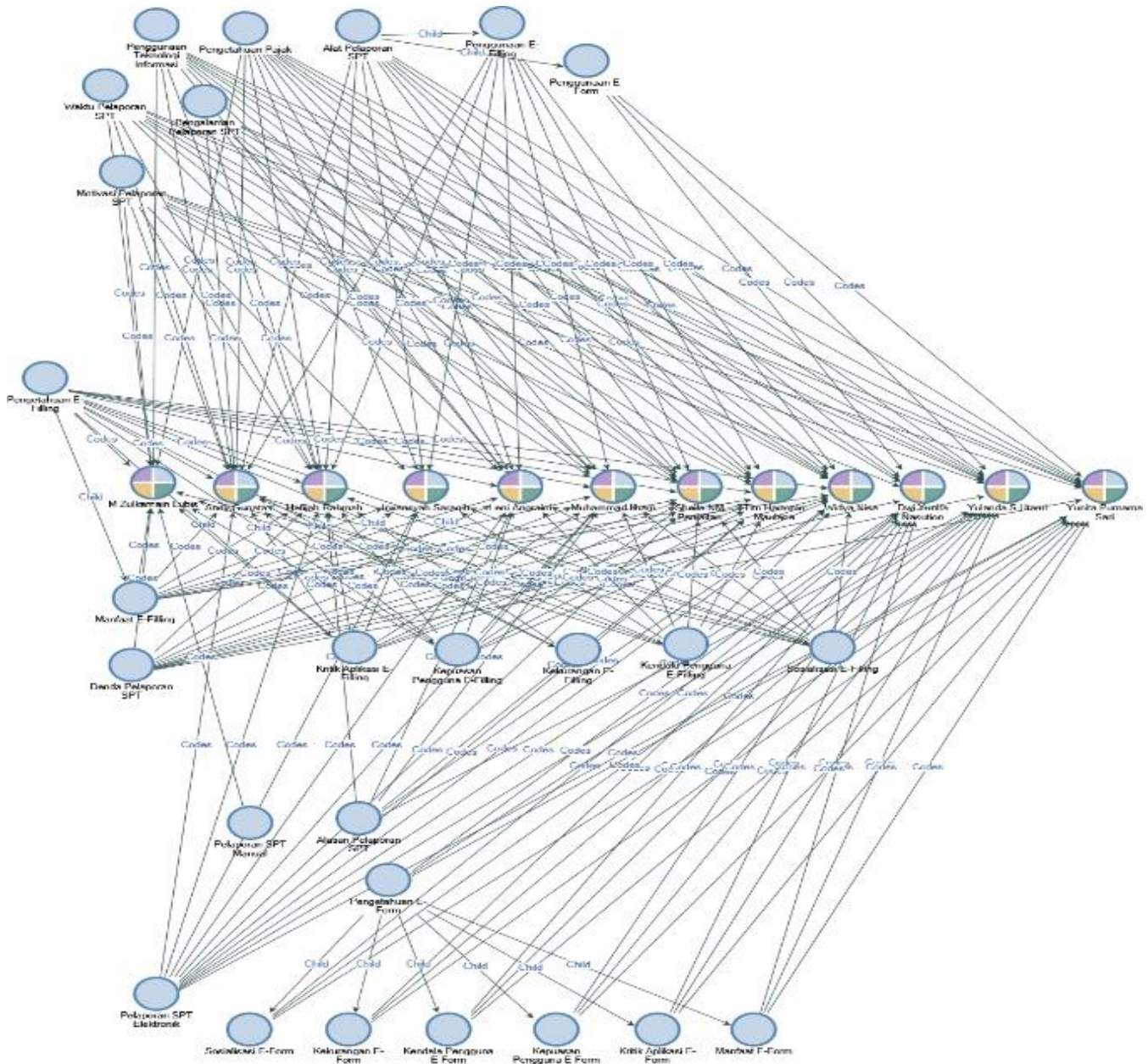


Figure 12: Data Visualization by Using Project Maps

Source: NVivo 11 Plus Data Processing, 2021

Project map has commonly defined as a graphic representation of various items that have been created in the study. In this stage, the researchers created an analysis map from coding, cases, and related source data to display the data process flow and the relationship between each data, that had been carried out from beginning to end. Based on Figure 12, twelve participants had been identified to state various obstacles related to the use of e-filing and e-form information systems in submitting Annual Tax Return.

DISCUSSION

The Use of E-filing and E-form by Individual Taxpayers in the Submission of the Annual Tax Return at the Regional Office of Directorate General of Taxes of North Sumatra I

An e-system in taxation is specifically designed to provide positive impacts for Taxpayers, such as providing convenience, lower compliance costs, and time savings in carrying out tax obligations. Nevertheless, the limited ability to use technology by taxpayers and the availability of internet networks are considered as obstacles to the success of an e-system (Matasik & Tangdialla, 2020).

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Referring to individual taxpayers' use of e-filing and e-form in submitting Annual Tax Return at the Regional Office of Directorate General of Taxes of North Sumatra I, it was found that many people likely did not understand on how to use this information system. As stated by several individual taxpayers who participated in this study, there were various levels of complexity found from the e-filing and e-form information systems, the lack of socialization provided by the Tax Service Office, and the unequal distribution of information, as well as punishments in the form of highly fines, demanding taxpayers to report their taxes even if they do not understand the tax system. Thus, even though e-filing and e-form have been implemented, taxpayers feel inclined to think that they must also continue to visit the Tax Service Office, in order to obtain direct answers on issues that they did not understand in Annual Tax Return reporting.

In the interview, P-1 revealed that it was better for them to attend directly to the Tax Service Office to obtain complete and clear information, specifically for the elderly taxpayers. P-1 also stated that the e-filing and e-form applications should be simplified more. Besides that, the Tax Service Office is advised to conduct socialization to the public, because most of the people do not understand deeply about the use of these application. In line with P-1, P-3 also regarded that the use of e-filing and e-form applications was very difficult to master and the system was often found with errors, thereby causing P-3 to be dissatisfied with the development of these applications.

Referring to data visualization by using Project Maps on Nvivo, it was found that all participants had provided feedback regarding the obstacles faced by them in the use of e-filing or e-form information systems. Based on this matter, e-filing and e-form used by individual taxpayers in submitting Annual Tax Return still likely to be constrained, especially for elderly taxpayers. Based on the characteristics of the participants involved in this study, there were participants with the highest age of 41 years, and with educational and occupational backgrounds, that are very closely related to the use of information technology. Referring to this background, the taxpayers should no longer experience any problems in using information systems, such as e-filing and e-forms in submitting Annual Tax Return. However, the facts tend to show that many obstacles were encountered in the use of these information systems. This was due to the lack of socialization held by the Tax Service Office to taxpayers regarding the online version of Annual Tax Return reporting. The results of this study are in line with the study carried out by Haryaningsih & Abao (2020), which concluded that one of the factors that provided an influence on the attitude of the people of Pontianak City, who were still less likely to pay taxes, was the lack of information from the government to the people.

Level of Complexity

A system that is easy to learn, controllable, flexible, easy to use, and clear and understandable, is considered as an indicator of ease that may influence the behavior of users of the system. However, this is contrary to the conditions experienced by taxpayers who were involved as participants in this study. P-9 was found to have tried to learn on how to use an e-filing application, but he then gave up, because he did not understand the next steps for using the application. Consequently, P-9 preferred to report Annual Tax Return manually, because it was considered more effective and less complicated. P-9 was a 32 year old participant with a Bachelor of Computer education background. Based on these characteristics, P-9 should be very familiar with the use of information systems. However, this participant was still likely to find difficulties in using information systems, such as e-filing and e-forms, and preferred to use manual reporting.

The results of this study are consistent with the study conducted by Cahaya (2021), which reported that the use of e-filing at Tax Service Office of Pratama Surabaya Karangpilang had not been capable of increasing public compliance with Annual Tax Return reporting, because taxpayers had not been able to use the e-filing application. Furthermore, the study of Matasik & Tangdialla (2020) concluded that e-system renewal did not provide any effect on the tax reporting compliance ratio, which was caused by internet network constraints and the inability of taxpayers to use the system. Taxpayers likely found it difficult and perceived that annual tax returns reporting via online was very complicated.

Perception of easiness is capable of providing impact on behavior. The higher a person's perception of the easiness of using the system, the higher the level of utilization of the information technology. Moreover, if someone perceives that an information system is easy to use or not difficult to understand, then he/she will likely use it (Noviandini, 2012).

This level of complexity was also faced by other participants, such as P-2, P-5, and P-7. For users who are using e-filing and e-forms for the first time, they are required to initially obtain an e-fin, which is used to access e-filing and e-forms. Participants tended to complain that e-fin was a complicated problem. Moreover, they were not provided with education regarding all procedures for using this application. Based on the results of the analysis by using NVivo in the Comparison figures, taxpayers who reported their Annual Tax Return by using e-filing or e-forms were often faced with various obstacles in using the information system. On the other hand, these obstacles had also resulted in one of the twelve participants preferring to report manually.

An Analysis of Individual Taxpayers' Behavior on the Use of E-Filing and E-Form in Submitting Annual Tax Return by Implementing a Phenomenological Approach

Fairly high level of complexity is capable of leading to Taxpayers having dependent behavior/not being able to be independent in carrying out the implementation of tax reporting. Consequently, these taxpayers prefer to use third parties in using e-filing and e-form information systems in their annual tax return reporting. This was also expressed by P-12, who was actively engaged in assisting taxpayers in the annual tax return reporting process by means of e-filing and e-form information systems. P-12 explained that taxpayers, especially elderly taxpayers, would likely have problems accessing the application. Moreover, the data needed to access this application tends not to be stored. Therefore, the workshop is highly expected to be held by the tax office according to P-12.

The level of complexity perceived by the taxpayers in using the e-filing and e-form information systems will result in dependent, spoiled and not independent behavior and continue to depend on the help of others. Moreover, if the person being addressed is reluctant to help them again, it will be difficult for taxpayers to solve their own problems. Consequently, the taxpayers will then decide to disobedience in carrying out their tax obligations (Cahaya, 2021).

Information Equity

Equitable distribution of information provided by the Tax Service Office was also considered capable of influencing the behavior of individual taxpayers in reporting Annual Tax Return. In interviews conducted in this study, ten participants revealed that there was an inequality in the information given to them. The results of data analysis by using NVivo as presented in the Comparison figure of E-filing and E-form Constraints and Socialization also indicates that all participants who used the e-filing or e-form information system stated that they were not given any socialization or information related to the e-filing and e-form information systems.

This inequality of information would further lead to social inequality. This social gap will likely provide an influence on the response of taxpayers in carrying out their tax obligations. The results of the study by Hassan et al., (2021) concluded that the perception of justice was significantly capable of mediating morals, modesty and behavior as well as obedience. Regarding to this matter, if taxpayers are dissatisfied because of social inequality, then they may not comply with their tax obligations, even though they are the taxpayers with high morale. Moreover, Ay et. al, (2021) stated that taxpayers who receive information regarding the implementation of their tax obligations will likely show active behavior to carry out their tax obligations, even though this is indicated by the tax authority. Meanwhile, taxpayers who do not receive Information related to tax reporting obligations will likely show passive behavior, because they feel that they do not have any responsibility regarding their tax obligations.

The results of this study are in line with Purwono et al. (2021), who found three main obstacles in the implementation of e-filing as a form of public policy to improve taxpayer compliance, namely (1) socialization that was not evenly distributed to taxpayers, (2) taxpayers who did not able to use the internet and, (3) Long queues to obtain e-fin.

Tendency to Avoid Sanctions

The imposition of tax penalties as stated in Article 38 of the General Tax Provisions and Procedures Law is considered quite burdensome for individual taxpayers, thereby creating a tendency for taxpayers to take a conservative position without violating the applicable tax provisions. As stated by all participants, this could be a boomerang for them, because it will lead to the imposition of administrative sanctions and fines, if the participants are late in reporting their Annual Tax Return. Consequently, these administrative sanctions and fines will become a motivation for taxpayers in performing their tax obligations. Similar to NVivo's results in the Comparison between Annual Tax Return reporting motivations and Annual Tax Return reporting fines, all participants agreed that their intention to report taxes was due to the element of avoiding tax administration sanctions in the form of fines. This result is in line with the study by Indah & Setiawan (2020), which found that tax sanctions provided a positive effect on individual taxpayer reporting compliance. The stricter the sanctions given, the more encourage taxpayers to fulfill their tax obligations, thus, compliance is required to increase.

Tax sanctions are imposed to increase taxpayer compliance in carrying out their tax obligations. The imposition of sanctions that burden taxpayers aims to provide a deterrent effect, thereby creating tax compliance. Contribution of the funds originating from the taxpayers is defined as significant income and has a broad meaning for the development of the country. According to Siregar (2017), efforts to increase taxpayer awareness to pay taxes are highly required to be carried out, because it is already stated in the core regulations, and the imposition of criminal sanctions related to taxation should be enforceable. This means that taxpayers who are afraid of administrative fines are considered a positive thing for the Directorate General of Taxes (DGT) in increasing taxpayer awareness in their tax obligations. Moreover, Rahmayanti & Prihatiningtias (2020), also stated that tax sanctions can be used as a solution for taxpayers who violate tax regulations. These implications could be indicated in the attribution, which explains that the behavior of taxpayers in complying with taxes is influenced by two factors, namely external factors (penalties/fines and tax audits) and internal factors (taxpayer awareness).

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Moral Perception in Tax Compliance

Empirically, tax morale has been shown to be effective in increasing voluntary compliance in both developed and developing countries (Gunawan et.al., 2014). Various surveys, specifically by Afrobarometer, Latinobarometro, and Asiabarometer also showed that tax morale is highly influenced by satisfaction with public services, trust in government, and perceptions of corruption. For individual taxpayers, tax morale is strongly influenced by age, education level, gender, religiosity, and trust in the government. Especially for individual taxpayers in developing countries, public services and the quality of administration carried out by the tax authorities play a much more significant role. Strategies to improve tax morale for individual taxpayers include tax education activities, improving the quality of tax administration, particularly related to the ease of implementation of tax obligations, and linking tax revenues and state expenditures. Referring to the results of the interviews, participants explained that socialization related to the use of e-filing and e-form information systems was considered insufficient. Furthermore, three participants said they had not received any socialization.

Having regard to the results of data processing by means of NVivo based on the Comparison figure of constraints and knowledge of taxpayers, all participants expressed the same problem related to the constraints they have, which was caused by their level of knowledge in e-filing and e-form information systems. Taxpayers tended not to fully understand the procedures for using e-filing and e-form, which was caused by the absence of tax education related to the use of e-filing and e-form information systems in submitting Annual Tax Return. Therefore, the taxpayers did not perceive the ease of using this information systems. This further resulted in taxpayers being dissatisfied with services provided by Tax Service Office and Directorate General of Taxes, and accordingly provided an influence on their tax morale.

Taxpayers' satisfaction with public services carried out by Tax Service Office and taxpayers' trust in the government were considered to affect individual taxpayers' compliance through tax morals (Andini & Rahmiati, 2020). If the service of Tax Service Office is less likely to be optimal, this will result in lower interest of taxpayers to use these information systems. Therefore, taxpayers expect an intense and equitable socialization through a personal approach. Therefore, it is easier for taxpayers to understand the procedures for using the e-filing and e-form information systems in submitting Annual Tax Return.

This shows that voluntary use of the e-filing application had an influence on behavioral intentions in reporting Annual Tax Return. The level of use of e-filing and e-form information systems which tends to be difficult will be capable of increasing the tendency of taxpayers to report Annual Tax Return manually. Moreover, inefficient manual reporting will also lead to non-compliance with tax reporting obligations.

CONCLUSION AND IMPLICATION

Conclusion

E-filing and e-form information systems, which tend to have complexities in terms of procedures and various features in data entry in Annual Tax Return reporting, were found to be capable of creating lazy behavior of taxpayers in the submission of the Annual Tax Return. The complexity of the information systems was also often found by taxpayers aged 30 years and over. In addition, the complexity faced by taxpayers tended to be caused by a complete lack of knowledge of the use of e-filing and e-form information systems. This was caused by the lack of socialization distributed to individual taxpayers by the DGT. Nevertheless, taxpayers were still found to be reporting their Annual Tax Return, even by asking for help from other people or asking for direct assistance to the Tax Service Office. Taxpayers' compliance in the submission of Annual Tax Return tended to be carried out to avoid tax penalties.

Implications

The results of this study indicated that the e-filing and e-form information systems had proven to be useful and efficient for use in reporting Annual Tax Return, especially for Individual Taxpayers. Through these systems, taxpayers would be capable of reporting their taxes without having to bother coming to the Tax Service Office. These two systems were considered very capable of providing assistance to taxpayers during the pandemic, so that the rules for implementing restrictions on community activities (PPKM) would not interfere with taxpayers in fulfilling their Annual Tax Return reporting obligations. Referring to the results of the interview, taxpayers were found to have difficulties in using the e-filing and e-form information systems, because they were not provided with information related to reporting procedures by using these information systems. Consequently, taxpayers should visit the Tax Service Office to ask for help from the Tax Service Office officials in the process of using e-filing and e-form. This was considered able to reduce the efficiency of these information systems. Therefore, DGT should be capable of conducting intensive and equitable socialization as well as taking a special approach (personal approach) to educate taxpayers personally. By conducting these efforts, taxpayers will be facilitated in using e-filing and e-form information systems in the submission of the Annual Tax Return independently, without having to attend to the Tax Service Office, just to ask for help from tax officials.

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REFERENCES

- 1) Andini, M., & Rahmiati, A. 2020. Tax Moral and Compliance of Individual Taxpayer. *Journal of Security and Sustainability Issues*, 10(10), 426-437.
- 2) Ay, M., Humta, H., & Ghafourzay, H. 2021. Examining the Effect of Tax Understanding and Tax Awareness on Taxpayer Compliance in Kabul-Afghanistan. *Third Sector Social Economic Review*, 56(1), 148-162.
- 3) Cahaya, E. N. 2021. Use of the E-filing System as a Compliance Action for Individual Taxpayer Annual SPT Reports at KPP Pratama Surabaya Karangpilang. *Equity: Jurnal Akuntansi*, 1(2), 54-64.
- 4) Creswell, Jhon W., 2016. *Research Design : Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*, 4^{ed}. Jakarta: PT Elex Media Kumpotindo, Gramedia.
- 5) Gunawan., Teddy., dkk. 2014. Taxpayer's Perception Regarding E-filing and Its Effect on the Compliance Level of Individual Taxpayers in Reporting Taxes. *Journal of Accounting and Finance Review*, 4(2), 615-622.
- 6) Haryaningsih. S., & Abao, A. S. 2020. Strategy for Formation of Taxpayer Attitudes in Realizing the Electronic Filing (E-filing) Program in Pontianak City with Understanding Towards the Digital Economy Era. *Journal of Administrative Reform: Scientific Journal for Realizing Civil Society*, 7(2), 145-149.
- 7) Hassan, I., Naeem, A., & Gulzar, S. (2021). Voluntary Tax Compliance Behavior of Individual Taxpayers In Pakistan. *Financial Innovation*, 7(1), 1-23.
- 8) Indah, N. P. I. P., & Setiawan, P. E. 2020. The Effect of Tax Awareness, Taxation Sanctions, and Application of E-filing Systems In Compliance With Personal Taxpayer Obligations. *American Journal of Humanities and Social Sciences Research*, 4(3), 440-446.
- 9) Matasik, A. L., & Tangdialla, R. 2020. Tax Compliance Post-Renewal of the Taxation E-system. *Journal of Economics, Business and Applied (JESIT)*. 1(1), 13-24.
- 10) Noviandini, N. C. 2012. The Influence of Perceived Usefulness, Perceived Ease of Use, and Taxpayer Satisfaction on the Use of E-Filing for Taxpayers in Yogyakarta. *Essay. faculty of Economics Universitas Negeri Yogyakarta*.
- 11) Purwono, M., Nahor, B., Fajri, R., Purwanto, S., Fahmi, I., & Saefudin, A. 2021. E-filing Information System Implementation Strategy as a Form of Public Policy in Improving Taxpayer Compliance in Indonesia. *Policy: Journal of Administrative Sciences*, 12(1), 134-148.
- 12) Rahmayanti, N. P., & Prihatiningtias, Y. W. 2020. Effect Of Tax Penalties, Tax Audit, And Taxpayers Awareness On Corporate Taxpayers' Compliance Moderated By Compliance Intentions. *International Journal of Research in Business and Social Science*, 9(2), 118-124.
- 13) Siregar, D. L. 2017. The Effect of Taxpayer Awareness and Tax Sanctions on Individual Taxpayer Compliance at the Batam Pratama Tax Service Office, *Jurnal Paidagogo*, 2(3), 119-128.
- 14) Suhardi, M. R., & Laksito, H. 2020. Implementation of the E-Filing System as a Mediator of the Relationship between Taxpayer Attitudes and Individual Taxpayer Compliance (KPP Pratama Semarang Gayamsari). *Diponegoro Journal of Accounting*, 9(4), 1-11.

Influence of Sector-Specific Components of Growth on Economic Freedom: Evidence from Sub-Saharan Africa



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ABSTRACT: Africa in general and precisely Sub-Saharan Africa (SSA) has been performing dismally in economic freedom determination parameters. This has substantially diminishes the probabilities of keeping up with other regions which have so far flourished in terms of sustainable economic and human development as highlighted through economic freedom index by the Heritage Foundation 2021. It is for this reason that this study purpose to investigate the influence of value added components of GDP on economic freedom. This is explored using a panel of 40 Sub-Saharan African (SSA) countries from 1995 to 2019. Using both conventional unit root and co-integration tests showed that all the series are stationary and co-integrated of order one I(1). Further estimations on the long-run relationship using dynamic panel econometric techniques key in accounting for panel data hiccups. Specifically, fixed effect and general method of moments which is adopted to discourse concerns of endogeneity and serial correlation commonly associated with panel data. Key significant results based on GMM indicate that both value added growth components of industry and service sectors positively and significantly influences economic freedom but the effect is negative regarding value added from agriculture sector. Inward FDI was equally found to positively influence for the overall score of economic freedom for SSA The practical implication is that for an increasing economic freedom, SSA economies or decision makers should gear for policies that improve industrial production by creating an enabling environment, encouraging the service sector through incentives and tax holidays, diversify agriculture and minimize wasteful FDI inflow. All these are critical in a bid to the realization of competitive economic freedom in SSA.

KEY WORDS: Economic freedom; value added components (VAC) of GDP; FDI, SSA, GMM

1. INTRODUCTION

The idea of economic freedom is no longer a new concept, it has previously been debated extensively by different economists applying diverse approaches since the proper documentation of economic theory from the time of Adam Smith; Corbi (2007); N. Ismail (2010). Modern economic growth theories highlighted economic freedom as an important factor of economic development and prosperity in a country Kacprzyk (2016) where most of these studies conducted investigation to check possible associations amid economic freedom and economic growth, it mainly depicted a positive and significant impact of economic freedom on growth Emini (2021); Brkić, Gradojević, and Ignjatijević (2020); Nadeem, Yang, Akhtar, Dong, and Niazi (2019); Xu (2019) and Acikgoz, Amoah, and Yilmazer (2016), Awan and Naeem (2020). All these study works in perspective have given less attention to the vice versa (i.e., the influence growth has on economic freedom). This idea of economic freedom which was for long abandoned, has nowadays become centerpiece of macroeconomic discussion for developmental economists. This move has been facilitated by the resurgence of indices for ranking various countries' on economic freedom scale mostly calibrated from least 'Free' to 'Freest'. Currently, two widely accepted indices of economic freedom exist; the Fraser Institute index¹ and also the Heritage Foundation index² that implore similar measurement techniques in calibrating economic freedom. This study adopted the Heritage foundation index in line with most studies of economic freedom literature; Singh and Gál (2020). Doran and Stratmann (2021).

¹ <https://www.fraserinstitute.org/economic-freedom/dataset>

² <https://www.loc.gov/item/lcwaN0002695/>.

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According to the Heritage Foundation (2021), Miller, Terry, Anthony B. Kim, James M. Roberts, and Patrick Tyrrell. 2021³ through their Highlights of the Index of Economic Freedom for the year 2021, the global average economic freedom score is 61.6, and this remained unchanged from that of the year 2020. This score is the highest score recorded in the 27-year history of the Index. Sub-Saharan Africa recorded a score of 55.7 which is below the world score by 5.9 points. As the world continues to recover from the coronavirus pandemic, economic freedom will be more important than ever in determining economic development of nations and forecasting the future state of these nations.

Sub-Saharan African countries' scores generally fall into the mostly unfree category of economic freedom, this category is associated with low incomes which is below the world average, systemic corruption instigated by respective governments and failure in implementation of developmental policies. Although the SSA's overall economic freedom climbed up from 55.0 to 55.7 in 2021. Average GDP per capita (\$3,998) is the lowest compared to the five global Index regions. Although some progress was noted in recent years, Sub-Saharan Africa continues to have an Index of Economic Freedom, as measured by the Heritage Foundation, below 60 which is considered poor Miller, Kim, Roberts, and Tyrrell (2020). Among the 48 countries in the region, only Mauritius is mostly free (score of 70-79.9), while Botswana, Rwanda, Namibia, Tanzania, Seychelles, Cabo Verde and Cote d'Ivoire are moderately free (score of 60-69.9). Majority of the countries in SSA including South Africa are in the category of mostly unfree (50-59.9). Eight countries in the region are in the repressed (score of 0-49.9) category. This stances a threat because economic freedom is believed to bring about prosperity in an economy according to the Heritage Foundation (2021) report. Economies with more economic freedom stand a better chance of achieving higher wealth and enhanced living standards, which culminates to a better investment and business environment that allows an economy to thrive (economic growth) and to attract inward FDI. Over the years, academic studies have identified that economic freedom is an important prerequisite to economic growth leaving a gap for the specific sectors. However, there is still a lot of debate on whether and on to which extent does economic freedom increases the wealth of a country's poorest individuals through several factor players such as economic growth in terms of its sectoral approach and the inflow of foreign direct investment. Both theory and practice agree that economic freedom leads to economic growth of the country. Economic development, income equality, human development and environmental researchers could find this concept potential idea for their research. A review of relevant economic freedom literature supports a positive influence of economic freedom on the economy Sooreea-Bheemul, Rasool, and Sooreea (2020); Hall and Lawson (2014), Shahabadi and Bahari (2014). In addition, Ivanović and Stanišić (2017) found robustly positive relationship between trade freedom (a proxy of economic freedom) and economic growth with a significant effect of FDI on economic growth. Others evident that positive externalities of FDI are hardly achieved without both economic growth and economic freedom, which needs sound monetary policies and stable financial development (Satrovic and Muslija (2019) for robust economic freedom. The policies adopted provide through unwavering growth realization and foreign direct investment and positive externalities from FDI. Further intuition by Azman-Saini, Baharumshah, and Law (2010) earlier asserted that the influence FDI has on growth is contingent on the economic freedom level and further outlining the fact that economic freedom encourages individuals to face risks and to start up new business ventures in an enabled environment. Additionally, economic freedom stimulates foreign trade and tends to attract foreign direct investors. The effect of FDI on economic freedom has also been debated extensively in economic literature. Furthermore, the existing researches mainly use global and regional samples where a few countries that meet the data criteria were taken to represent Sub-Saharan Africa or included as a regional dummy. The assemblage of sub-Saharan African countries with other developed global regions such as those in Europe or America may result to sample selection bias as these regions are already developed and democratic Fofana (2014); Ciftci and Durusu-Ciftci (2021). We consequently restrict our sample to sub-Saharan Africa so that we can give an unbiased reflection of the effects of VACs of growth and FDI on economic freedom of this region. Evidence from several theoretical and empirical studies attests to the presence of a association between economic freedom and growth (Akin, Aytun, and Aktakas (2014); Pääkkönen (2010); Justesen (2008);). There is also a considerable number of other studies that examine the impact of economic freedom on FDI (Herrera-Echeverri, Haar, and Estévez-Bretón (2014); Iamsiraroj (2016), (Cung and Nhung (2020); Nguyen, Bui, & Vo, 2019). These works show that countries with lower levels of economic growth are likely to have restrictions on capital inflows and consequently a lack of economic freedom. Contrary to the findings above Saribaş (2009) and Santiago, Fuinhas, and Marques (2020) examined the relation of economic growth to economic freedom. Their results suggest that economic growth is negatively associated with economic freedom and a negative impact resulting from EFI on economic growth in the long run respectively. It is however less clear in the literature whether sector-specific value-added components of GDP amid the inflow foreign direct individually impacts on economic freedom especially for Sub-Saharan Africa region. This is why this paper aims to seal this gap by providing empirical evidence on this matter of interest by

³ https://www.heritage.org/index/pdf/2021/book/2021_IndexofEconomicFreedom_Highlights.pdf.

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theory, design and findings. In order to innovatively validate the theory through robust findings amid the five real variables, this study holistically aims to extensively explore this area of research despite the mixed findings.

This paper underwrites to the literature in two key ways. First, irrespective of its exceptionality of being among the few studies in this area, and side from impact of FDI and sector-specific value-added components of growth on economic freedom, it analyzes the full effects of the three proxies for GDP and FDI resulting to new relevant findings. Secondly, the paper has employed various specifications and most recommended panel data estimators including the fixed effect model and generalized method of moments (GMM) to gain an overall insight on the role of FDI in economic freedom with a large sample of 40 countries. The research intends to validate the existing literature on the impacts of value-added components of GDP and FDI and economic freedom using more current data and precisely large sample size. The study concentrated on Sub-Saharan Africa in order to give a comprehensive explanation relating to this region.

The remaining parts of this paper are structured as follows; **Section 2** does literature review regarding sector-specific value-added components of GDP growth, foreign direct investment and economic freedom, **section 3** describe the empirical methodology while **4** does analysis of results. **Section 5** does discussion of results while identifying with the relevant literature. **Section 6** concludes the study while forwarding policy recommendations.

2. LITERATURE REVIEW

The current section discusses the relationship economic freedom has with growth through its sector-specific components and the inflow of foreign direct investment as provided by a survey of theoretical and empirical literature linking the variables.

Numerous studies have attempted to uncover the nature of the relationship between economic freedom and economic growth. Using a variety of econometric methods and different indicators of economic freedom, scholars attempted to answer the same question: does economic freedom lead to economic growth? Moreover, a few studies have also attempted to determine which sector of growth contributes most to economic freedom. There is almost unanimous conclusion that economic freedom has positive effects on the economic growth and the influx of foreign direct investment of developed countries, but when it comes to developing countries like the Sub-Saharan Africa this relationship is not conclusive Kešeljević (2018), and Santhirasegaram (2007). Previous research by, Murphy and O'Reilly (2019), Bennett et al.2017, Faria et al. 2016; Doucouliagos and Ulubasoglu (2006) indicated that the variable of economic freedom is positively related to economic growth thus economic freedom has a robust positive effect on economic growth regardless of how it is measured.

A plethora of studies have continued to confirm the relationship between freedom and growth. These studies include the works of Ivana Brkić et al. (2020), who investigated the impact of economic freedom from the Heritage Foundation on growth for 43 developing and developed European economies for a period of 20 years using system GMM. The results indicate that, upsurge in economic freedom (not in levels) is related to economic growth his study was in line with works of Malanski and Póvoa (2021); Piątek, Szarzec, and Pilc (2013), Bayar (2017) who discovered that economic freedom was necessary to spur economic growth in an economy.

Further and in line with the current study, Sayari, Sari and Hammoudeh, (2018) investigate the influence between FDI and the value-added components of GDP on EF in 30 European countries Western Europe and Central and Eastern Europe. The result shows service value added and industry value added are positively related to EFI in the long run while a negatively relationship was noted for the agriculture value added. A slightly significant and negative association between EFI and FDI in the random effects model was documented. Further a positive long-run relation between EFI and FDI in the sub-regions of Western, Central, Eastern European countries was observed. While they separately analyze the subgroup of Eastern and Western European countries, FDI becomes insignificant for Central European countries and negatively significant for Western European countries.

The study by Moussa, Çaha, and Karagöz (2016) survey the impact of EFI on FDI inflows both regionally and globally. They include the ignored regions such as Sub Saharan, Post-Soviet and conflict-affected countries and utilized the panel data analysis. Results show FDI is largely affected EFI macro-economic variables in different regions with the fixed-effects model. The European region obtains the largest degree of EFI with all the 9 regions including Sub-Saharan Africa confirming a positive influence of EFI on FDI. Variables such as political stability, corruption level of the country, institutional rights, and financial market and employment regulations, account for more than 80-90% of variations in FDI. The cumulative effect of the EFI and FDI are having a positive and significant effect on economic growth, and distinct factors might affect the countries differently; some, factors are significant in one country compare to the other.

Equally, Țaran, Mironiuc, and Huian (2016) examined the determinants of FDI inflow at the multiregional level. The study took the 75 countries' research utilized the data from the Heritage Foundation as used in this study. They presented in European regions, EFI does not have any significant impact on FDI in the said region. However, the overall EFI for other regions leads to the increment in FDI. The long established economic theories according to Voyer and Beamish (2004) and Singh and Gál (2020) suggest that

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macroeconomic determinant of EFI create the economic conditions to attract the FDI inflows in host countries as it reduces the decisive effect and uncertainties. The research explored by Makwana (2021); Korle, Amoah, Hughes, Pomeyie, and Ahiabor (2020) in their works observed the positive significant impact of economic freedom on FDI where a unit change in economic freedom rises FDI inflows up to 0.0835 units for the Indian and for selected African economies respectively. Additionally, Onyeiwu (2004) shows that the Sub-Saharan Africa region has to maintain price stability reduced the taxes and control corruption so as to enhance the FDI inflow.

In conclusion to this section the reviews of relevant literature have been very informative in explaining the stronger relationship that exists between economic freedom, the different sectors of growth and foreign direct investment. The authors successfully presented the empirical literature for Sub-Saharan Africa and temporarily draws three conclusions. *Firstly* the impact of the various factors under study on economic freedom could be positive or negative sign. *Secondly*, there are still a few studies that have addressed the impacts of sector-specific VACs of GDP and FDI inflow in general case but no particular case noted for Sub-Saharan Africa. This study also deals with inverse of the impact of economic freedom on various macroeconomic variables such as economic growth and the FDI where most researches elude. This makes this research unique in addressing this gap that exist in literature especially for Sub-Saharan Africa, employing the linear static panel data estimators; fixed effects as well as linear dynamic panel data estimator GMM model to explore the influence of sector-specific VACs of GDP and the FDI inflow on EFI in the said region.

3. METHODOLOGY

3.1 Data

This study used annual panel data for the period 1995–2019, including 44 Sub-Saharan Africa from Eastern, Southern, Central, and Western Africa excluding those countries on the northern part.⁴ The period used has been chosen based on the availability of data; the previous years have a lot of missing data to warrant analysis. However, some countries⁵ were dropped from the sample as they all have an impermissible amount of randomly missing data. Other missing values on respective countries are filled in with values of five-year moving averages Fölster and Henrekson (2001).

Our dataset has been obtained from Heritage Foundation for economic freedom while the data for the remaining variables were obtained from the World Development Indicators database (WDI)⁶ published by the World Bank (2021). All data used in these indexes are from government sources and have been verified with independent, credible third-party sources.

3.2 Variables description

The dataset consist of the variables listed below. These variable are in constant US dollars; Ozcan, Aslan, and Nazlioglu (2017) indicate that the Index of Economic Freedom (EFI) published by The Heritage Foundation is a suitable proxy for economic freedom, while Industry value added (IND), Service value added (SER) and Agriculture value added (AGR) are proxy variables for economic growth and Foreign direct investment net inflows (FDI). All the variables were taken in their natural logs so as to control their different variations in the data set.

Industry value added (IND), service value added (SER) and agriculture value-added (AGR) are proxies of growth (GDP) Sayari et al., 2018. In order to take into full consideration of issues relating to variable omission bias, the current study adopted one control variable in the conditioning information set, notably: inflow of foreign direct investment. The control variables which are consistent with economic development literature (Asongu, 2018b) is restricted to one because upon preliminary empirical examination, it was ostensible that application of more than one control variable generates concerns of instrument proliferation and over-identification for this study. This procedure of adopting limited control variables in the Generalized Method of Moments (GMM) approach (aimed to avoid invalid models that do not pass post-estimation diagnostic tests) is common in the empirical literature. In essence, there is an abundant supply of GMM literature that has used limited control variables, notably: (i) zero control variable (Asongu and Nwachukwu, 2017b) (ii) one control variable (Yameogo, Omojolaibi, and Dauda (2021)) and (ii) two control variables Asongu and Odhiambo (2020)

3.2.1 Economic freedom index

The economic freedom index was first developed by the Fraser Institute 1974 and later by the Heritage Foundation in 1995. Both the Fraser Institute and the Heritage foundation indexes have been used widely by researchers in determination of economic trajectories of various economies including, (Graafland, 2020; Nikolaev and Bennett (2017)); Graafland and Lous, 2017; Panahi et al., 2014; Young and Makhija, 2014; Justesen, 2008; Baughn et al., 2007; Doucouliagos and Ulubasoglu, 2005; and many others). The two indexes in practical terms yield similar results in economic freedom. However, the Heritage Foundation index was

⁴ These are the list of countries found on the southern part of Sahara desert excluding 5 countries in North Africa including: Algeria, Egypt, Libya, Morocco and Tunisia

⁵ Sudan, South Sudan, Somalia, Sao Tome Principle, Comoros, DRC, Liberia and Seychelles

⁶ <https://databank.worldbank.org/reports.aspx?source=world-development-indicators>.

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employed in this study since its coverage in terms of variables, countries and years assessed is greater. According to heritage foundation 2020, this index includes 12 quantitative and qualitative factors, which are grouped into four broad categories: Rule of law which include property right, judicial effectiveness and freedom from corruption, Government size which covers tax burden, fiscal freedom, and government spending Regulatory efficiency, which includes business freedom, labor freedom, and monetary freedom and finally Open markets, which includes trade freedom, investment freedom, and financial freedom

Each component is considered to be equally important for economic freedom, and the 12 factors are rated on a scale from 0 to 100 and each country's overall score is calculated by taking the average of these 12 factors. Judicial effectiveness and fiscal health components are available from 2017, and the labor freedom component since 2005, thus tested for a short period of time (2005 – 2018). Judicial effectiveness and fiscal health have been excluded from the analysis due to limited data availability.

3.2.2 Foreign direct investment

Foreign direct Investment is the influx of external investment in home economies. FDI is usually the net inflows of investment divided by GDP, including the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as always shown in the balance of payments. It is considered as a tool of both transfer and introduction of new technology. FDI can be reflected as one of the key transmissions of innovative expertise from influential to evolving economies (Zandile and Phiri (2019)). Even though all the other variables are in natural log, FDI has some negative values in its data set thus it was not transmuted into natural log, instead it was used as a percentage of GDP this was helpful in dealing with the problem of heteroscedasticity in the results. Generally it is contended that FDI has positive influence on economic performance of host countries by providing them new skills, technology and employment bases as postulated by Adegboye, Osabohien, Olokoyo, and Matthew (2020) Bosedede Adegboye, Femi Adesina, Aanu Ojeka, Abosedede Akinjare, and Omowunmi Olokoyo (2020) and Amoo 2018

3.2.3 Value added components of GDP

These variables include; industry, service and agriculture sector-specific components of GDP, hence are the proxies of gross domestic product (GDP). The Industry value added (IND) comprises the value added in mining, manufacturing, construction, electricity, water, and gas. It is calculated without making deductions for the depreciation of fabricated assets or depletion and degradation of natural resources. Service value added (SER) includes the value-added in the wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional and personal services such as education, healthcare, and real estate services. SER also includes imputed bank service charges, import duties and any statistical discrepancies by the national compiler as well as discrepancies arising from scaling. Agricultural value added (AGR) includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value-added encompasses the net output of a sector after adding up all outputs and subtracting intermediate inputs. Both economic freedom index and all the three value-added components of GDP used in the study are expressed in natural logarithms, FDI net inflow as a percentage of GDP because it has negative values and EFI is used as the overall score of the 12 factors. Finally, we choose the 25-year period spanning from 1995 to 2019.

3.3 Descriptive statistics

A comparative analysis of the various variables for this study were presented in Table 1. The results revealed the following with regards to; EFI, with $A=3.994$, $SD=07072$. The results indicate that the EFI for the SSA is relatively low. Further, FDI has $A= 3.697$, $SD=3.3857$, indicating an averagely low FDI and higher standard deviation for the region. The three value added components of GDP; Agri. $A=22.04$, $SD= 0.72745$, Serv. $A=23.05$, $SD=1.0292$ and Ind. $A= 22.65$, $SD= 1.00024$, the average values for the three components are moderately large and slightly vary; this indicates that SSA countries do not have much different economies of scale per sector.

The normality assumptions for the variables were specified in the values of kurtosis and skewness. A variable said to be normally distributed if the value of skewness and kurtosis is 0 and 3 respectively. The result in Table 4 below revealed that, Agri., Serv., Ind., and FDI are tailed to the right (right skewed) meaning that these variables are flattening to the left, while the EFI is negatively skewed, thus flattening to the right. For peakness (Kurtosis) of the distribution, Serv. and Ind. have a platykurtic distribution (value of kurtosis below "3"), whereas EFI, Agri. and FDI had a leptokurtic distribution (value of kurtosis greater than "3"). It is therefore confirmed that none of the variables satisfied the kurtosis and skewness conditions of normality, thus no variable is normally distributed. The logs were therefore applied to normalize the results in most variables (MUSLIJA (2018)) The Jarque-Bera (JB) normality test was used to confirm the rejection of the normality test for the kurtosis and skewness. The JB test, with the null hypothesis that a variable is normally distributed, was rejected with a probability value less than 0.05.

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Table 1: Descriptive Statistics

Variable	Average(A)	SD	Skewness	Kurtosis	JB test
LnEFI	3.994	0.071	-0.580	3.301	59.85***
LnAgri.	22.04	0.727	0.521	3.123	45.94***
LnServ.	23.05	1.029	0.141	2.082	38.41***
LnInd.	22.65	1.000	0.056	1.718	69.046***
FDI	3.697	3.386	3.742	26.942	26217.4***

Source: Authors' own computations

Note: *, **, *** indicate level of significance at 10 percent, 5 percent and 1 percent respectively. The usage of Jarque–Bera test was to determine if the variables conform the normal distribution.

4. EMPIRICAL RESULTS

4.1. Cross-sectional dependence

A cross-sectional dependence test comes in handy especially when deciding on whether to use first or second-generation panel unit root tests. The following two tests were performed: the Breusch-Pagan LM and the Pesaran CD. Evidence from Table 2 below suggests rejection of the null hypothesis of no cross-sectional dependence, i.e., there is cross-section dependence among the regressors at 1% level of significance for the Breusch-Pagan LM test. This means that there is a certain level of dependence among Sub-Saharan Africa countries, thereby confirming the appropriateness of the application of first-generation panel unit root tests for this study.

Table 2: Cross-sectional dependence

Tests	Breusch-Pagan LM	Pesaran CD
LnEFI	0.0048***	22.11***
LnAgri	0.5588***	111.47***
LnInd	1.0203***	94.92***
LnServ	1.044***	116.74***
FDI	12.13***	22.54***

LM – Lagrange Multiplier, CD – Cross-sectional Dependence

Table 3: Spearman's rank correlation

	LnEFI	LnAgri	LnInd	LnServ	FDI
LnEFI	1.000				
LnAgri	-0.0982*** (0.0019)	1.000			
LnInd	-0.0509 (0.1074)	0.7771*** (0.000)	1.000		
LnServ	0.0836*** (0.0082)	0.7900*** (0.000)	0.9266*** (0.000)	1.000	
FDI	0.1304*** (0.000)	0.2032*** (0.000)	0.0737*** (0.000)	0.1502 (0.000)	1.000

From the correlation matrix it was evident that the value added components of GDP are strongly correlated to each other. This implies that industry adds to both the service sector and the agriculture sector and the vice versa is also true i.e., 0.93, 0.79 and

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0.78 respectively. The economic freedom proved to have a negative significant correlation with the agriculture sector though significant and positively correlated to both the service sector and FDI. For the FDI, a slightly low positively significant correlation was portrayed for the value added components of GDP with the industrial sector registering the lowest correlation of 0.074 with

4.2 Unit root test

Usually, the panel data model needs to test the stationarity of the data before carrying out any regression (Wang et al., 2015). The essence of the test is carried out in order to avoid spurious analysis and to check if the data are not integrated of order 2. The determination of the order of integration among the variables for setting up the econometric model and to show whether certain variables are integrated or a random walk and check whether variables are integrated of the same order so as to undertake panel unit root test using three first generation unit root test as guided by the cross-dependence tests, including Levin Lin and Chu 2002, Im, Pesaran and Shin 2003 and Breitung 2000. In this regard therefore, these tests are basically used as descriptive tools to classify the series as stationary and non-stationary. If there is a stationary linear combination of the non-stationary random variables, the combined variables are said to be cointegrated. The panel unit root tests, displayed in Table 4, shows that each variable is integrated of order one on the overall sample. The panel unit root results sanction the likely presence of panel cointegration, which was perform next.

Table 4: Panel unit root test

Series	Lean, Lin & Chu (LLC)		Im, Pesaran & Shin (Phillips & Perron)		Breitung	
	Level	1 st diff.	Level	1 st diff.	Level	1 st diff.
LnEFI	-13.44***	-31.98***	-0.9167***	-27.95***	-15.18***	-4.306***
LnInd	1.618*	-.6482***	2.0583*	-6.337***	1.860*	-3.793***
LnAgri	-0.055**	-5.592***	1.580*	-8.15***	1.983*	-1.630*
LnServ	1.491*	-5.995***	1.147*	-7.920***	3.858*	0.2792*
FDI	-2.716***	-13.47***	-4.537***	-18.78***	-4.126***	-10.58***

Source: Authors' computation

The results of the three panel unit root tests are shown in the table 2 above. The variables of economic freedom and foreign direct investment are found to be stationary at their log levels within the three tests conducted, rejecting the null hypothesis of non-stationarity at 1% significance level. For LLC test agriculture is stationary at 5% level of significance at level. The rest of the variables are stationary given the 10% level of significance at level. In the first difference the variables of economic freedom, industry and FDI becomes stationary at 1% level of significance level for all the three unit root tests. Moreover, for Breitung test, the variables of agriculture and service become significance only given the 10% level of significance. Therefore, the relationship between economic freedom and the other variables can be further identified by the co-integration test.

4.3. Cointegration tests

Panel co-integration tests can examine the long-term equilibrium between variables. The study has noted the order of integration to be a mixture of I(1) and I(0). Therefore, the study further conducts cointegration test by Pedroni (1999) and Kao, Chiang, and Chen (1999) tests. The co-integration relation of Pedroni test is described by the inner scale and the group scale according to different test strength of each statistic, so it presents 7 statistics. The Pedroni test is based on the overall panel fixed effects model:

$$y_{it} = \alpha_i + \delta_i t + x_{it} \beta_i + \mu_{it} \quad (i = 1, 2, \dots, N; t = 1, 2, \dots, T) \quad (3)$$

Where y_{it} and x_{it} are integrated of order one in levels, β_i represents the coefficients, μ_{it} denotes the estimated panel residuals. α_i and δ_i are the cross-section fixed effect and period fixed effect, respectively. The auto-regressive test for the estimated panel residuals is as follows:

$$\hat{e}_{it} = \rho_i \mu_{i,t-1} + v_{it} \quad (4)$$

Where v_{it} represents the random error term and ρ_i the autoregressive term of the estimated residuals. Pedroni's framework provides co-integration tests based on seven residual-based statistics Pedroni (1999). For the seven statistics, the panel v-statistic, panel rho-statistic, panel PP-statistic and panel ADF-statistic are based on the within-dimension. The remaining three statistics; Group rho-Statistic, Group PP-Statistic and Group ADF-Statistic are based on the between-dimension. (Morshed (2010)

For the within-dimension statistics, the null hypothesis of no cointegration for the panel cointegration test

$$H_0 : \rho_i = 1 \text{ for all } i \quad (5)$$

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$$H_0 : \rho_i = \rho < 1 \text{ for all } i \quad (6)$$

For the between-dimension statistics the null hypothesis of no cointegration for the panel cointegration test is

$$H_0 : \rho_i = \rho < 1 \text{ for all } i \quad (7)$$

$$H_0 : \rho_i = \rho < 1 \text{ for all } i \quad (8)$$

After the stationarity test which had shed greenlight for the study to proceed with cointegration test, the current study employs Pedroni and Kao cointegration tests to test for long-run relationship among the variables and the results are displayed in table 3. The two cointegration tests are similar in hypothesis testing. Panel A which is Pedroni test was further sub-divided in two main tests: the first test consist of four sub-tests, i.e., panel-v, panel-rho, panel PP, and panel ADF statistics. In these tests the regression residuals are pooled along the within dimensions of the panel whereas the second test which comprises of three sub-tests, i.e., group rho, group PP, and group, has its' sub-tests based on drawing together the residuals of the regression along the between dimension of the panel. All the seven sub-tests from panel A have the same null hypothesis of no cointegration. The current results have revealed that at least four out the seven statistics are significant. (Lee and Chang (2008); Narayan, Smyth, & Prasad, 2007) maintained that if at least four statistics are significant, the null hypothesis of no cointegration could be rejected and hence cointegration exists.

Consequently, (Kao et al., 1999; Pedroni, 1999) suggested that for a reliable conclusion about the existence of cointegration, panel ADF and group ADF have to be considered as they have better small sample properties and as such their statistics provide reliable estimates. Following these authors, it can be concluded that long-run relationship exists among the variables. Further, \tilde{A} -Rsal (2008), also asserts that the Panel ADF-statistic is known to have a better performance than other statistics. In this study it was found that at least four out of the seven statistics for Pedroni test and the ADF statistic from panel B i.e., Kao test are significant. These include panel ADF and group ADF are significant. Based on the results of this tests, this paper comes to a general conclusion that there exist long-term relationship among the variables for SSA.

Table 5: Results for Pedroni and Kao cointegration tests

	Statistic (No trend)
Panel A:	
Within Dimension	
Panel v-Statistic	-0.339910
Panel rho-Statistic	1.136331
Panel PP-Statistic	-2.889083***
Panel ADF-Statistic	-1.803390**
Between Dimension	
Group rho-Statistic	3.036288
Group PP-Statistic	-4.510990***
Group ADF-Statistic	-2.177282**
Panel B:	
ADF	-6.9554***

Note: All reported values are distributed as a typical normal distribution [i.e., $N(0, 1)$] under the null of unit root or no cointegration. Panel statistics are weighted by long-run variances. The probability shows the rejection of the null hypothesis of no cointegration at the 1 percent significance level.

4.4 Estimation Results

As shown in table 6-9, we estimate the impact of value added components of GDP and the inflow of foreign direct investment of economic freedom in Sub-Saharan Africa region using a number of regression analysis. These include the fixed effect model and the generalized method of moments.

4.4.1 Hausman test

Table 6: Correlated random effects – The Hausman Specification Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	131.16	4	0.0000
Cross section random effects comparisons:			
Variable	Fixed	Random	Var.(Diff.) Prob.

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LnAgri.	0.06080	0.04152	0.01928	0.0265**
LnInd.	0.03324	0.01598	0.02327	0.0019***
LnServ.	-0.03266	-0.012134	-0.02053	0.0013***
FDI	0.00242	0.002216	0.000203	.

Notes: ** and *** represent significance at 10%, 5% and 1% levels

Initially for the random and the fixed effects models, the Hausman test was used to decide on the most appropriate model between them. Table 6 exemplifies the comparison between the two models i.e., the fixed and random effects models. It shows significant differences between the variance of the two models for agriculture, industry and service value added variables at the 5% level for agriculture and 1% significance levels for each of the last two named variables. The variance difference of the FDI variable was estimated though its probability was not displayed by STATA 15.0, however based on the outcome of the majority of variables, employing the random effect model would not be appropriate.

Consequently, the null hypothesis was rejected at 1% level and conclude that the fixed effects model is more efficient than the random effects model. Hence, the fixed effects estimator was adopted to evaluate the influence of the explanatory variables on economic freedom for SSA.

4.4.2 The fixed effect model

In table 7, the dependent variable is economic freedom and the independent variables are three value added components of GDP (i.e., agriculture, service and industry) and foreign direct investment. The results projected clearly shows that the agriculture, industry and service value added variables are significant at the 1% level, indicating that these sectors have clear yet divergent relationships with economic freedom for the 40 countries of SSA. In terms of sector estimates, the results reveals that agriculture value added has a positive and statistically significant influence on economic freedom. The quantitative interpretation of this results specifies that 1 unit increase in agriculture value added spur economic freedom to increase by 6.1 percent. Equally, positive and statistically significant influence on economic freedom was noted for industrial sector and for foreign direct investment. Their coefficients describe that 1 percentage point increase in industry value added and foreign direct investment consequently lead to 4% and 0.2 % increase in economic freedom respectively. On the other hand, the service sector was found to have a negative though significant influence to economic freedom for SSA. The coefficient estimates of at least two of GDP value added components meanwhile proved to have a positive relationship between them and the economic freedom for SSA countries, probably due to governments supporting the sectors, the strength of farmers' lobbies, mushrooming of industries due to enabling environment, sophistication of respective establishments and institutions Sayari, Sari, and Hammoudeh (2018)

R square value shows how much is the variability in outcome is explored by the predictors' agriculture, service and industry value added and foreign direct investment with the dependent variable economic freedom.

Table 7: The fixed effect model

Independent variables	Coefficients
C	2.509*** (23.06)
LnAgi	0.0608*** (8.02)
LnServ	-0.0327*** (-5.40)
LnInd	0.03924*** (5.87)
FDI	0.002419*** (5.58)
R-squared	0.20
Adjusted R-squared	0.17
N	1000

Source: Authors' own computations

Note: *, **, *** indicate level of significance at 10 percent, 5 percent and 1 percent respectively. The t values are in parenthesis.

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Results for the two-step system GMM

Following a study by Ahmed and Ahmad (2020) in this literature current study applied linear dynamic panel estimator which solve the problem of endogeneity associated with linear static panel data models was necessary at this point. This problem could result measurement error and probable omission of some key variables, this therefore encouraged the model to be estimated with Generalized Method of moments Arellano and Bond (1991). This method has been a dominant technique in panel data study Holtz-Eakin, Newey, and Rosen (1988). It has been used as one of the general estimators designed for circumstances where explanatory variables are not rigorously exogenous and where there exist the problems of heteroskedasticity and autocorrelation within entity Arellano and Bover (1995). For GMM estimators, their application was based on panel data with certain conditions which must be considered before its application. These conditions include: first the number of cross-sections must be greater than the number of time periods in the panel ($N > T$); secondly the explained or dependent variable should be used as lagged dependent variable; thirdly the explanatory variables are usually correlated with previous values or the current realizations of the error term; fourthly the assumption of the individual fixed effects; and lastly heteroskedasticity and autocorrelation within entities but not across them. GMM usually provides efficient and consistent estimates especially in the presence of heteroskedasticity. This method has developed into a very predominant instrument among empirical academics due to its wide range of application Blundell and Bond (1998). The GMM estimators are usually applied to correct the biasness affected by endogenous variables.

To be further specific on application, this section begins with Bond, Hoeffler, and Temple (2001) procedure of determining the most appropriate model between difference GMM and system GMM. A series of model estimation techniques were conducted including; determination of the OLS estimate of the model, fixed effect estimate of the model and its one-step and two-step of the difference GMM. In the entire three models estimation techniques, the value of ϕ which is the constant of the lag of the dependent variable was noted down for comparison. For decision making; the first estimate of the pooled OLS was considered the upper bound estimate while the second estimate the fixed effect was considered the lower bound estimate. The final decision was finally arrived at if the difference GMM estimate obtained was below or close to the fixed effect estimate it suggest that the estimate downward biased because of weak instrumentation. In this stage, the system GMM is preferred and vice versa.

To avoid picking of any GMM method randomly, the authors decided apply a scientific approach that is most efficient, robust and sufficient, this application help in a voiding bias associated with individual judgement. Although Roodman (2009) proved the supremacy of system GMM compare to difference GMM, this study further considered conducting the check on the most suitable model. Following Blundell and Bond (1998), it was revealed that system GMM was considered appropriate, more precisely the two-step system GMM.

Table 8: Deciding between Difference and System GMM

Estimators	Coefficients
Pooled OLS	0.8737
Fixed effects	0.6494
One-step Difference GMM	0.0854
Two-step difference GMM	0.0867

Table 8: The table above shows that the estimates of the first lag of the dependent variable of one-step and the two-step difference GMM estimator as 0.0854 and 0.0867 respectively. These results are well below the fixed effect estimate 0.6494 which is the lower bound, thus it is far below the pooled OLS 0.8737 which is the upper bound. This suggests that the difference GMM estimate is downward biased thus system GMM estimator may be preferred. System GMM was therefore applied in the current and more precisely two-step system GMM which is more efficient and robust compared to the one-step GMM, Blundell and Bond (1998)

Table 9: Panel estimation results (two step system GMM results)

Variable	Coefficient	Std. Error	t-Statistics
1.lnEFI	0.7250***	0.06519	11.12
LnAgri	-0.0533***	0.01848	-2.88
LnInd	0.0246**	0.01111	2.21
LnServ	0.0248**	0.01189	2.08
FDI	0.0047***	0.01470	3.22
Cons	1.1267***	0.2373	4.75

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AR1 – 0.000	AR2 – 0.555	F(5,43) = 46.29	P-value – 0.000
Sargan test – 0.000		Instruments = 41	Groups = 44
Hansen test - 0.148			

Source: Authors' computations

Note: 1. LnEFI is the lagged dependent variable; economic freedom index, ** Significance level at 5%, *** Significance level at 1%,

Finally, we employed a further robust technique of estimation, the two-step system generalized method of moments (GMM) estimator to generate internal instruments for economic freedom and other endogenous explanatory variables. Arellano and Bover (1995) and Blundell and Bond (1998) was specifically applied. This result display a myriad of similarities with both the fixed effect and the ARDL methods. However, as shown on table 4 and 5 the service sector have negative impact for the fixed effect and in the long run for the ARDL method, agriculture sector on the other hand project a negative effect for economic freedom on the GMM and on the short run for the ARDL estimation. The system GMM estimator combines the regressions in differences and levels in a system of equations using the lagged differences instruments for the level series, and the lagged levels of instruments for the differenced series. The two-step system GMM provides more efficient estimators over the one-step system GMM. However, the associated asymptotic standard errors may be biased downwards in the finite sample Bond et al. (2001). It, therefore, applies that Windmeijer (2005) finite-sample correction for the variance of the linear efficient two-step system GMM estimator. This estimator therefore provides further evidence beyond our previous application and the general panel data analysis. The two-step system GMM results indicate that the Hansen and serial-correlation tests do not reject the null hypothesis of correct specification (that p-value of Hansen test and p-value of AR (2) test of Arellano and Bond are larger than 5%), providing support for our estimation results. The p-value of the Hansen test of over-identifying restrictions is equal to 14.8% which is higher than 5%. Hence, we confirm the overall validity of the instruments. Also, the p-value of AR (U.-F. F. Ismail & Nyarko) is equal to 56% (more than 5%) which implies that there is no second order serial correlation. The Sargan test on the other hand fully support this results outcome.

The study demonstrates that, industry and service sector specific value-added variables are significantly and positively related to economic freedom, while the agriculture value added is negatively related but statistically significant to this index for Sub-Saharan Africa. Foreign direct investment equally has a positive and statistically significant impact. Our GMM findings are well supported by previous works of Sayari et al. (2018) who suggested that the negative impact of the agriculture value added component of GDP on economic freedom could arise from several factors. Such as, the agricultural sector which is usually supported by government subsidies and purchases of agricultural product surpluses, and protected by quotas and tariffs that may stoke graft and corruption. As a result, this sector's dependency on the government is likely to have a negative effect on institutions and economic freedom. Further, this sector is usually less sophisticated than the other sectors and vulnerable to the impulses of natural conditions. The agricultural sector may not also contribute much to free trade because of some countries being land-locked, lack of a common language, adequate education and the presence of preferential trade agreements. Finally, since the agricultural sector is usually characterized by monopolistic elements and regulatory constraints, it triggers monopolistic behavior in agricultural production, thereby leading to deterioration in the economic freedom of countries. Natos, Botonaki, and Mattas (2008) on the other hand observed that the effect of the economic freedom of exporters on the agricultural sector is greater than that of importers, while this relationship is completely opposite for the other sectors (i.e., machinery, chemicals and other manufacturing). The opposite relationship between the agricultural and other sectors results from different policies that the agricultural sector faces, which in turn affect a country's institutional environment when agricultural activities dominate. The negative impact of FDI though in line with Sethi, Guisinger, Phelan, and Berg (2003) which shows that this resulted from the changing trends in the flow and determinants of FDI in the last decade due to global macro-economic and strategic considerations, this is an area that is crucial to growth of economies and therefore requires more exploration. We suggest that future research should focus more the effect of other institutional factors on economic freedom index, using more advanced methods of estimation and different regions to ascertain these claims. We also suggest for the comparison of the difference in the impact of agriculture value added on economic freedom between developing and developed economies so as demystify the misery of regional information and approaches on the sector.

Consequently, the results indicate that agriculture loses its primacy even in the developing economies such as SSA, giving way to a moderate growth in the industry sector and that of service sector. To sum up, the results indicate that although the overall economic growth has a positive effect on economic freedom, countries that have agriculture-dominated economies are likely to lose their economic freedom due to underdeveloped industries and services sectors. As a consequence, the economic transformation from agricultural to industrial development has important implications due to changing labor as well as capital distributions. Therefore industrialization, production techniques become more capital intensive, which results in decreasing labor

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requirements. In this respect, Sub-Saharan African countries should decide on sector-specific value-added distribution according to their social costs and the social benefits for the economy Singer (1971). Hence, countries that could not find an appropriate balance between agriculture as a sector and other sectors are subject to decline in their economic muscle as well as economic freedom.

5 SUMMARY, CONCLUSION AND RECOMMENDATION

In conclusion of the study, it has been noted that a few scholars have focused on the influence of value-added components of GDP growth and inflow of foreign direct investment on economic freedom. However, the vice versa (positive impact of economic freedom on both GDP and FDI) was unanimously agreed. This application therefore makes this study unique and one of its kind in bridging this loophole that existed in literature more specifically for the Sub-Saharan Africa. As evident on table 8 (on the GMM estimates), two of the three value added components of GDP and FDI projected positive and significant influence on economic freedom, except for the agriculture value-added which gives negative and significant results. Hence, the FDI and the value-added components of GDP were expected to foster EFI.

In order to determine the direction of relationship between the variables of interest, we use the panel data framework due to the well-known fact that panel data methods increase the power of the tests. The relevance of value-added components of GDP growth and foreign direct investments on economic freedom is explored in the panel of 40 Sub-Saharan African countries. The observed period ranges between 1995 and 2019. The authors aimed to include the most recent dataset. The models applied are initially estimated using linear static panel data estimators. Results of Hausman test suggest fixed effects. Coefficients of industry and service value added are reported to be significant and positive indicating that promotion of industries and the service sector in an economy is like to spur economic freedom in the observed countries. However, improvement of the agriculture is likely to contract (influence negatively) the economic freedom of a country. Agricultural sector is known to be supported by government through subsidies, purchases of its product surpluses, and protected by quotas and tariffs that may encourage graft and corruption. This resulted the sector's dependency on the government to have a negative effect on economic freedom index, this sector is less sophisticated in relation to other sectors, as a consequence vulnerable to the vagaries of natural conditions (N. Sayari et al. 2018). The inflow of FDI for Sub-Saharan Africa has been hampered by several factors such as political instability, tribal clashes amidst economic sanctions imposed by economic giants resulting to the exodus of profitable MNCs or stall of their operations. In addition, changing trends and determination of FDI in the recent past due to global macro-economic and strategic considerations Sethi et al. (2003); (Tripathi, Seth, and Bhandari (2015)) have also immensely contributed to the stated phenomena. All this incorporated still leads to positive impact on EFI. It is therefore paramount to state that FDI is an unavoidable variable that spur EFI for SSA countries. The robustness tests on the other hand, indicate that the assumptions on no autocorrelation and homoscedasticity are satisfied.

On recommendation of the future research therefore, even though the regression control for factors and results carried out in the current study are robust, more research is clearly warranted. First the necessity is to take into account other variables such as education, endowment of natural resources, culture etc. as control variables in place of inward FDI which were noted to be key variables for EFI in Sub-Saharan Africa countries, would shed more light on the present findings on the region and could be more useful in generalization and for policy makers. Secondly there was need test the influence of sector-specific components of growth on the 12 sub-indices of economic freedom separately so as demystify their individual impact. Likewise, further research could test our main hypotheses on world countries, regional grouping based on their level of development or any other criteria. Finally, the future research should wholesomely cover more countries in the region under study for more recent years, especially when higher frequency data becomes available, using different methodological framework such as panel-ARDL, GARCH and many more. Our results suggest that by enhancing economic freedom, policy makers would need to uphold robust policies that spur economic growth in relation to all its sectors and to encourage inward foreign direct investment.

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Appendix

See Tables 10, and 11.

Table 10: Countries in the sample

Angola	Ethiopia	Niger
Benin	Gabon	Nigeria
Botswana	Ghana	Rwanda
Burkina Faso	Guinea	Senegal
Burundi	Guinea-Bissau	Sierra Leone
Cabo Verde	Kenya	South Africa
Cameroon	Lesotho	Tanzania
CAR	Madagascar	The Gambia
Chad	Malawi	Togo
Congo, Rep.	Mali	Uganda
Cote d'Ivoire	Mauritania	Zambia
DRC	Mauritius	Zimbabwe
Eq. Guinea	Mozambique	
Eswatini	Namibia	

Table 11: Data Description and Sources

Variable	Description	Source
Heritage Freedom Score	An Index that measures economic freedom based on 12 quantitative and qualitative factors, grouped into four broad categories: i) regulatory efficiency (monetary freedom labour freedom and business freedom) ii) government size (fiscal health, government spending and tax burden) iii) rule and law (government integrity, judicial effectiveness and property rights) iv) market openness (financial freedom, in-vestment freedom and trade freedom).	Heritage Foundation
Agriculture value added	Agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. It is the net output of agriculture sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The data are in constant 2010 U.S. dollars.	World bank
Industry value added	Industry corresponds to ISIC divisions 10-45 and includes manufacturing (ISIC divisions 15-37). It comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. This data are in constant 2010 U.S. dollars.	World bank
Service value added	Services correspond to ISIC divisions 50-99. They include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services. Also included are imputed bank service charges, import duties, and any statistical discrepancies noted by national compilers as well as discrepancies arising from rescaling. Value added is the net output of a sector after adding up all	World bank

outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. Data are in constant 2010 U.S. dollars.

NB: The value added sectors of GDP are calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources and are determined by the International Standard Industrial Classification (ISIC), revision 3.

Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by GDP.

World bank

*Collected from the World Bank Website

ISIC stand for **International Standard Industrial Classification**

Source: World Bank

REFERENCES

- 1) Acikgoz, B., Amoah, A., & Yilmazer, M. (2016). Economic freedom and growth: A panel cointegration approach. *Panaeconomicus*, 63(5), 541-562.
- 2) Adegboye, F. B., Osabohien, R., Olokoyo, F. O., & Matthew, O. A. (2020). Foreign direct investment, globalisation challenges and economic development: an African sub-regional analysis. *International Journal of Trade and Global Markets*, 13(4), 414-433.
- 3) Ahmed, S., & Ahmad, H. K. (2020). Impact of Economic and Political Freedom on Economic Growth in Asian Economies. *European Online Journal of Natural and Social Sciences*, 9(1), pp. 219-231.
- 4) Akin, C. S., Aytun, C., & Aktakas, B. G. (2014). The impact of economic freedom upon economic growth: an application on different income groups. *Asian Economic and Financial Review*, 4(8), 1024.
- 5) Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The review of economic studies*, 58(2), 277-297.
- 6) Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of econometrics*, 68(1), 29-51.
- 7) Asongu, S. A., & Odhiambo, N. M. (2020). Foreign direct investment, information technology and economic growth dynamics in Sub-Saharan Africa. *Telecommunications Policy*, 44(1), 101838.
- 8) Awan, A. G., & Naeem, I. (2020). Relationship between Economic Freedom and Economic growth in Pakistan. *Global Journal of Management, Social Sciences and Humanities*, 6(1), 1-29.
- 9) Azman-Saini, W., Baharumshah, A. Z., & Law, S. H. (2010). Foreign direct investment, economic freedom and economic growth: International evidence. *Economic Modelling*, 27(5), 1079-1089.
- 10) Bayar, Y. (2017). Impact of openness and economic freedom on economic growth in the transition economies of the european unión. *South-Eastern Europe Journal of Economics*, 14(1).
- 11) Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of econometrics*, 87(1), 115-143.
- 12) Bond, S. R., Hoeffler, A., & Temple, J. R. (2001). GMM estimation of empirical growth models. *Available at SSRN 290522*.

Influence of Sector-Specific Components of Growth on Economic Freedom: Evidence from Sub-Saharan Africa

- 13) Bosede Adegboye, F., Femi Adesina, T., Aanu Ojeka, S., Abosede Akinjare, V., & Omowunmi Olokoyo, F. (2020). Foreign direct investment, dual gap model and economic development in sub-Saharan Africa. *Cogent Social Sciences*, 6(1), 1743138.
- 14) Brkić, I., Gradojević, N., & Ignjatijević, S. (2020). The impact of economic freedom on economic growth? New European dynamic panel evidence. *Journal of Risk and Financial Management*, 13(2), 26.
- 15) Ciftci, C., & Durusu-Ciftci, D. (2021). Economic freedom, foreign direct investment, and economic growth: The role of sub-components of freedom. *The Journal of International Trade & Economic Development*, 1-22.
- 16) Corbi, R. B. (2007). The components of economic freedom, income and growth: an empirical analysis. *Estudos Econômicos (São Paulo)*, 37, 515-545.
- 17) Cung, N. H., & Nhung, N. T. H. (2020). Impact of Economic Freedom and Corruption Perceptions Index on Foreign Direct Investment in Vietnam. *European Scientific Journal*, 16(7), 25-37.
- 18) Doran, C., & Stratmann, T. (2021). The relationship between economic freedom and poverty rates: cross country evidence. *Doran, C., & Stratmann*, 686-707.
- 19) Doucouliagos, C., & Ulubasoglu, M. A. (2006). Economic freedom and economic growth: Does specification make a difference? *European journal of political economy*, 22(1), 60-81.
- 20) Emini, E. (2021). THE IMPACT OF ECONOMIC FREEDOM ON GROWTH PROSPECTS OF SOUTHEAST EUROPEAN COUNTRIES. *ECONOMIC VISION-International Scientific Journal in Economics, Finance, Business, Marketing, Management and Tourism*, 8(15-16), 51-59.
- 21) Fofana, M. F. (2014). The influence of measures of economic freedom on FDI: A comparison of Western Europe and Sub-Saharan Africa. *Global Economy Journal*, 14(3-4), 399-424.
- 22) Fölster, S., & Henrekson, M. (2001). Growth effects of government expenditure and taxation in rich countries. *European economic review*, 45(8), 1501-1520.
- 23) Graafland, J. (2020). When does economic freedom promote well being? On the moderating role of long-term orientation. *Social Indicators Research*, 149(1), 127-153.
- 24) Hall, J. C., & Lawson, R. A. (2014). Economic freedom of the world: An accounting of the literature. *Contemporary Economic Policy*, 32(1), 1-19.
- 25) Herrera-Echeverri, H., Haar, J., & Estévez-Bretón, J. B. (2014). Foreign direct investment, institutional quality, economic freedom and entrepreneurship in emerging markets. *Journal of Business Research*, 67(9), 1921-1932.
- 26) Holtz-Eakin, D., Newey, W., & Rosen, H. S. (1988). Estimating vector autoregressions with panel data. *Econometrica: Journal of the econometric society*, 1371-1395.
- 27) Iamsiraroj, S. (2016). The foreign direct investment–economic growth nexus. *International Review of Economics & Finance*, 42, 116-133.
- 28) Ismail, N. (2010). Income inequality, economic freedom and economic growth. *European Journal of Economics, Finance and Administrative Sciences*(25), 144-157.
- 29) Ismail, U.-F. F., & Nyarko, M. A. K. (2014). Safety climate as a predictor of quality of worklife: An empirical study among miners in Ghana. *Safety*, 6(18).
- 30) Ivanović, V., & Stanišić, N. (2017). Monetary freedom and economic growth in new European Union member states. *Economic research-Ekonomska istraživanja*, 30(1), 453-463.
- 31) Justesen, M. K. (2008). The effect of economic freedom on growth revisited: New evidence on causality from a panel of countries 1970–1999. *European Journal of Political Economy*, 24(3), 642-660.
- 32) Kacprzyk, A. (2016). Economic freedom–growth nexus in European Union countries. *Applied Economics Letters*, 23(7), 494-497.
- 33) Kao, C., Chiang, M. H., & Chen, B. (1999). International R&D spillovers: an application of estimation and inference in panel cointegration. *Oxford Bulletin of Economics and statistics*, 61(S1), 691-709.
- 34) Kešeljević, A. (2018). Economic freedom and growth across German districts. *Journal of Institutional Economics*, 14(4), 739-765.
- 35) Korle, K., Amoah, A., Hughes, G., Pomeyie, P., & Ahiabor, G. (2020). Investigating the role of disaggregated economic freedom measures and FDI on human development in Africa. *Journal of Economic and Administrative Sciences*, 36(4), 303-321. doi: 10.1108/JEAS-02-2019-0017
- 36) Lee, C.-C., & Chang, C.-P. (2008). Energy consumption and economic growth in Asian economies: a more comprehensive analysis using panel data. *Resource and Energy Economics*, 30(1), 50-65.

Influence of Sector-Specific Components of Growth on Economic Freedom: Evidence from Sub-Saharan Africa

- 37) Makwana, C. IMPACT OF ECONOMIC FREEDOM ON FOREIGN DIRECT INVESTMENT (FDI): EMPIRICAL EVIDENCE FROM INDIA.
- 38) Malanski, L. K., & Póvoa, A. C. S. (2021). Economic growth and corruption in emerging markets: Does economic freedom matter? *International Economics*, 166, 58-70.
- 39) Miller, T., Kim, A., Roberts, J., & Tyrrell, P. (2020). The Heritage Foundation. 2020 Index of Economic Freedom. *Washington DC: The Heritage Foundation*.
- 40) Morshed, H. A. S. (2010). A Panel Cointegration Analysis of the Euro area money demand.
- 41) Moussa, M., Çaha, H., & Karagöz, M. (2016). Review of economic freedom impact on FDI: New evidence from fragile and conflict countries. *Procedia Economics and Finance*, 38, 163-173.
- 42) Murphy, R. H., & O'Reilly, C. (2019). Applying panel vector autoregression to institutions, human capital, and output. *Empirical Economics*, 57(5), 1633-1652.
- 43) MUSLIJA, A. (2018). Foreign direct investments and economic freedom in OECD countries. *Uluslararası Ekonomik Araştırmalar Dergisi*, 4(4), 51-59.
- 44) Nadeem, M., Yang, J., Akhtar, T., Dong, W., & Niazi, M. (2019). Does really economic freedom matter for growth in South Asia? Empirical evidences from pre-economic crises and post-economic crises period. *Asian Economic and Financial Review*, 9(1), 52.
- 45) Narayan, P. K., Smyth, R., & Prasad, A. (2007). Electricity consumption in G7 countries: A panel cointegration analysis of residential demand elasticities. *Energy policy*, 35(9), 4485-4494.
- 46) Natos, D., Botonaki, A., & Mattas, K. (2008). *Assessing the Relationship between Agricultural Trade and Economic Freedom*. Paper presented at the International Conference on Applied Economics, ICOAE.
- 47) Nguyen, H. M., Bui, N. H., & Vo, D. H. (2019). The nexus between economic integration and growth: Application to Vietnam. *Annals of Financial Economics*, 14(03), 1950014.
- 48) Nikolaev, B., & Bennett, D. L. (2017). Economic freedom and emotional well-being. *Journal of Regional Analysis and Policy*, 47(1100-2019-3675), 88-99.
- 49) Ozcan, C. C., Aslan, M., & Nazlioglu, S. (2017). Economic freedom, economic growth and international tourism for post-communist (transition) countries: A panel causality analysis. *Theoretical & Applied Economics*, 24(2).
- 50) Pääkkönen, J. (2010). Economic freedom as driver of growth in transition. *Economic Systems*, 34(4), 469-479.
- 51) Pedroni, P. (1999). Critical values for cointegration tests in heterogeneous panels with multiple regressors. *Oxford Bulletin of Economics and statistics*, 61(S1), 653-670.
- 52) Phillips, P. C., & Perron, P. (1988). Testing for a unit root in time series regression. *Biometrika*, 75(2), 335-346.
- 53) Piątek, D., Szarzec, K., & Pilc, M. (2013). Economic freedom, democracy and economic growth: a causal investigation in transition countries. *Post-Communist Economies*, 25(3), 267-288.
- 54) Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *The stata journal*, 9(1), 86-136.
- 55) Santhirasegaram, S. (2007). The impact of democratic and economic freedom on economic growth in developing countries: pooled cross country data evidence. *Journal of Applied Sciences*, 7(11), 1484-1489.
- 56) Santiago, R., Fuinhas, J. A., & Marques, A. C. (2020). The impact of globalization and economic freedom on economic growth: the case of the Latin America and Caribbean countries. *Economic Change and Restructuring*, 53(1), 61-85.
- 57) Sarıbaş, H. (2009). The Relationship Economic Freedoms and Economic Growth: A Panel Data Analysis|. *Finans Politik&Ekonomik Yorumlar*, 46.
- 58) Satrović, E., & Muslija, A. (2019). Fresh evidence on the investment-economic freedom-growth nexus in oecd member states.
- 59) Sayari, N., Sari, R., & Hammoudeh, S. (2018). The impact of value added components of GDP and FDI on economic freedom in Europe. *Economic Systems*, 42(2), 282-294.
- 60) Sethi, D., Guisinger, S. E., Phelan, S. E., & Berg, D. M. (2003). Trends in foreign direct investment flows: A theoretical and empirical analysis. *Journal of international business studies*, 34(4), 315-326.
- 61) Shahabadi, A., & Bahari, Z. (2014). Effect of Political Stability and Economic Freedom on the Economic Growth in Selected Developed and Developing Countries. *Quarterly Journal of Economic Growth and Development Research*, 4(16), 72-53.
- 62) Singer, H. (1971). The Role of Agriculture in Economic Development: JSTOR.
- 63) Singh, D., & Gál, Z. (2020). Economic freedom and its impact on foreign direct investment: global overview. *Review of Economic Perspectives*, 20(1), 73-90.

Influence of Sector-Specific Components of Growth on Economic Freedom: Evidence from Sub-Saharan Africa

- 64) Sooreea-Bheemul, B., Rasool, U. S., & Sooreea, R. (2020). Does Economic Freedom Matter to Foreign Direct Investment in Sub-Saharan Africa. *International Journal of Economics and Financial Issues*, 10(3).
- 65) Taran, A., Mironiuc, M., & Huian, M. (2016). Examining the influence of some macroeconomic factors on foreign direct investments. *Review of Economic and Business Studies*, 9(2), 159-182.
- 66) Tripathi, V., Seth, R., & Bhandari, V. (2015). Foreign direct investment and macroeconomic factors: evidence from the Indian economy. *Asia-Pacific Journal of Management Research and Innovation*, 11(1), 46-56.
- 67) Windmeijer, F. (2005). A finite sample correction for the variance of linear efficient two-step GMM estimators. *Journal of econometrics*, 126(1), 25-51.
- 68) Xu, T. (2019). Economic freedom and bilateral direct investment. *Economic Modelling*, 78, 172-179.
- 69) Yameogo, C. E., Omojolaibi, J. A., & Dauda, R. O. (2021). Economic globalisation, institutions and environmental quality in sub-Saharan Africa. *Research in Globalization*, 3, 100035.
- 70) Zandile, Z., & Phiri, A. (2019). FDI as a contributing factor to economic growth in Burkina Faso: How true is this? *Global Economy Journal*, 19(01), 1950004.

Community Empowerment through New Entrepreneurship in the Era of the Corona Virus Pandemic in Banten Province



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ABSTRACT: The Corona Virus pandemic that has hit almost all countries, including Indonesia, especially in the province of Banten, which is part of Indonesia, is geographically located to the west of the national capital, namely Jakarta, with a distance of approximately two hours away, with a population of 11,904.562 people, which became the location of the research which was held in 2021, with research samples taken randomly as many as 311 respondents with characteristics as lower middle class people who live in cities and districts in Banten province as the main data source.

On this basis, research that uses a qualitative descriptive analysis approach coupled with descriptive statistical analysis methods as reinforcement in interpreting research results that aims to answer the focus or research problem regarding, "*Community Empowerment Through New Entrepreneurship in the Corona Virus Pandemic Era in Banten Province, Indonesia.*"

Based on the results of research and discussion, it can be stated that; 1) the implications of the Covid-19 Pandemic on the empowerment and powerlessness of the Banten people in the form of, a) 0.11 percent lost their jobs, b) 0.14 percent of workers were laid off or terminated, c) 0.68 percent experienced a reduction or loss of income, d) as much as 0.07 percent of the people actually experienced an increase in income, which is a little hopeful condition even in the midst of the Corona emergency, but there is still a glimmer of hope that the people actually increase their income. 2) the existence of community empowerment activities through new entrepreneurship in the era of the Covid-19 Pandemic in the province of Banten in the form of; a) opening 0.16 percent of new entrepreneurship in the culinary sector, b) opening up new entrepreneurship in the field of buying and selling goods based on digital networks as much as 0.11 percent, and c) opening new entrepreneurship in the field of buying and selling basic needs of the community as much as 0.09 percent.

This research, convincingly has been able to leverage that, the Corona Pandemic not only limits people's activities and causes people's powerlessness, but on the other hand the Corona Pandemic can also awaken the community's fighting power to be able to rise by taking advantage of strategic opportunities in the form of opening various new entrepreneurships that can be used as a catalyst and new energy as a source of new awakening for the growth of the community's economy, both during the Corona Pandemic and post-Corona Pandemic later.

KEY WORDS: Community Empowerment

INTRODUCTION

Community empowerment programs in Indonesia have begun to develop rapidly since 1990, which is used as one of the strategic approaches in sustainable development in all fields, because by including and empowering in development activities, it means that the community will be directly involved and play an active role in development activities both at home and abroad, urban and in rural areas.

Empowering the community is a noble activity, because community empowerment activities are expected to raise the dignity of the community it self, where the weak community can develop the ability to live independently and side by side with a strong community, while a strong community is expected to help weak communities to thrive can live prosperously and independently. However, in community empowerment, it is necessary to observe and pay attention to the background and characteristics of the community itself, in order to be able to follow and adapt to the process of changing times which fluctuates so quickly and sometimes it is difficult to follow, especially changes in so aspects of communication and information technology that are so fast and powerful. Therefore, it is necessary to prepare the community so that they have capabilities that can be used as capital to be more empowered.

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According to Sulistiyani (2004:7), it is explained that, etymologically, empowerment comes from the word power which means strength or ability, thus empowerment can be interpreted as a process to obtain power or provide power to groups of people who are not empowered, especially when the country is experiencing a COVID-19 emergency, which started from Wuhan, China at the end of 2019, and spread massively to all countries in the world, which ultimately made the Corona virus a global pandemic, which limited human activity and mobility within and between countries.

Especially in Indonesia, the first case of Covid-19 occurred in March 2020, which subsequently spread so quickly throughout Indonesia, on this basis the activities and mobility of the community have been limited by various government policies aimed at controlling the spread of Corona to various levels of society, according to data from the Central Bureau of Statistics in 2021 stated that there were 19.1 million people (9.3 percent) of the working age population who were affected by the Corona Pandemic in the form of job losses and loss of income.

The most serious impact that is felt by the community as a result of the Corona Pandemic is a direct impact on the level of community empowerment such as workers who lose their jobs, so this causes people's income to decrease, and causes a decline in people's purchasing power and ultimately decreases the level of community welfare in generally.

This condition is caused by many factors, one of which is the existence of government policies in the form of limiting and reducing the mobility of people out of the house, by making policies to work and do business from home, school from home, which in the end results in a decrease in productivity, especially in the product sector and services.

Therefore, this study tries to examine the empirical conditions that are intended to answer the research questions, namely; *"How is community empowerment through the new Entrepreneurship Era of the Corona Virus Pandemic in Banten Province?."*

THEORETICAL FRAMEWORK

Empowerment emphasizes that a person acquires sufficient skills, knowledge, and power to become capital in his life. According to Parson (Edi Suharti, 2006: 58), empowerment activities can be in the form of providing skills training, providing assistance, providing assistance, and other activities according to community needs. Meanwhile, according to Mardikanto, community empowerment is an effort to make the community independent, this effort can be interpreted as the ability of individuals to integrate with the community as an effort to build an empowered and effective society.

Edi Suharto, (2006:60), explains that community empowerment can be interpreted as a process and as a goal, where community empowerment can be carried out through stages, namely; 1) community empowerment as a process; is a series of activities to strengthen weak community groups so that they are free from various disabilities, 2) community empowerment as a goal ;is a condition to be achieved either through social change that can make the community more empowered by having the knowledge and ability to be able to meet various needs of life better in the economic sector or in social life in general such as having self-confidence, being able to express aspirations, having a livelihood and able to play an active role in social life and be independent in various life tasks.

Furthermore, according to Mardikanto, there are several objectives of community empowerment, namely; 1) institutional improvement; is a process to increase institutional capacity through system improvement and business partnership network development, 2) business improvement; is a community empowerment is expected to have good implications for business improvement, by improving the qualifications and quality of education by increasing the enthusiasm for learning, as well as by participating in or by providing life skill training, 3) improving income or income; this is the most strategic thing in community empowerment is the creation of an improvement in the income of the community itself, by expanding the reach of business which includes multi-sector marketing based on digital networks including the use of social media, 4) environmental improvement; along with the improvement in income and education, it is expected to improve environmental conditions, both the physical environment, the social environment and the economic environment as a result of which people's lives become more empowered and more prosperous, 5) improve the status of life; after the creation of an improvement in the level of life which is supported by an improvement in the environment and income, it is hoped that the community can improve the degree of every family life in the form of increasing purchasing power of the community or family, as well as increasing the strata of social life of the community itself, 6) the realization of a better community life; as an implication of improving and improving the quality of education accompanied by the possession of competencies relevant to the advancement of science and technology.

In order for the purpose of community empowerment to be achieved properly, it is necessary to pay attention to several principles as according to Edi Suharto, (2006:68), there are several principles that must be considered, 1) empowerment is a collaborative process, 2) it is the community as the main actor who must be empowered, 3) utilizing a multi-sector network, 4)

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must be accompanied by a high awareness to be more empowered, 5) must participate actively in every activity, 6) the empowerment process must be dynamic, synergistic and sustainable, 7) empowerment must be evaluation.

In order to achieve empowerment goals as expected, appropriate empowerment strategies are needed as proposed by Parson 1994:112, (Edi Suharto, 2006:66), there are three main strategies, namely; 1) micro strategy; this empowerment strategy is prioritized for individual level empowerment through guidance activities, 2) mezzo strategy; this strategy is implemented for empowerment activities at the group level in the form of activities such as skills training and group dynamics, 3) macro strategy; this strategy is intended for empowerment activities at the wider community level, with activities for making social action plans, social policies, community organizing. The community empowerment strategy is essentially a movement from, by and for the community, which means that the community is active in planning programs, implementing programs, overseeing programs and assessing the success of empowerment programs that are tailored to the potential and needs of the community itself, Suyono, H (2014: 89).

According to Fahrudin, (2012: 96), community empowerment can be in the form of providing the ability or empowering the community to have the ability and independence that can be done by going through the stages, namely; 1) enabling; at this stage community empowerment in the form of creating a climate atmosphere that provides opportunities for the potential possessed by the community to grow and develop continuously, which in the end the community is expected to motivate and raise self-awareness of their own and sustainable potential in order to develop themselves to be more empowered productively, 2) empowering; at this stage the community's capacity and potential are increased so that they have a wider ability to open and establish and utilize multiple accesses in order to take advantage of opportunities that can make the community more prosperous, 3) protection; at this stage the empowerment activity is to provide protection so that the community feels safe and comfortable in their activities and business, namely the community is free from all unfair competition, free from exploitation from strong groups, free from discrimination or oppression from strong groups.

However, community empowerment must pay attention to the values that are inherent in society such as the value of goodness and truth, the value of togetherness, sincerity, mutual cooperation, honesty, hard work, must be built and maintained in order to create change in order to obtain a more empowered life, and more prosperous. This is in line with the opinion of Abbot, (1996:16), which states that community development needs to pay attention to and respect and uphold the values of equality, justice, and togetherness, these values are intended to be a filter from the emergence of social jealousy, and most fundamentally to avoid social jealousy of discrimination in social life.

The community empowerment program is expected to foster the spirit and ability of the community to be able to compete in the global era, therefore the community empowerment process must be carried out in a targeted, timely and efficient manner with various forms of strategic programs such as; 1) community empowerment in the economic sector, this economic empowerment program is classified as a program that has a central and very strategic role, because this program is expected to be able to make people live independently and prosperously, strategic programs such as the development of small and medium enterprises that provide assistance to the community in business such as batik, choliner business, savings and loan cooperatives and digital-based small economic businesses, 2) community empowerment programs in agriculture, by utilizing agricultural land to be managed and planted with various productive crops, such as rice, peanuts, corn, vegetables. Vegetables, the results of which are not only used for family consumption, but can also be distributed or sold to traditional markets or modern markets as a source of income or additional family income, then to UN increase the quantity and quality of agricultural production, farming communities are given training about farming good and productive, so that in the end the farming community will be more productive and live prosperously, 3) community empowerment program in the health sector, with this program the community is expected to be able to improve their quality of life and care more about their own health by prioritizing health promotion and disease prevention programs, health treatment and rehabilitation, as well as providing various trainings on environmental management and healthy personal hygiene. and independence in determining the assistance of health workers when needed, 4) community empowerment programs in the field of education, education is a very strategic part in becoming a smart person, that's why education must be felt and can be achieved by all levels of society both in cities and in rural areas. Education is important because through education the community will be able to develop themselves to be literate in information and communication technology that is tailored to the needs and keeps up with the times, 5) community empowerment in the field of religion, community empowerment programs in the field of religion are needed, because people can be proud of their children is smart in academics, but what is the meaning if it is not accompanied by a religious appearance, which can always display the best and commendable behavior of all time.

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In the end, empowering the community can be seen from various indicators such as; 1) the community has freedom in self-mobility, 2) the community has the ability to meet basic needs, 3) is able to obtain greater clothing and food, 4) is active in various social planning and decisions, 5) has legal and political awareness, 6) have a good and productive economic status and live a prosperous life.

RESEARCH METHODS

The research uses a naturalistic descriptive qualitative method, where the qualitative research results are a description of the observations of the nouns that are currently happening. Therefore, the validity and objectivity of the results are largely determined by the strength of the words and sentences described (Moleong, 2007). In this study, the researchers collected data from the main data source as many as 311 people.

Respondents, while the researcher acts as a human instrument, to obtain data to answer the research objectives, the researcher uses interview and observation guidelines and open questionnaires as an objective guide in data processing and analysis.

The data collection process was carried out qualitatively, namely through stages; 1) orientation stage; at this stage detailed observations are made in order to get an overview of data sources and research locations, 2) exploration stage; at this stage real data collection activities are carried out using interview guidelines and observation guidelines and distributing questionnaires to be studied the contents of the data respondents were 311 people, 3) the triangulation stage; at this stage the researcher re-checked the data obtained, by confirming to a third party who understood and knew about the truth of the data obtained.

Then for qualitative data analysis the researcher used interactive analysis techniques with the Miles and Huberman model (A. Muri Yusuf, 2013 p. 410), which includes the following stages: 1) the reduction stage; at this stage the researcher sorts and selects the data according to the research focus that the researcher formulates, 2) the display stage; at this stage the data that the researcher has collected are compiled in a narrative formulation that already has meaning in order to answer the research focus, and stage 3) the verification stage; at this stage the researcher formulates a provisional conclusion, to be clearer following the visualization of the interactive analysis model as shown below.

RESEARCH OF RESULTS

Based on the results of data processing and analysis obtained from interviews and observations as well as from the results of the analysis of the questionnaire answers from 311 respondents, both the results of descriptive qualitative analysis, and the results of descriptive statistical analysis using a simple formula, namely the mean formula, it can be stated that research results that aim to answer research problems that are in accordance with the research focus, namely; *"Community Empowerment Through New Entrepreneurship in the Era of the Corona Virus Pandemic in Banten Province, Indonesia."*

Based on the results of research data analysis aimed at answering two sub-problems, it can be stated that; 1) the implications of the Corona virus pandemic on the empowerment and powerlessness of the Banten people, there are several forms including; a) as many as 0,11 percent (low category), who experienced job loss, b) as many as 0,14 percent of workers (less category), who were at home or dismissed from work, c) as many as 0,68 percent of the community experienced a reduction or lost income and, d) as much as 0,07 percent (very low category) people actually experienced an increase in income. This condition shows that, in the midst of difficulties and the crush of the Corona Pandemic, it turns out that there is still encouraging hope where people remain optimistic and try to rise from the difficulties they face, 2) there are community empowerment activities through new entrepreneurship in the Corona pandemic era in Banten Province, in the form of; a) opening new entrepreneurship in the culinary business sector as much as 0,16 percent (small category), b) opening new entrepreneurship in the digital network-based trading business as much as 0,11 percent (small category) and, c) opening new entrepreneurship in the buying and selling business basic needs as much as 0.09 percent (very few categories), for this reason the following visualization of research results is as shown in the following table.

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Table. Community Empowerment Through New Entrepreneurship in the Era of the Corona Virus Pandemic in Banten Province Indonesia

N0	Aspect Under Study	Type	Amount	Percent	Average Percent
1	Community empowerment and powerlessness in the form of job and income loss	Loss of a job	33	0,11	0,25
		Status of workers who are at home	43	0,14	
		Loss and decrease in income	213	0,68	
		An increase in peoples income	22	0,07	
2	Community empowerment by opening new entrepreneurship (0,12)	Food entrepreneur	49	0,16	0,12
		Buy and sell online	33	0,11	
		Buying and selling basic necessities	31	0,09	
	Respondents		311		

Sources of questionnaire answers from 311 respondents

Based on Banten population data, there are still as many as 0,11 percent of working age who are not working or unemployed, and as many as 0,08 percent of the population who are poor, (Banten Province Statistics Bureau 2021), if this is compared with the results of this study, the level of error of 0,03-0,05 percent, can be declared quite valid.

The interpretation of the research results is that the Corona Pandemic has a broad impact on people's lives, and has caused changes in all aspects of the order of life, this does not only occur in developing countries such as Indonesia but also in almost all developed countries in the world, all of its people experience suffering. This suffering occurs as a result of various government policies in controlling the Corona virus, whose programs are almost the same in all countries, namely in the form of limiting people's activities and mobility not to leave their homes, even though the economic demands in the Corona Pandemic era are getting heavier and this is getting worse. Exacerbated because people can not work or try optimally outside the home. However, with all the power and effort by taking advantage of the various possible opportunities that exist, the community is still trying to rise from adversity and helplessness, namely, by using opportunities as capital to achieve success and rise from adversity by trying to open new entrepreneurship.'

CONCLUSION

Based on the results of the study it can be concluded that; Community empowerment through new entrepreneurship in the Corona Pandemic era in Banten, it can be concluded that a small portion of the community can open new entrepreneurship, such as in the culinary business, buying and selling digitally, and in the form of buying and selling materials and other basic needs.

The empowerment of the community in taking advantage of opportunities amid the threat of the Corona virus should be proud, because this proves that the community is still capable and has the courage and independence to rise from adversity and helplessness as an implication of the ferocious and massive spread of the Corona virus so that it has implications for the empowerment and powerlessness of the community, especially the people of Banten in the form of losing their jobs as a result of workers being laid off or laid off from their jobs, there are also people who experience reduced or even lost income, however, there are also among the people who actually experience an increase in income, as well as the efforts and efforts of the community to remain empowered in the form of various new business activities such as, opening a new business in the culinary field, opening a new business in the field of digital-based trading and opening a new business in the field of buying and selling other basic necessities.

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BIBLIOGRAPHY

- 1) Aidha, Z., & Harahap, R. A, (2021), Community empowerment in an effort to food security during the COVID-19 pandemic in West Bilah District, *Tropical Public Health Journal*, 1(1), 22-30.
- 2) Ariyani, N. I., & Nurcahyono, O, (2014), Digitalization of Traditional Markets: Perspective of Social Change Theory. *Journal of Sociological Analysis*,
- 3) Anwas, M, Oos, (2014), *Community Learning Mass Media*, Scientific Journal, vol 16 No 5, Jakarta: Balitbang Depdiknas.
- 4) Dahama, D.P, and Bhatnager, (1980), *Educational and Communication for Development*, New Delhi: Oxford and IBH Publishing Co.
- 5) Dubois, Brenda and Karla Krogsrud Miley, (1992), *Social Work: An Empowering Professional*, Boston: Allyn and Bacon.
- 6) Gorahe, L. V., Waani, F., & Tasik, F, (2021), Impact of the Covid 19 Pandemic on Community Welfare in Dalako Bembanehe Village, Tatoareng District, Sangihe Islands Regency. *EXECUTIVE JOURNAL*, 1(1).
- 7) Midgley, James, (1995), *Social Development: The Development Perspective in Social Welfer*, London: Sage Publication.
- 8) Meredith, G, RE, Nelson and PA Neck, (1996), *Entrepreneurship*, Jakarta: Pressindo
- 9) Manzilati, Asfi, (2017), *Qualitative research methodology: Paradigms, methods, and applications*. Jakarta : Universitas Brawijaya Press,
- 10) Marius, Jelamu Ardu, (2006), *Social Change*, Journal of Extension 2.2.
- 11) MUSYAROFAH, M, (2017), *Implementation of the Independent Pattern Community Empowerment Improvement Program in Poverty Alleviation*, Jember dissertation, MUHAMMADIYAH UNIVERSITY.
- 12) Maryani, Dede and Nainggolan, Ruth Roselin E. (2019). *Community empowerment*. Yogyakarta : CV Budi Utama.
- 13) Rappaport, J, (1984), *Studies in Empowerment: Intruduction to the issue of Prevention in Human Issues*, USA.
- 14) Sudadio, (2020), *Colinovpreneurship*, Serang: Untirta Press.
- 15) Sudadio, (2021), *Policies Contribution an Integrated Quality Management to Improve the Quality of Services in Primary and Scodary Education in The Banten Province 21 St Centuruy The Era of the revolutionary 4.0*, *Journal of Economics, Finance and Management Studies*, volume 4 .
- 16) Suharto, Edi, (2006), *Building a Community Empowering the People*, Bandung: Aditama.
- 17) Wisarja, I. K., & Sudarsana, I. K, (2017), *Educational Practices According to Habermas (Reconstruction of Social Evolution Theory through Community Learning Processes)*. *IJER (Indonesian Journal of Educational Research)*, 2(1), 18-26
- 18) <https://www.djkn.kemenkeu.go.id/> [accessed on Tuesday, 11/16/21 at 2.13 PM.]
- 19) <https://prasfapet.wordpress.com/2015/05/07/concept-dan-theory-empowerment-community/> (Accessed on 20 November 2021).
- 20) <https://www.kompas.com/skola/read/2020/01/24/100000469/pemdayaan->
- 21) <https://www.berdesa.com/purpose-empowerment-community/>
- 22) Tarigan, P. B. (2013). *Small business*. *Journal of Chemical Information and Modeling*. 53(9) pp. 1689–1699.
- 23) Ariani, and Utomo, Mohamad NNur (2017). *Study of Strategy for Development of Micro, Small and Medium Enterprises (MSMEs) in Tarakan City*. *Journal of Organization and Management*. 13(2) pp. 99-118.
- 24) Laksono B.A Etc. (2019). *Community Empowerment Through Social and Educational Institutions*. *Journal of Non-Formal Education*. 14(1) pp. 1-11.
- 25) Noor.M. (2011). *Community empowerment*. *Civis Scientific Journal*. 1(2) pp. 87-99.
- 26) Kurniawan, F.D Etc. (2014). *Empowerment of Micro, Small and Medium Enterprises (MSMEs) in Poverty Reduction*. *Journal of Public Policy and Management*. 2(2) pp 103-220.
- 27) Arfianto, A.E.W, Etc. (2014). *Community Empowerment in Village Economic Development*. *Journal of Public Policy and Management*. 2(1) pp 1-102.

The Impact of Good Corporate Governance as a Moderation of Company Performance on the Timeliness of Submitting Financial Statements



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ABSTRACT: Timeliness in the submission of financial statements is an important factor in the relevant presentation information. This research is a proof of concept function analytically and experimentally. This study aims to determine the effect of company performance on timeliness submission of financial reports with good corporate governance as a moderating variable. The object of this research is a manufacturing company that has listed its shares on the IDX from 2018 to 2019. The sample of this study was 193 samples using the purposive sampling method. The analytical method used is a statistical analysis model in the form of a logistic test. The results showed that ROA did not have affect the timeliness of financial reporting, while DER affects the timeliness of financial reporting. Moderation between ROA and frequency of board meetings provides a potential type of moderation. Meanwhile, DER with board meeting frequency resulted in pure moderation.

1. INTRODUCTION

Financial reports are a form of implementation of corporate accountability to various parties, including investors, creditors, and the public. Financial reports will provide benefits if they are presented in a transparent, accurate and timely manner (Alsharife et al, 2016; Asmara & Situanti, 2018). Timeliness in the delivery of financial reports is an important factor in presenting relevant information. Based on Financial Services Authority Regulation Number 29 / PJOK.04 / 2016 Annual Report Issuers or Public Companies are required to submit an Annual Report to the Financial Services Authority no later than the end of the fourth month after the financial year ends. This shows that the timeliness of presenting financial reports to the public is needed and therefore each company is expected not to delay the presentation of financial statements (Elviani, 2017; Novi Asriyatun, 2020).

The timeliness of financial reporting will affect the value of the financial statements with respect to the value of the company's securities and investors' decisions. The shorter the time interval between the end of the accounting period and the date of submission of the financial statements, the more benefits that can be obtained from the financial statements, while the longer the period between the end of the year and the submission of financial statements, the higher the likelihood that the information will be leaked to interested parties. In addition, the information is no longer updated so that it will reduce its added value for users of the financial statement information (Asri & Putri, 2017; Kartikasari & Ifada, 2010).

The timeliness of financial reporting is one of the relevance values in the quality of financial reports, so if the information is not conveyed in a timely manner, it will cause the information to lose value in affecting the quality of decisions (Welly et al, 2017). This is also believed to be the result of research (Türel, 2010) on 211 non-financial companies listed on the Istanbul Stock Exchange. Descriptive analysis shows that 59% of companies that prepare separate financial statements and 66% of companies that prepare consolidated financial statements issue their financial statements at less than the maximum allowable time after the end of the financial year. 28% of companies that prepare separate financial statements and 16% of companies that prepare consolidated financial statements over the deadline. This shows that more and more companies are aware of the importance of submitting financial reports in a timely manner. Relevant characteristics must have predictive value and be presented on time, thus the timeliness of reporting financial information is an important element for information users (Hadi, 2018).

The company's financial performance report is an indicator used by investors to date. In the financial statements, investors will certainly see the growth of the company's profitability and sales. Profitability is considered good news that needs to be conveyed to investors, the results of research (Surachyati et al, 2019) show that profitability has an influence on the timeliness of submitting financial statements. So that companies that earn profits tend to submit their financial reports on time. However, this is not the

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case with companies that experience losses which tend to slow down the delivery of their financial reports (Irama, 2018; Ardian & Khoiruddin, 2014). Likewise with the results of research (Wahyuni, 2020) which states that the high profitability (return on assets) of a company will increase the company's ability to produce quality financial reports and will submit financial reports on time, this is because it is related to company performance.

If profit is categorized as good news, then debt can be said as bad news. Companies that have additional debt or increased debt consider this a high risk for the company not to be able to pay off their obligations. So that high debt ratios have a tendency to do window dressing so that it has the potential to report financial reports not on time, (Novi Asriyatun, 2020).

The board of directors meeting or meeting has a function, namely as a medium to carry out various improvements or evaluations needed, including ensuring the quality of financial reports (Akbar and Kiswara, 2014). OJK Regulation Number 55 / POJK.04 / 2015 states that the board of directors holds regular meetings at least once in three months. So that at least the audit committee conducts audit committee meetings 4 times a year. The more frequent meetings of the board of directors are held, the more timely the company is in submitting financial reports (Anugrah and Laksito, 2017). Regarding the relationship between corporate governance which is able to moderate between financial ratios and the level of timeliness of the submission of financial statements, research shows (Hadi, 2018); Wahyuni, 2020), where the level of supervision as a principle of GCG is able to have an influence on the timeliness of the submission of financial reports, especially if the condition of the financial statements is in good news.

2. LITERATURE

Signaling Theory Signal is an action taken by the company to give instructions to investors about how management views the company's prospects. This signal is in the form of information about what has been done by management to realize the wishes of the owner. Information released by the company is important, because it affects the investment decisions of parties outside the company. The information is important for investors and business people because the information essentially presents information, notes or pictures, both for past, present and future circumstances for the survival of the company and how it affects the company, (Brigham & Houston, 2013).

Information is an important element for investors and business people because the information essentially presents information, notes or pictures both for the past, present and future conditions for the survival of a company and how it markets its effects. (Tarmidi, 2019) revealed that because of the information asymmetry between the company and outsiders, publication of company conditions is needed to create a good corporate image and outsiders will be interested in joining as investors. Complete, relevant, accurate and timely information is needed by investors in the capital market as an analytical tool for making investment decisions. Some individuals want to convey information that is available, but there are others who wish not to convey information, but overall the fact is in signaling theory that the act of conveying information directs people to change their behavior, (Connelly et al, 2011).

Agency Theory

Agency theory states that there is an agency relationship as a contract between management as an agent and ownership as a corporate preliminary, a working relationship between the party that gives authority (preliminary), namely the shareholders and the recipient authority (agent) of the company in the form of cooperation, called the nexus of contract preliminary giving authority and authority to the agent to run the company in the interests of the owner and the principal, (Jensen & Meckling, 1976). The agent has more information about his capacity, work environment and the company as a whole. This has resulted in an imbalance of information between the principal and the agent, which is called information asymmetry. This information asymmetry and conflict of interest encourage agents to present false information to the principal, especially if the information is related to the agent's performance.

Compliance Theory

Regulations concerning the Obligation to Submit Periodic Financial Statements legally inform the compliance of every individual and organization (public company) involved in the Indonesian capital market to submit company annual financial reports in a timely manner to Bapepam. The demand for compliance with the timeliness of submitting annual financial statements of public companies in Indonesia has been regulated in Kep-17 / PM / 2002 and has been updated by Bapepam Regulation Number XK2, attachment to the Decree of the Chairman of Bapepam Number: Kep-36 / PM / 2003 which states that The annual financial report must be accompanied by an accountant's report with the usual opinion and submitted to Bapepam no later than the end of the third month (90 days) after the date of the annual financial report.

The Impact of Good Corporate Governance as a Moderation of Company Performance on the Timeliness of Submitting Financial Statements

Timeliness

The accounting system must provide in a timely manner the information needed to control day-to-day operations. Timeliness is an important aspect so that information can "make a difference" because if new information can be obtained after a decision has been made, it will not be of much use. Financial reporting has been criticized for its timeliness because in the era of information technology like now, users of financial statements increasingly want to get answers in a short time, not at the end of a year or a quarter, (Tillah et al, 2019).

According to Elviani (2017), the timeliness of the presentation of financial statements is directly proportional to the relevance and reliability of financial statements. So, the longer a company publishes its financial statements, the more irrelevant and unreliable its financial statements are. Timely financial reports cannot fully guarantee the relevance of financial reports, but relevant financial reports cannot be achieved without timely information.

In accordance with the X.K.2 rule issued by Bapepam, the submission of the annual financial report that has been taken is said to be on time if it is submitted before or no later than the end of the third month after the date of the annual financial report of the public company. Delays in financial reports can have negative consequences for the company, either directly or indirectly. Indirectly, investors may respond to the delay as a bad signal for the company. Directly, for example in the Indonesian capital market in 2009, public companies that violated the principle of information disclosure by not submitting annual financial reports on time were subject to administrative sanctions and fines. The Indonesia Stock Exchange has issued the decision of the board of directors of PT. Jakarta Stock Exchange Number 307 / BEJ / 07-2004, namely Rule Number I-H Concerning Sanctions.

Return on Assets (ROA)

Return on Assets is a measure of a company's ability to generate profits with all assets owned by the company. These assets are all of the company's assets starting from its own capital or foreign capital that has been converted into company assets for the survival of the company. This ratio figure is commonly used to measure a company's performance by investors. The increased return on assets shows how well assets are managed by the company to bring profit for every one dollar of assets that have been invested in the company, (Atidhira & Yustina, 2017). Economically, the higher the rate of return obtained, the higher the company's ability to use its assets to make a profit. So that the higher ROA, the higher the company's ability to generate profits the higher the company's revenue will make investors interested in the value of shares, and A company can be said to be successful if it has achieved the standards and objectives that have been set, (Subramanyan, 2014 ; Warrad & Omari, 2015).

Debt to Equity Ratio

The leverage ratio describes the source of operating funds used by the company. The leverage ratio also shows the risks a company faces. The greater the risk faced by the company, the more uncertainty to generate future profits will also increase (Agustia, 2013). The consequence of using leverage according to (Cai & Zhang, 2011) is if from the use of debt it turns out that the rate of return on assets (return) is greater than the cost of debt, the leverage is profitable and the return on capital with the use of this leverage also increases, vice versa if the return on return. on assets less than the cost of debt, leverage will reduce the rate of return on capital.

Utami & Darmawan (2019) state that DER is a measure of the leverage ratio which can be defined as the level of debt use as a source of corporate financing. From the perspective of the ability to pay long-term obligations, the lower the DER will have an impact on the increase in stock prices and the company will be better at paying longterm obligations. Information about an increase in DER will be accepted by the market as a bad signal that will provide negative input to investors in making decisions to buy stocks.

3. FRAMEWORK AND HYPHOTESIS DEVELOPING

The effect of ROA on the timeliness of financial report submission.

The increased return on assets shows how well the assets are managed by the company to bring profit for every dollar of assets that have been invested into the company (Atidhira & Yustina, 2017). Companies that have a high level of profitability can be said that the company has good performance so that the company's financial statements contain good news and companies will tend to submit their financial reports in a timely manner (Pratama & Ciptani, 2018; Wahyuni, 2020). **H1: ROA has a significant effect on the timeliness of financial statement submission.**

The Impact of Good Corporate Governance as a Moderation of Company Performance on the Timeliness of Submitting Financial Statements

The effect of DER on the timeliness of financial report submission.

The leverage ratio refers to the extent to which a company depends on creditors in financing the company's assets. DER is a measure of the leverage ratio which can be defined as the level of debt use as a source of corporate financing. From the perspective of the ability to pay long-term obligations, the lower the DER will have an impact on increasing share prices and also the company will be better at paying long-term obligations (Utami & Darmawan, 2019). Management is more likely to delay the submission of financial reports that contain bad news. Companies with a high debt to equity ratio will be late in submitting their financial reports, because the time available is used to reduce the debt to equity ratio (Respati, 2011). **H2: DER affects the timeliness of financial report submission**

The effect of ROA on the timeliness of financial report submission, moderated by GCG.

The board of directors meeting or meeting serves as a medium to carry out various improvements or evaluations needed, including ensuring the quality of financial reports (Akbar & Kiswara, 2014). OJK Regulation Number 55 / POJK.04 / 2015 states that the board of directors holds regular meetings at least once every four months. Increasing profits will provide good news for companies and investors so that the agenda for the board of directors meeting to immediately deliver financial reports to the public will be even more timely. **H3: GCG strengthens the effect of ROA on the timeliness of financial report submission**

The effect of DER on the timeliness of financial report submission, moderated by GCG.

FCGI (2001) explains that board meetings are a medium of communication and coordination between management. At meetings held by the board of commissioners and directors, management's performance will be evaluated and the board will provide feedback on the implementation of tasks that have been carried out by management. Meeting activities will also discuss issues regarding the direction and strategy of the company, evaluate policies that have been taken or carried out by management, and resolve conflicts of interest. (Kankanamage, 2016) said that regular meetings held by the board of commissioners will also evaluate policies taken by management and resolve conflicts of interest between shareholders and managers. **H4: GCG weakens the influence of DER on the timeliness of financial report submission.**

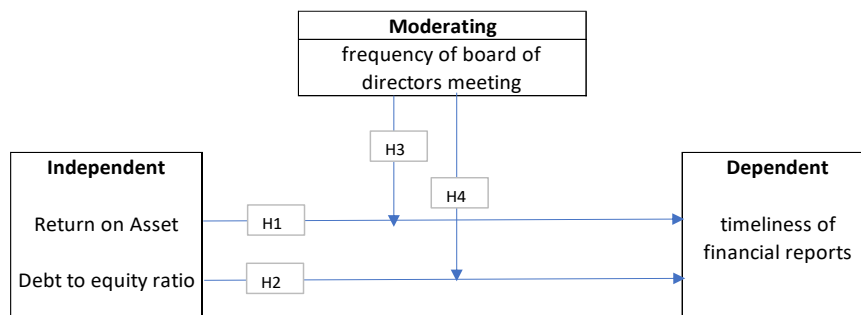


Figure 1: Framework

4. RESEARCH METHODS

Research Design

The population in this study are manufacturing companies listed on the Indonesia Stock Exchange in 2018-2019. Sampling in this study using purposive sampling technique, where purposive sampling is a technique of sampling data sources with certain considerations, obtained a research sample of 193 companies and the amount of data as much as 386 data.

Table 1. Operasional Variable

Variable	Measurement	Scale
Timeless (Y)	Timeliness of Financial Report Reporting = 1 Not on time in reporting financial statements = 0	Dummy
ROA (X ₁)	RoA = Earning after tax / total asset	Ratio
DER (X ₂)	DER = Total Liabilitas / Total Equity	Ratio
Moderating frequency of board of directors meeting	The frequency of Director's meetings is measured by the total number of meetings held during one year	Ratio

The Impact of Good Corporate Governance as a Moderation of Company Performance on the Timeliness of Submitting Financial Statements

5. ANALYSIS METHOD

Model Test

In testing the model in logistic regression analysis, there are several tests, namely:

1. Fit Test Model
2. Overall Model Fit Test
3. Determination Coefficient Test (Model Summary)
4. Hypothesis Testing
 - a. Partial Testing (Wald Test)
 - b. Logistic Regression Analysis

The multiple linear regression equation in this study is as follows:

$$\text{Timeliness} = \alpha + \beta_1\text{ROA} + \beta_2\text{DER} + \beta_3\text{ROA} * \text{FRDR} + \beta_4\text{DER} * \text{FRDR} + \epsilon$$

Information : Timeliness a = Constant $\beta_1, \beta_2, \beta_3, \beta_4,$ = Regression Coefficient ROA = Return on Asset DER = Debt to Equity Ratio

FRDR = Frequency of board of directors meetings

ϵ = Error

6. RESULT AND DISCUSSION

Model Test Results

This study uses a logistic regression model with a significant method (α) 5% (0.05). Logistic regression is used to test the effect of Return on assets (ROA), Debt to equity ratio (DER), the frequency of board meetings as a moderating variable on the timeliness of the company's financial report submission.

Regression Model Feasibility Test (Fit Test Model)

Fit Test Model Goodness of Fit or correlation calculation is used to determine the measure of the accuracy of the model used and to measure the accuracy of the regression line in explaining the variation in the value of the independent variable. Hosmer and Lemeshow's Goodness of Fit Test was used to test the feasibility of the logistic regression model. If the value of Hosmer and Lemeshow's Goodness of Fit Test is greater than 0.05, the null hypothesis cannot be rejected and it means that the model is able to predict its observation value.

Table 2. Hosmer and Lemeshow's Goodness of Fit test result

Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	3.645	8	.888

Table 2 shows that the Chi-square value of 3.646 and a significant value of 0.888 is greater than α (0.05) so that H_0 is accepted, which means that there is no difference between the predicted classification and the observed classification. That means the logistic regression model can be used for further analysis.

Overall Model Fit Test

To assess the overall model (overall model fit) is indicated by the likelihood value (value -2LL), it can be seen by comparing the value of -2 log likelihood (-2LL) at blocknumber = 0 and -2 log likelihood (-2LL) at blocknumber = 1. If the value of -2LL blocknumber = 0 is more than the -2LL value at blocknumber = 1, it means that the regression model is better. The results of the overall fit model test are presented in the following table:

Table 3. Test Results -2Log Likelihood Block - 0 (Initial)

Iteration History ^{a,b,c}			
Iteration		-2 Log likelihood	Coefficients
			Constant
Step 0	1	217.591	.038
	2	217.591	.038

a. Constant is included in the model.

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- b. Initial -2 Log Likelihood: 217.591
- c. Estimation terminated at iteration number 2 because parameter estimates changed by less than .001.

Table 4. Test Results -2 Log Likelihood Block - 1 (End)

Iteration History^{a,b,c,d}

Iteration	-2 Log likelihood	Coefficients						
		Constant	X1	X2	Z	MOderating1	MOderating2	
Step 1	1	213.278	.430	-.092	.007	-.067	.010	.000
	2	213.270	.442	-.096	.007	-.070	.010	.000
	3	213.270	.442	-.096	.007	-.070	.010	.000

- a. Method: Enter
- b. Constant is included in the model.
- c. Initial -2 Log Likelihood: 217.591
- d. Estimation terminated at iteration number 3 because parameter estimates changed by less than .001.

Based on the Overall fit model, the two tables above show two values of -2LL, namely BlockNumber = 0 and BlockNumber = 1. BlockNumber = 0 has a -2LL value of 217,591 which is greater than the -2LL value at BlockNumber = 1 which is 23,035. A decrease of 213,270 indicates a better regression model or in other words the hypothesized model is fit with the data. This shows the addition of independent variables, Return on assets (ROA), Debt to equity ratio (DER), frequency of board meetings and moderating variables into the model to improve the fit model. This decrease can be seen in table 5 below:

Table 5. The results of the omnibus test model coefficients

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	6.720	5	.242
	Block	6.720	5	.242
	Model	6.720	5	.242

Determinant Coefficient Test (Model Summary)

The summary model in logistic regression is the same as testing R2 on the linear regression equation. The purpose of this model is to determine how much the combination of independent variables consisting of Return on assets (ROA), Debt to equity ratio (DER), frequency of board meetings and moderating variables 1 and 2 are able to explain the dependent variable, namely the timeliness of financial report submission.

Table 6. Model Summary Test Results

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	238.315 ^a	.046	.061

- a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Based on table 6 above, the value of Nagelkerke R Square = 0.061 or 6.1% means that the combination of independent variables, namely Return on Assets (ROA), Debt to Equity Ratio (DER), frequency of board meetings and moderating variables 1 and 2 are able to explain. The variation of the dependent variable on timeliness of financial statement submission is 6.1%, while the remaining 93.9% is explained by other variables not included in this model. This result is still very small, so it is necessary to transform the variable data or by removing the outlier data so that the summary Square results can be changed.

The Impact of Good Corporate Governance as a Moderation of Company Performance on the Timeliness of Submitting Financial Statements

7. HYPOTHESIS TEST RESULTS

Partial Test (Wald Test)

This test is conducted to determine whether each of the independent variables (Return on assets (ROA), Debt to equity ratio (DER), frequency of board meetings and moderating variables 1 and 2 have an effect on the dependent variable, namely the timeliness of financial report submission

Table 7. Wald coefficient test results

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	X1	.066	.049	1.863	1	.172	1.069
	X2	.004	.002	3.341	1	.058	1.004
	Z	.034	.034	.956	1	.328	1.034
	MOderating1	-.005	.004	1.628	1	.202	.995
	MOderating2	.000	.000	3.500	1	.051	1.000
	Constant	-.601	.480	1.567	1	.211	.548

a. Variable(s) entered on step 1: X1, X2, Z, MOderating1, MOderating2.

If you look at the Wald test or t test with respect to the significant coefficient value in table 10, it can be said that ROA (X1) has no effect on the timeliness of financial reporting and the moderating variable between ROA and the frequency of board of directors meetings has no effect on the timeliness of financial reporting. In this case, it can be said that the moderation between the ROA variable and the frequency of board meetings is included in the potential moderation type (Homologous Moderator), that is, the variable has the potential to become a moderating variable.

Meanwhile, the DER variable (X2) and the moderating variable between DER and the frequency of board meetings have a positive effect on the timeliness of financial reporting. In this case it can be said that the moderation between the DER variable and the frequency of board meetings is included in the pure moderation type, which is a variable that moderates the relationship between the independent variable and the dependent variable in which the moderating variable purely interacts with the independent variable without being an independent variable. , in this case the variable of board of directors meeting frequency has no effect on the timeliness of financial reporting.

Table 8. Conclusion hypotheses

Hypotheses	Result
Hypotheses 1	Rejected
Hypotheses 2	Accepted
Hypotheses 3	Rejected
Hypotheses 4	Accepted

8. DISCUSSION

Part of the data that has been obtained can be temporarily discussed as follows:

a. The effect of profitability on the timeliness of financial reporting

Table 7 shows that profitability, which is proxied by ROA, has no effect on the timeliness of financial reporting. These results can be said that in determining management's decision to report financial statements in a timely manner, it does not see the element of profit originating from the assets of the company. Because this research took research in 2018 and 2019, where the 2019 financial statements contained new rules in the timing of financial reporting, namely the Letter of the Head of the Capital Market Supervision Department 2B of the Financial Services Authority (OJK) Number: S-45 / PM.22 / 2020 dated March 19, 2020 Regarding relaxation of regulations regarding the obligation to submit reports by Listed Companies and Issuers and as an effort to alleviate the impacts arising from the Covid-19 emergency condition in Indonesia. The regulation contains the submission of the Annual Financial Report which should be amended by March 30 to May 31 2020, and the submission of the Annual Report which should be no later than April 30 to June 30, 2020.

The Impact of Good Corporate Governance as a Moderation of Company Performance on the Timeliness of Submitting Financial Statements

The Indonesia Stock Exchange (IDX) as the Self Regulatory Organization (SRO), has also extended the deadline for financial statements for listed companies by up to two months. This relief is effective as of March 20, 2020 for up to 2 months from the original financial reporting rules. This is done to provide an extension of time to the Listed Company so that it can convey accurate information to investors while still paying attention to the emergency conditions that are in effect. IDX appeals to the public to always pay attention to the disclosure of information submitted by Listed Companies. Based on the reporting time rules, profit is no longer an element that must be reported immediately.

b. The frequency of board meetings strengthens the significant effect of ROA on the timeliness of financial reporting

In the results of table 7, it can be said that the moderation relationship obtained between the variable frequency of board meetings and ROA is a potential moderation, that is, the variable has the potential to become a moderating variable. These results can be said that although the frequency of the board of directors meeting does not have an influence on the timeliness of financial reporting, it does provide potential for investors if company profits can continue to increase, it will be good news for investors.

This result contradicts (Akbar & Kiswara, 2014) that the board of directors meeting or meeting serves as a medium to carry out various improvements or evaluations needed, including ensuring the quality of financial reports.

c. Effect of leverage on the timeliness of financial reporting

Table 7 shows that leverage, which is proxied by DER, has a significant positive effect on the timeliness of the financial reporting of manufacturing companies. The existence of a lot of debt ownership by the company is considered that the company still gets a lot of trust from the public, especially the financing party because it is able to get a lot of debt, besides that with high debt the company also has a lot of capital so that it is able to run its business. As research results from (Utami & Darmawan, 2019), from the perspective of the ability to pay longterm obligations, the lower the DER will have an impact on the increase in stock prices and the company will be better at paying long-term obligations. This encourages companies to submit their financial reports in a timely manner, because they want to immediately inform the public that the trust of the financing party in the company is still high and the company has large capital to run its business, in accordance with existing obligations that the company as an agent must be on time in delivering the information it has to the public as the principal so that it can be used as a basis for decision making.

d. The frequency of board meetings strengthens the significant effect of DER on the timeliness of financial reporting

From the results of table 7 it can be said that the frequency of board of directors meetings has a strong influence between DER and the timeliness of financial reporting. The moderation relationship obtained is pure moderation or pure moderator, which is a variable that moderates the relationship between the independent variable and the dependent variable where the pure moderating variable interacts with the independent variable without becoming an independent variable, in this case because the variable frequency of board meetings does not have an effect on timeliness. finance report.

These results can be said that the frequency of board meetings as part of the GCG element will encourage managers to present accurate financial reports with actual conditions, especially if this is used as a basis for measuring performance, so that they cant has an influence on the stock price in the capital market. Meeting activities will also discuss issues regarding the direction and strategy of the company, evaluate policies that have been taken or carried out by management, and resolve conflicts of interest. (Kankanamage, 2016) said that regular meetings held by the board of commissioners will also evaluate policies taken by management and resolve conflicts of interest between shareholders and managers.

9. CONCLUSION

From the results of the discussion, it can be concluded:

ROA has no effect on the timeliness of financial reporting ; 2. DER has a positive effect on the timeliness of financial reporting ; 3. The frequency of board meetings as a potential moderation of the ROA relationship to the timeliness of financial reporting ; 4. The frequency of board meetings is a pure moderation of DER's relationship to the timeliness of financial reporting.

Suggestion

1. For companies and investors, the frequency of board of directors meetings is an element or part of good corporate governance where when the GCG in the company is running well, it can be a source of decisions for managers in reporting financial reports in a timely manner.
2. For academics, further research can replace other moderating variables that can strengthen the relationship between profitability and leverage on the timeliness of financial reporting.

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REFERENCES

- 1) Agustia, D. (2013). Pengaruh Faktor Good Corporate Governance, Free Cash Flow, dan Leverage Terhadap Manajemen Laba. *Jurnal Akuntansi Dan Keuangan*, 15(1), 27–42. <https://doi.org/10.9744/jak.15.1.27-42>
- 2) Akbar, F. N., & Kiswara, E. (2014). Efektivitas Komite Audit Terhadap Ketepatan Waktu Pelaporan Keuangan (Studi Empiris pada Perusahaan Publik yang Terindikasi Kesulitan Keuangan Tahun 2010-2012). *Diponegoro Journal of Accounting*, 3(2), 1–9.
- 3) Alsharife, F. M., Subekti, I., & Widya, Y. (2016). The Effect of Audit Committee Characteristics on Timeliness of Financial reporting by Using Auditor Quality as The Moderating Variable (an empirical study from Indonesian manufacturing companies). *The International Journal of Accounting and Business Society*, 24(2), 92–112. Retrieved from <https://www.ijabs.uob.ac.id/index.php/ijabs/article/view/324>
- 4) Ardian Andromeda, & Khoiruddin, M. (2014). Pengaruh Analisis Kebangkrutan Model Altman Terhadap Harga Saham Perusahaan Manufaktur. *Management Analysis Journal*, 3(1), 1–14. <https://doi.org/10.15294/maj.v3i1.3354>
- 5) Asmara, R. Y., & Situanti, R. (2018). The effect of audit tenure and firm size on financial reporting delays. *European Research Studies Journal*, 21(3), 414–422. <https://doi.org/10.35808/ijeba/170>
- 6) Asri, I., & Putri, D. (2017). Pengaruh Komite Audit, Independensi Komite Audit, Dan Profitabilitas Terhadap Audit Report Lag Di Perusahaan Manufaktur. *E-Jurnal Akuntansi*, 20(2), 1672–1703. <https://doi.org/10.24843/EJA.2017.v20.i02.p29>
- 7) Atidhira, A. T., & Yustina, A. I. (2017). The Influence of Return on Asset, Debt to Equity Ratio, Earnings per Share, and Company Size on Share Return in Property and Real Estate Companies. *JAAF (Journal of Applied Accounting and Finance)*, 1(2), 128–146. Retrieved from <http://www.bi.go.id>
- 8) Brigham, E. F. & Houston, J. F. (2013). *Essential of Financial Management* (11th ed.). Jakarta: Salemba Empat.
- 9) Cai, J., & Zhang, Z. (2011). Leverage Change, Debt Capacity, and Stock Prices. *SSRN Electronic Journal*, (April). <https://doi.org/10.2139/ssrn.1107878>
- 10) Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>
- 11) Elviani, S. (2017). Faktor-faktor berpengaruh bagi ketepatan waktu pelaporan keuangan perusahaan manufaktur di Bursa Efek Indonesia. *Jurnal Riset Akuntansi Multiparadigma (JRAM)*, 4(3), 1–10.
- 12) Hadi, M. (2018). Determinan Ketepatan Waktu Penyampaian Laporan Keuangan Perusahaan Manufaktur di Indonesia. *Jurnal Riset Akuntansi Dan Perpajakan*, 5(1), 77–85.
- 13) Hartono, J. (2010). *Teori Portofolio dan Analisis Investasi* (7th ed.). Yogyakarta: BPFJ Yogyakarta.
- 14) I Made Brahmandita Padmanagara¹, Mohamad Rafki Nazar, S.E., M. S. (2018). Pengaruh Profitabilitas, Ukuran Perusahaan dan Leverage terhadap Ketepatan Waktu Pelaporan Keuangan (Studi pada perusahaan sub sektor property dan real estate yang terdaftar di Bursa Efek Indonesia pada tahun 2013-2016). *E-Proceeding of Management*, 5(3), 3606–3613. <https://doi.org/10.1360/N072017-00297>
- 15) Irama, O. N. (2018). Pengaruh Potensi Kebangkrutan Terhadap Harga Saham Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Bisnis Net*, 1(1), 219–226.
- 16) Jensen, M. C., & Meckling, W. H. (1976). THEORY OF THE FIRM: MANAGERIAL BEHAVIOR, AGENCY COSTS AND OWNERSHIP STRUCTURE. *Journal of Financial Economics*, 3(4), 305–360. <https://doi.org/10.1002/mde.1218>
- 17) Kankanamage, C. A. (2016). The relationship between board characteristics and earnings management: evidence from Sri Lanka listed companies. *Kelaniya Journal of Management*, 4(2), 36. <https://doi.org/10.4038/kjm.v4i2.7499>
- 18) Kartikasari, L., & Ifada, L. M. (2010). Analisis Ketepatan Waktu Penyampaian Laporan Keuangan Perusahaan Go Publik di Pasar Modal. *EKOBIS*, 11(1), 415–424.
- 19) Kasmir. (2014). *Analisis Laporan Keuangan*. Jakarta: PT Rajagrafindo Persada.
- 20) Norwani, Norlia Mat., Mohamad, Zam Zuriyati., Chek, T. I. (2011). Corporate Governance Failure and Its Impact on Financial Reporting Within Selected Companies. *International Journal of Business and Social Science*, 2(21), 205–213.
- 21) Novi Asriyatun, A. S. (2020). Analisis Faktor-Faktor Yang Mempengaruhi Ketepatan Waktu Pelaporan Keuangan Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Program Studi D3 Akuntansi STIE Putra Bangsa Kebumen Abstrak Ketepatan waktu pelaporan keuangan merupakan suatu k. *Jurnal Ilmiah Mahasiswa Manajemen, Bisnis Dan Akuntansi*, 2(1), 39–46.
- 22) Pratama, R., & Ciptani, M. K. (2018). The Analysis of Company Size, Complexity of Operation, Profitability, Solvency and Audit Firm Size toward Timeliness of Financial Statement Reporting for Company listed in LQ45 Index in Indonesia Stock

The Impact of Good Corporate Governance as a Moderation of Company Performance on the Timeliness of Submitting Financial Statements

- Exchange (2012 – 2014). *JAAF (Journal of Applied Accounting and Finance)*, 2(1), 18.
<https://doi.org/10.33021/jaaf.v2i1.328>
- 23) Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- 24) Surachyati, E., Abubakar, E., & Daulay, M. (2019). Analysis of Factors That Affect the Timeliness of Submission of the Financial Statements on Transportation Companies in Indonesia Stock Exchange. *International Journal of Research and Review*, 6(1), 190–201. Retrieved from http://www.gkpublication.in/IJRR_Vol.2_Issue6_June2015/IJRR0066.pdf
- 25) Tillah, M., Sebrina, N., & Mulyani, E. (2019). Pengaruh Kinerja Perusahaan, Komite Audit Dan Pergantian Auditor Eksternal Terhadap Ketepatan Waktu Pelaporan Keuangan. *Jurnal Eksplorasi ...*, 1(2), 605–626. Retrieved from <http://jea.ppj.unp.ac.id/index.php/jea/article/view/98>
- 26) Türel, A. G. (2010). Timeliness of Financial Reporting in Emerging Capital Markets: Evidence from Turkey. *European Financial and Accounting Journal*, 5(3), 113–133. <https://doi.org/10.18267/j.efaj.58>
- 27) Utami, M. R., & Darmawan, A. (2019). Effect of DER , ROA , ROE , EPS and MVA on Stock Prices in Sharia Indonesian Stock Index. *Journal Of Applied Accounting and Taxation*, 4(1), 15–22.
- 28) Valentina, I. G. A. P. B., & Gayatri. (2018). Pengaruh Profitabilitas , Ukuran Perusahaan , Struktur Kepemilikan , Leverage , Dan Umur Perusahaan Pada Ketepatan Waktu Pelaporan Keuangan Fakultas Ekonomi dan Bisnis Universitas Udayana (Unud), Bali , Indonesia Fakultas Ekonomi dan Bisnis Universitas. *ISSN: 2302-8556 E-Jurnal Akuntansi Universitas Udayana Vol.22.1. Januari (2018): 572-594*, 22(1), 572–594.
- 29) Wahyuni, P. D. (2020). Corporate Governance and Profitability of The Timeliness of Financial reporting: an Empirical Study of the Mining Sector. *Dinasti International Journal of Economics, Finance & Accounting*, 1(4), 669–681. <https://doi.org/10.38035/DIJEFA>
- 30) Warrad, L., & Omari, A. R. (2015). Effect of Earning Per Share (EPS) and Return On Assets (ROA) Against Share Price on Coal Mining Company Listed in Indonesia Stocks Exchange. *Journal of Resource Development and Management*, 7(6), 79–92.
- 31) Welly Salipadang, Robert Jao, & Beauty. (2017). Pengaruh Mekanisme Good Corporate Governance Terhadap Ketepatan Waktu Penyampaian Laporan Keuangan Dan Dampaknya Terhadap Return Saham. *Dinamika Akuntansi, Keuangan Dan Perbankan*, 6(1), 83–101. Retrieved from www.neraca.co.id

The Effect of Menyama Braya Culture and Social Capital on Family Welfare



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ABSTRACT: According to economic development theory, a country's economic development is determined by social and cultural factors. Gotong royong is a valuable ancestral heritage in Indonesian culture. The purpose of this study is to examine how social capital and community togetherness are implemented in Bali through the Menyama Braya Culture, in order to benefit families and improve their welfare. This study employs a descriptive method to examine the welfare and culture of Menyama Braya in Bali, as evidenced by mutual cooperation during ceremonies, both god and human yadnya. The analysis's findings indicate that Balinese Hindu traditional and religious rituals generally have a beneficial effect on people's incomes and levels of happiness. The application of social capital as embodied in the Menyama Braya Culture may imply a recommendation that the Menyama Braya Culture be preserved as a local culture because it embodies the social capital that can prosper the family.

KEYWORDS: menyama braya culture, social capital, family welfare.

I. INTRODUCTION

According to economic development theory, a country's economic development is determined by social and cultural factors. Gotong royong is a highly prized ancestral heritage in Indonesian culture. According to Ranjabar (Machfiroh, 2011:16), given the pluralism of Indonesian society, it must be accepted that there are three distinct cultural groups, each with its own distinct style. The three groups are as follows: 1) Ethnic culture (commonly referred to in Indonesia as regional culture); 2) Local general culture; and 3) National culture. According to him, ethnic culture is synonymous with local or regional culture. While local general culture is spatially dependent, this can usually be analyzed in urban spaces, where multiple local or regional cultures are brought by each newcomer, but a dominant culture develops, for example, local culture in the city or place. National culture, on the other hand, is the accumulation of regional cultures. This is consistent with Koentjaraningrat's (2009: 89) definition of ethnicity as "a group of people who are bound together by an awareness and identity of cultural unity, in this case the element of language serves as its trademark."

According to Judistira (2008:141), local culture complements regional culture, which is a necessary component of the formation of national culture. In a broad sense, Judistira (2008:113) asserts that regional culture is not only revealed through the expression of a sense of beauty through pure art, but also encompasses all forms, and ways of behaving, acting, and thinking that are significantly different from what they appear to be. According to Judistira, a particular administrative area may be a regional cultural area, or a regional cultural area may encompass several administrative areas, or an administrative area may contain elements of a regional culture. Meanwhile, Moendardjito (in Ayatrohaedi, 1986:40-41) stated that elements of regional culture have the potential to be local geniuses due to their ability to survive. Its characteristics include the following: 1) Resistance to foreign cultures. 2) Is capable of accommodating and integrating elements of foreign culture into the indigenous culture. 3) Possess the capacity for control. 4) Capable of guiding cultural development.

Previous research on how new entrepreneurs are born (Bates, 1995; Robinson and Sexton, 1994) corroborate Shane and Venkataraman's (2000) finding that those with a higher level of social capital than human capital are more susceptible to spotting opportunities deemed sufficient. Those who do find it interesting are more likely to take the first steps toward starting their own business than those who do not. Zhao (2002:563-4) asserts in Primadona (2015) that workers who quit their jobs and find new ones succeed by leveraging social capital, which is typically based on networks, thrust, and reciprocity.

According to Walter A. Friedlander's 1980 definition of social welfare, it is an organized system of social enterprises and institutions aimed at assisting individuals and groups in attaining a satisfactory standard of living and health, as well as

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developing personal and social relationships that enable them to reach their full potential and enhance their well-being in accordance with family needs.

Family-owned social capital is critical for family welfare improvement. According to Li Ren et al. (2013), social relationships between humans are a critical component of the family environment and are critical for the development of human capital for the next generation. According to Katherine N. Rankin's (2002) research, local wisdom entails the community taking an active role in achieving its own welfare. Gandhiadi et al. (2008) explain how Coleman (1988), Fukuyama (1999), Suandi (2007), The World Bank (2011), and Vipriyanti (2011) have conducted extensive research on the role of social capital in improving people's welfare (2011). Similarly, Heath, & Road, 2015; Norcia, & Rissotto, 2013 in Setyari et al. (2018) explain that, in addition to religion, several in-depth studies have demonstrated a link between culture and poverty. Suandi (2014) asserts that social capital plays a critical role in enhancing welfare. Mulyati et al. (2018) demonstrate through a correlation test that social support is significantly associated with improved quality of life and a rising level of welfare.

Balinese people understand Menyama Braya as the primary source of wealth in life, a path to happiness and harmony in life (dharma santhi), and local wisdom, which is widely understood and believed to be quite effective at sustaining social integration, because it encompasses all humans without exception, regardless of blood type, class, religion, ethnic origin, or culture. Menyama Braya is defined as social interaction that is respectful of ethnic, religious, and linguistic differences. Which Menyama Braya is a practical application of the Upanisadic teachings as referenced in the Mahavakya Upanisad. This understanding of the Balinese people is, of course, inextricably linked to the fundamental philosophy animating their social lives, namely "Tri Hita Karana," which is implemented through Parahyangan, which encompasses various religious activities undertaken by the Balinese in order to manifest their devotion to God / the Creator, and which is expressed through yadnya (sacrifice with sincerity). Pawongan, which is to establish harmonious relationships with others in social ties, is carried out through the concept of "segilik seguluk selung selungaka, paras paros sarpanaya" (all the burden are carried out together and with devotion) or "vasudhaiva kumbakam" (we are all one family). Palemahan, with the belief "ulu" (top) and "teben" (bottom), strives to maintain a harmonious relationship between humans and their environment (bottom). The "ulu" area is designated for ritual activities, while the "teben" area is designated for non-religious activities (settlement). Balinese hopes to convey the essence of a harmonious Balinese spatial layout through this concept (Damayana, 2011).

According to Fatmawati (2021), the form of Menyama Braya in Bali can be seen in the mutual cooperation that occurs during ceremonies, both manusa and dewa yadnya. In addition, Menyama Braya can also be seen from Hindus who visit each other when there are relatives or neighbors who are sick. Hindus reflect Tat Twam Asi's philosophies through this visit. Menyama Braya has actually been instrumental in preserving Hindu harmony in Bali. Along with determining the impact of social capital on family welfare and the impact of the Menyama Braya Culture on family welfare, this study conducts a literature review to determine whether the Balinese Hindu Menyama Braya Culture is a form of implementing social capital elements in the local community.

II. METHOD

This is a systematic literature review, which explains how the research and development methodology is used to combine and evaluate research that is relevant to the core of a particular topic. The purpose of a systematic review of the literature is to examine, identify, evaluate, and interpret all research on an interesting phenomenon with a variety of questions in certain appropriate research (Triandini, et.al 2019). This study employs descriptive analysis, which is a systematic presentation of the data obtained, followed by an understanding and explanation for the reader. This study consisted of five stages. It begins by examining Social Capital, Bali's Menyama Braya Culture, and Welfare. Second, identify issues with the Menyama Braya Culture's implementation of Social Capital and its impact on Family Welfare. Third, formulate a problem related to the focus of the problem being studied and analyzed. Fourth, collect data and materials relevant to the problem's focus to bolster the analysis's strength. Fifth, analyze and present Menyama Braya Culture's influence on family welfare. Thus, if this pattern is implemented sustainably and in conjunction with other capital, the community's economic, social, and food security constraints can be overcome, allowing this model to be applied in the broader community as a method of implementing social capital based on indigenous wisdom and culture in the region. local concern for the family's welfare. Although not directly applied, because this research can be analyzed and studied through various journals and books.

III. RESULT AND DISCUSSION

A. Menyama Braya Culture as the Implementation of Social Capital

According to Setyari (2018), the Balinese people's customs and culture reflect an expressive configuration dominated by Hindu religious values and philosophies. The configuration encompasses aspects of Balinese society such as religious essence,

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life patterns, social institutions, and arts. Due to the close relationship between culture and religious norms, the Balinese people's life pattern is extremely rigid, including in terms of regulating household expenditures in order to become members of adat (krama), which confers exclusive rights to assistance and acceptance of the family's social environment. If a family encounters difficulties, the other customary members in one banjar will gladly and voluntarily assist in alleviating the burden. This means that any obligation to follow customary manners will not be an issue for the family in question.

Fukuyama stated in Clara (2020) that social capital is comprised of several components, including trust that has existed for a long period of time and a fairly complicated process by which social capital plays a significant role in society's various activities. This is consistent with Syamsul Alam and Muhammad Imam Makruf's (2016) assertion in Triana's research (2019) that, in addition to economic capital (financial and means of production), social capital, such as trust, kinship, and solidarity, is a significant factor in well-being. Suparman Abdullah (2013) explains that social capital focuses more on the potential of groups and patterns of relationships between individuals within and between groups by examining social networks, norms, values, and beliefs developed by group members and adopted as group norms.

Putnam (1993) explains that social capital refers to the characteristics of social organization, such as trust, norms, and networks, that contribute to society's efficiency by facilitating coordinated action. Social capital is a collection of values, norms, and beliefs that facilitate people cooperating actively and cooperatively to accomplish their goals. Individuals, groups, and even entire countries can all benefit from the concept of social capital. Through the development of active relationships, democratic participation, community strengthening, and trust, communities in these societies build social capital.

It can be said that the Balinese Hindu Menyama Braya Culture, which is a reflection of social capital in eastern culture, not only plays a Thrust role in a network and norms without the involvement of religiously intense meetings, but each other has more than just known each other, because mutual trust is not always mutual. Not only participation in social organizations, but also the intensity of meetings between members of the pasemetonan in various religious activities is believed to be capable of fostering emotional bonds (fanaticism) among association members. Menyama Braya culture developed in eastern indigenous communities, particularly in Bali, and is synonymous with a sense of community through various series of Yadnya ceremony activities (holy sacrifices in Hindu teachings). The religious overtones in the intensity of these meetings foster an extremely strong emotional bond between pasemetonan members). Balinese Hinduism The implementation of social capital as reflected in the Menyama Braya Culture enables the conclusion that the Menyama Braya Culture has an effect on welfare.

B. The Effect of Social Capital on Family Welfare

Gotong royong is a legacy of noble values that are extremely valuable as social interaction and as social capital that contributes to the realization of mutual progress in the Indonesian culture, reflecting the spirit of reciprocity, mutual trust, and the existence of social networks. The diversity of economic information that occurs in a community can be viewed as an activity that has an effect on the community's Family Welfare. Zhao (2002:563-4) states in Primadona (2015) that workers who quit their jobs and find new ones succeed by leveraging social capital, which is typically comprised of networks, trust, and reciprocity. What is accomplished in entrepreneurship and business will progress rapidly if it is able to leverage social capital.

Reza Amarta Prayoga 2020 highlights research findings that demonstrate how poor families utilize intangible assets in the form of social capital. Poor families accumulate social capital in the form of family members, neighbors, coworkers, and colleagues, as well as social gathering networks. Additionally, social capital can be used as a safety valve to ensure survival. As a result, poor families must strengthen their social capital by leveraging the community's collective potential. Additionally, it is necessary to strengthen poverty alleviation programs founded on social capital empowerment in order to foster community autonomy and diminish community individuality.

According to Katherine N. Rankin's (2002) research, local wisdom entails the community taking an active role in achieving its own welfare. Gandhiadi et al. (2008) explain how Coleman (1988), Fukuyama (1999), Suandi (2007), The World Bank (2011), and Vipriyanti (2011) have conducted extensive research on the role of social capital in improving people's welfare (2011). Similarly, Heath, & Road, 2015; Norcia, & Rissotto, 2013 in Setyari et al. (2018) explain that, in addition to religion, several in-depth studies have demonstrated a link between culture and poverty. Suandi (2014) asserts that social capital plays a critical role in enhancing welfare. Mulyati et al. (2018) demonstrate through a correlation test that social support is significantly associated with improved quality of life and a rising level of welfare. According to Setyari et al. (2018), welfare as measured by income confirmed that spending on customs and religious rituals had an effect on income, but the effect was positive and significant.

Other studies' findings suggest that social capital indirectly predicts welfare. It is noted that social capital has an effect on entrepreneurial behavior and accounts for 79% of entrepreneurial behavior (Thobias, et al. 2013). Suandi (2014) stated that existing research indicates a link between social capital and welfare, with the higher the family's social capital, the higher the

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level of welfare. It is asserted that social capital not only has a cognitive (psychological) context, but also occupies a significant space in economic development (Syahra, 2003).

C. The Effect of Trust on Family Welfare

Trust is a manifestation of a society's social dynamics. Trust plays a critical role in enhancing family welfare (Raden Ahmad, 2017). Social capital serves a critical function, namely confidence, which is the psychological realm of an individual as an attitude that encourages someone to make decisions after weighing the risks to be accepted, cooperation based on trusting relationships between individuals, efficiency and effectiveness at work, and bringing order and reducing chaos. social, binds all social components together and ensures that the social structure remains intact (Mollering in Alfiasari 2008).

The strong relationship between trust and household expenditure demonstrates that trust social capital is effective at increasing household income, which increases the community's economic capability, which has an effect on increasing household spending. This indicates that household welfare is improving, as evidenced by an increase in household spending and an increase in community trust. When relationships are established between individuals or groups/organizations in society, trust is measured in terms of a person's level of confidence in their words, agreements, and actions consistently (Suandi, 2014). This can be interpreted to mean that social capital is a critical component of enhancing welfare because it is a manifestation of individuals' social motives in society.

D. The Effect of Reciprocal Relationship on Family Welfare

Reciprocity is a form of interaction in which individuals and groups give, receive, and assist one another. It can arise as a result of social interactions between individuals and groups. Reciprocity is defined in social capital as a person or group's participation in a communication process or joint activity in specific social situations (Agung Dwi Pramono, 2012). In practice, reciprocity refers to members of a community participating in other community activities. The degree of reciprocity is determined by the strength of the community's norms and the interactions between communities.

The amount of social capital possessed by a member of a group is contingent upon the quantity and quality of the network of relationships that can be established, as well as the volume of economic, cultural, and social capital possessed by all members of the network of relationships (Bourdieu in Rusydi Syahra, 2013). Individuals with a high level of social capital will facilitate the resolution of social welfare issues. This is possible, particularly among people who are accustomed to living in an atmosphere of mutual trust, who are united and have extensive social relationships, and who are encouraged to live in a mutually beneficial and giving manner by the spirit of goodness.

E. The Influence of Menyama Beraya Culture on Family Welfare

Economic development is determined by social and cultural factors. Gotong royong and the spirit of community are extremely valuable ancestors in Indonesian culture. The spirit of togetherness towards progress is what is called social capital. With the presence of social capital consistent with the Indonesian people's culture, the path to national economic development will be strengthened.

The purpose of this discussion is to examine culture based on the Menyama Braya concept as a source of inspiration for innovation that is maintained to improve economic welfare. When cultural values are applied to daily life in society and the state, they improve a person's quality of life.

Many practitioners outside of Bali argue that current ceremonies are a contributing factor to poverty. This is justified by the significant portion of income that must be spent on the various traditional ceremonies that the Balinese Hindu community must perform. There are studies that address the fundamental question: Are customs and culture to blame for the Hindu community's decline in welfare in Bali? The data used are primary sources from 350 Hindu family heads in Bali who are classified as poor. Religion can aid in poverty alleviation. Religion is not only a moral sensibility that reminds people to be generous to the poor, but also a way of seeing the poor as fellow human beings. There is an opinion that religious and customary activities undertaken by the Balinese Hindu community contribute to an increase in poverty, which appears to be supported by data on the significant portion of expenditure devoted to these activities. Family income will be distributed again in the Balinese Hindu community in the form of consumption and yadnya expenditure. The analysis's results suggest that Balinese Hindu traditional and religious rituals generally have a beneficial effect on people's incomes and levels of happiness. As such, it is not appropriate to assert that customs and religion have impoverished the Balinese Hindu community. This result also demonstrates a shift in the Balinese Hindu community's understanding of religion. The implementation of ritual ceremonies in the form of upakara (yadnya) and the application of ethics in social life allow for a more nuanced interpretation of a person's religiosity (susila).

Poverty is frequently associated with the welfare of the family (rather than the individual). Absolute poverty refers to the inability to meet basic needs due to a lack of money. Traditional activities in Bali are quite intense. Because the intensity of

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customary activities is quite high, there will inevitably be an increase in the costs associated with their implementation. When viewed through the lens of opportunity cost, the time spent on these activities is proportional to the income lost if that time is spent working. Thus far, the social burden on customs and culture that must be borne by the poor and the rich is identical, implying that the poor bear an extremely heavy burden.

The Balinese people's customs and culture reflect an expressive configuration dominated by Hindu religious values and philosophies. The configuration encompasses aspects of Balinese society such as religious essence, life patterns, social institutions, and arts. Due to the close relationship between culture and religious norms, the Balinese people have a very rigid way of life, including in terms of managing household expenses.

The findings of Setyari et al. research's analysis indicate that being a Hindu in Bali with various traditional obligations and ritual routines has no effect on the poor in Bali's income level. Surprisingly, spending on rituals increased household income significantly. This means that the more money spent on rituals, the more money earned by the household. Although these findings raise additional questions about the type of pathway that has a beneficial effect on ritual expenditures on household income. This ritual is frequently associated with yadnya. If you take the word yadnya literally, it refers to various forms of ceremonial offerings and worship made by Hindus to Ida Sang Hyang Widhi Wasa out of a sincere conscience (Sukrawati, 2017). Individuals' sincerity of conscience is assumed to be beneficial to their ability to give their best. When ritual expenditures are divided into religious expenditures (which are relatively more flexible) and adat/other expenditures (relatively more rigid).

Separating adat (in the form of peson-peson, ayahan, patisan, and various other forms) from religious expenditures is expected to provide a clearer picture of the "objection" that is believed to impoverish the Balinese people. Consistently, the results indicate that all customary obligations and religious rituals have no adverse effect on household income. Additionally, the frequency of various traditional activities, community gatherings, and religious rituals has no detrimental effect on people's income. The findings of this study indicate that a person's sense of happiness is positively correlated with their frequency of participation in traditional activities and religious rituals. The more frequently they participate in activities in their environment, the more content they feel. This finding contradicts the majority of people's belief that participating in various traditional activities and religious rituals in Bali will make them feel uneasy and reduce their happiness. This result also demonstrates that welfare can be quantified not only in terms of asset ownership, but also in terms of the sense of belonging in one's social environment. Satisfaction with social relationships becomes the most important factor influencing a person's level of happiness, as demonstrated by satisfaction with social relationships. The more satisfied an individual is with the social environment's acceptance of them, the more happiness that individual can experience. According to Wisnumurti (2010), Menyama Braya can be used not only in conflict situations, but also as a guide for everyday life in overcoming social, economic, and political problems that frequently arise as a result of social life's dynamics..

IV. CONCLUSIONS

Welfare is defined as a value system for each individual, family, and community that encompasses economic, social, and spiritual dimensions in order to carry out efforts to meet physical and spiritual needs. To accomplish this goal, a strong and intensive level of connection is required in order to fully utilize the social capital that has been acquired. The high level of customary harmony for which Indonesia is famous is evident in the implementation of social capital and community togetherness both between individuals and groups or communities in Bali via the Menyama Braya Culture, which is extremely beneficial for families seeking to improve their welfare. Social capital is the most valuable resource in people's lives because it is a network/family relationship with the outside world, both formal and informal, that enables society to solve a variety of problems, including the problem of family food needs. In other words:

1. Social capital, specifically trust, has an effect on family welfare, with a higher level of trust between communities implying a higher level of family welfare. Social capital is a reciprocal relationship that has an effect on the family's welfare, with the stronger the reciprocal relationship between the community, the greater the family's welfare. Social capital, specifically social networks, has an effect on family welfare, with the greater the social network between communities, the greater the family's welfare.
2. The study's findings indicate that a person's sense of happiness is positively correlated with their frequency of participation in traditional activities and religious rituals. The more frequently he participates in activities in his environment, the more content he feels.
3. It can be asserted that the Balinese Hindu Menyama Braya Culture, as a form of social capital in Eastern culture, not only acts as a Thrust in a network and norms without the need for meetings, but also possesses a profound religious intensity, such that each other has accomplished more than simply getting to know one another. Not only participation in social organizations is suspected to have created emotional bonds, but also meetings between members of the

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pasemetonan in various religious activities (fanaticism). Menyama Braya culture is synonymous with a sense of community through various Yadnya ceremony activities (holy sacrifices in the teachings of Hinduism). Thus, the Menyama Braya Culture's implementation of social capital can imply a concluding statement that the Menyama Braya Culture has an effect on Family Welfare.

Based on the conclusions of the study, it can be suggested that Menyama Braya, as a local culture, should be preserved because it embodies the social capital necessary for family prosperity. According to the concept developed and supported by the Bali socio-cultural community in general, if this pattern is implemented sustainably and in conjunction with other capital, the community's economic, social, and food security constraints can be overcome, allowing this model to be applied in other areas. the larger community as a means of implementing indigenous wisdom and culture in the local area for the family's welfare..

REFERENCES

- 1) Adi, Isbandi Rukminto. 2013. *Social Welfare, and Development Studies*. Jakarta: PT Raja Grafindo Persada.
- 2) Alfiasari (2008). *Analysis of Social Capital in Economic Empowerment of Poor Family at Kedung Jaya Village, Tanah Sareal Sub District, Bogor City*. FEMA IPB. Vol. 1 No. 1 – 42.
- 3) Ayatrohadi (1986). *National Cultural Personality (Local Genius)*. Jakarta: Student Library
- 4) Badrudin, Rudy. 2012. *Economics of Regional Autonomy*. Yogyakarta: UPP STIM YKPN
- 5) Cahyono. B (2014) *The Role of Social Capital in Improving the Welfare of Tobacco Farmers in Wonosobo Regency*. ECOBIS. Vol.15, No.1, 1 – 16.
- 6) Clara (2020) Clara. EF, Krisnawati. A. (2020). *The Role of Social Capital as a Mediator of Financial Literacy and Financial Inclusion at Productive Age in Gunungkidul Regency*. *Journal of Business Research and Management Tirtayasa (JRBMT)*. Volume 15, No.1.
- 7) Damayana, 2011, *Menyama Braya: Study of Change in Balinese Society*, Faculty of Theology, Satya Wacana Christian University, ISBN 602918203X, 9786029182033
- 8) Fahrudin (2012) *Introduction to Social Welfare*, 2012, PT. Refika Aditama,
- 9) Fatmawati (2021) Fatmawati. K (2021). *Menyama Braya's article in the Upanishads Vol 1, No 1*.
- 10) Friedlander, Walter A. 1980. *Social Welfare*. New Jersey: Prentice Hall, 1980
- 11) Gandhiadi, et.al. (2018) *The Role of Government, Social Capital, and Business Performance on the Subjective Welfare of Weaving Industry Players in Jembrana Regency*, *Bali Journal of Mathematics* Vol. 8, No. 1, ISSN: 1693-1394, pp. 26-40.
- 12) Iskandar, A, 2008, *Analysis of Family Resource Management Practices and Their Impact on Family Welfare in Kab. Bogor and Bogor City*. *Transdisciplinary Journal of Sociology, Communication, and Human Ecology*, ISSN: 1978-4333, Vol.02, No, 01. P 81-98
- 13) Judistira, K.G. (2008). *Sundanese Culture: Across Time Against the Future*. Bandung: Lemlit UNPAD
- 14) Koentjaraningrat (2009:89), *History of Anthropological Theory I*, Jakarta: UI Press
- 15) Li Ren, et al. (2013) Li Ren, Guangwei Hu Ren, L. & Hu. G (2013). *A comparative study of family social capital and literacy practices in Singapore*. *Journal of Early Childhood Literacy*, 13, 98-130.
- 16) Listyawati and Ayal (2018) Listyawati. A, Ayal. L.N (2018). *Local Culture ss A Form of Community Social Solidarity*. *Social Welfare Research Information Media*, Vol. 42, No. 3, 253-262.
- 17) Mariani et.al (2015) *The Effect of Social Capital and Social Support toward Elderly Welfare Members of Home Care Program*. *MCC Journal*. Vol 14 No 2; 137 – 148.
- 18) Mulyati, et al. (2018), *The Effect of Family Social Support on Quality of Life and Elderly Welfare*. *Journal of Family Welfare and Education*. E-ISSN: 2597-4521.
- 19) Machfiroh. R, 2011, *Revitalizing National Character Through Citizenship Education with Local Culture Development (Case Study of Macapat Culture in the Surakarta City Community, Central Java)*. Master's Thesis at SPS UPI Bandung: Graduate School of the University of Education Indonesia.
- 20) Nugraha, 2021, *The Role of Social Capital in the Development of Tourism Villages as Tourist Media Attacks*, Volume 19, Number 2, Issn 16935969 Eissn 26858436
- 21) N. Triana, 2019, *The Role of Social Capital in Improving the Welfare of Pre-Prosperous Families in Pallangga District, Gowa Regency*
- 22) Putnam, Robert D. (1993). *Making democracy work: Civic Traditions in Modem Italy*. Princeton University Press. New Jersey: USA.
- 23) Primadona (2015) *The Role of Social Capital and Human Capital in Entrepreneurship*. SNEMA. ISBN: 978-602-17129-5-5.

“The Effect of Menyama Braya Culture and Social Capital on Family Welfare”

- 24) Reza Amarta Prayoga 2020, Activation of Social Capital as a Strategy to Maintain Survival
- 25) Setyari, et.al (2019) The Proportion of Cultural Indigenous Peoples in Bali and Its Influence on the Welfare of Local Communities, *Kawistara Journal*, Vol :9, Issn 2088-5415 (Print) Issn 2355-5777 (Online), No. 1, Pages :91-106
- 26) Suandi (2014) Relationship of Social Capital with Family Economic Welfare in Rural Areas Jambi. *Community Journal of Research & Learning in Sociology and Anthropology* 6 (1) 38-46. DOI: 10.15294.
- 27) Sunarti. E (2016), Indicators of Prosperous Families: History of Development, Evaluation, and Sustainability, Faculty of Human Ecology, IPB, ISBN: 978-602-8665-05-6
- 28) Shahra. R (2003) Social Capital: Concepts and Applications *Journal of Society and Culture*, Volume 5 No. 1.
- 29) Widyastuti (2012), Analysis of the Relationship Between Worker Productivity and Education Level of Workers on Family Welfare in Central Java in 2009. *Economics Development Analysis Journal* 1
- 30) Wisnumurti (2010) Wisnumurti, O.W. 2010. Managing the Value of Local Wisdom in Realizing Religious Harmony (An Empirical-Sociological Review). [Http://www.korpribali Foundation.Org/Artikel-Dan-Berita/59-Management-Nilai-Kearifan-Lokal-dalam-MeManifest-Harmony-Umat-Beragama](http://www.korpribali-foundation.org/artikel-dan-berita/59-management-nilai-kearifan-lokal-dalam-meManifest-Harmony-Umat-Beragama)

Consumption Behavior of Halal Cosmetic Products: The Mediating Role of Trust on the Effect of Halal Certification on Purchase Intention



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ABSTRACT: Halal certification is still no guarantee that consumers will purchase the product. This study aims to analyze the role of consumer trust in mediating the relationship between halal certification and intentions, where intentions ultimately impact the consumption behavior of halal cosmetic products during the Covid-19 pandemic. The population of this study is the female population in Jakarta aged 15-60 years. The number of research samples to be taken is 160 respondents with the purposive sampling technique. Data will be collected using questionnaires and analyzed using Partial Least Square (PLS) analysis method. Based on the research results, halal certification positively affects consumer trust, and trust has a positive influence on consumer intentions to buy halal products. Halal certification also positively influences consumer intentions to buy halal products. In addition to direct influence, halal certification indirectly affects intentions—the effect of halal certification on intentions through trust mediation. Furthermore, intention positively influences the consumption behavior of halal products.

KEYWORDS: Halal Certification; Trust; Intention; Behavior; Halal Cosmetics

I. INTRODUCTION

The Covid-19 virus outbreak provides several lessons. One of them is that every violation of Islamic Sharia will cause harm, damage, and destruction (Rifa'i et al., 2020). As a country with the largest Muslim population globally, Muslims can give their best role through the halal industry. The halal industry is in the spotlight during a new normal era when hygiene is the current priority. The potential is getting more prominent along with the new normal order, which prioritizes cleanliness or hygiene (Kamila, 2020).

Halal means permitted or based on Islamic law, which refers to products permitted for consumption by Muslims (Ambali & Bakar, 2013). The concept of halal emphasizes cleanliness, safety, process, manufacture, and production on a good platform in Islam (Hussain et al., 2016). Halal products are products that are declared halal by the provisions of Islamic law (Kamila, 2020). The product categories included in halal products are food and beverages and cosmetics and personal care, pharmacy, tourism, and hospitality (Islam & Chandrasekaran, 2015).

One of the halal product categories is cosmetics and personal care. Cosmetic and personal care products are considered halal only when all ingredients meet halal and sharia requirements and haram materials such as alcohol and ingredients derived from pork are not used in their manufacture, and all ingredients must be produced, stored, packaged, and shipped according to halal standards (Islam & Chandrasekaran, 2015). Before the Covid-19 pandemic in 2019, Indonesia was in the second position (\$ 4 billion) after India (\$ 6 billion) in the halal cosmetics shopping market. Muslim spending from 1.9 Billion Muslims on cosmetics globally in 2019 also increased compared to 2018, namely to \$ 66 billion, with India, Indonesia, and Russia representing the top three countries by expenditure (DinarStandard, 2020).

The Covid-19 pandemic has an impact on decreasing public consumption activities which have started to occur in all products, including halal cosmetic products (Sumarni, 2020). The Covid-19 pandemic has significantly impacted beauty products and cosmetics sales, especially make-up because many consumers are forced to live and work from home. Given the profound and widespread impact of Covid-19, global Muslim consumer spending on cosmetics is expected to fall by 2.5% to \$ 64 billion by 2020 (DinarStandard, 2020).

Consuming halal products is an obligation for Muslims. Therefore, halal cosmetic manufacturers are trying to obtain halal certification so that Muslims can easily accept their products. Consumers see product quality assurance through the existence of

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halal certification. Halal certification, whether in the form of a certificate, logo, trademark, or stamp, is a guarantee that the product has gone through a rigorous and extensive inspection by a legitimate Islamic certification authority and shows that the source, material, and process are based on Sharia principles (Al-Mazeedi et al., 2013; Nawi & Nasir, 2014).

Consumers will only trust halal products if a halal certification (Bakar et al., 2017). The finding also consistent with the findings of Omar et al., (2012), where there is no other way how a consumer can determine the halalness of a product except by relying on a credible halal logo. Halal product manufacturers include halal certification to increase consumer trust (Rahman et al., 2015). Halal certification has a positive and significant effect on consumer trust (Novagusda & Deriawan, 2019; Yusuf et al., 2019). Halal certification is proven to increase consumer trust in halal products (Mangkarto, 2005). Halal certification also has a positive and significant effect on the intention to buy halal products (Faturrohman, 2019; Fitria et al., 2019; Majid et al., 2015; Nurhasanah & Hariyani, 2017). Halal certification provides quality assurance assessed by consumers and leads to broader acceptance of products (Rajagopal et al., 2011). However, halal certification was also found to have no significant effect on buying intention in halal products (Putri & Rimadias, 2020; Setiawan & Mauluddi, 2020). This means that halal certification has not been guaranteed to be a factor that significantly influences intention in buying a product.

Meanwhile, consumers usually buy products with the halal logo printed on the packaging and trust the producers wholeheartedly (Alqudsi, 2014). This shows the validity of consumers' trust in the product's halal status (Aziz & Vui, 2012). Based on the Commitment-Trust Theory of Relationship Marketing, trust plays an essential role in instilling consumer trust and creating commitments considered important in purchasing behavior (Morgan & Hunt, 1994). Thus, trust can mediate the effect of halal certification on purchase intention. Zakaria et al., (2015) show that trust plays a role in mediating the relationship between halal certification and intention.

Trust in halal product producers is essential to shape consumer intentions and behavior. This is based on consumers' preference to buy products from trusted brands and well-known manufacturers (Ismail et al., 2019). Trust has a positive and significant effect on buying intention in halal products (Handriana et al., 2020; Romle et al., 2016; Triantoro et al., 2020). However, Setiawan & Mauluddi, (2020) show that consumer trust does not significantly affect the intention to buy halal products. This means that consumer trust has not been guaranteed to be a factor that significantly influences the intention to buy halal products.

Futhermore, the intention will influence consumption behavior. Intention would depict the people's plans and motivations to purchase a product in the near future (Wibowo et al., 2020). Intention positively affects the consumption behavior of halal products (Huda et al., 2018; Kadengkang & Linarti, 2020; Khan et al., 2017). However, Ma'rifat et al., (2015) show that intention has a negative and significant effect on the consumption behavior of halal products. This means that the intention can reduce the consumption behavior of a halal product.

Based on the description above, findings show that halal certification does not significantly affect purchase intentions, even though halal cosmetic manufacturers are trying to obtain it so that Muslims can easily accept their products. This shows the validity of consumers' trust in the product's halal status. Therefore, seeing the effect of halal certification on intention through trust is essential where in turn, the intention will impact the behavior of consuming halal products. By the main focus of Theory of Planned Behavior (Ajzen, 1985) namely the individual's intention to perform certain behaviors, many factors have influenced the stability of behavioral intentions.

Research on the consumption behavior of halal products is important because halal cosmetic manufacturers are trying to obtain halal certification so that Muslims can easily accept their products. In addition, the majority of Indonesia's population is Muslim, plus the emergence of halal issues during the Covid-19 pandemic. The halal products that focus on this research are cosmetic products and halal personal care from local brands in Indonesia.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) has proven to be the best way of predicting individual consumption intentions (Ajzen, 1991). In addition, TPB provides a socio-psychological framework for understanding and predicting the determinants of human behavior and integrating several fundamental concepts in the social and behavioral sciences (Armitage & Conner, 2000). TPB is a conventional model helpful in predicting consumer buying behavior (Bashir et al., 2019).

Behavior

Kotler & Keller, (2012) define consumer behavior as the study of how a person chooses to buy uses or no longer uses goods, services, ideas, or experiences to fulfill their needs and desires. Consumer behavior also means a reflection of

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consumer decision-making and the physical activity that a person does when evaluating, obtaining, using, or not an item and service (Shamser, 2016). Their buying intention will first influence a person's buying behavior before the purchase decision is actually implemented (Ajzen, 1985).

The theory of consumer behavior built on Islamic sharia is different from conventional theories. The primary differences are related to the fundamental values that form the basis of theory, motives, and consumption goals to budget allocations (Huda et al., 2018). The consumption behavior of halal products can be reflected through the regular use of halal products, routine purchases of halal products, purchases of halal products compared to non-halal products, large budget allocations in purchasing halal products (Adiba, 2019).

Halal Certification and Trust

Halal certification identifies that the product meets halal requirements (Razalli et al., 2013). Halal product manufacturers include halal certification to increase consumer trust (Rahman et al., 2015). Halal certification has a positive and significant effect on consumer trust (Novagusda & Deriawan, 2019). The higher consumer perception regarding halal certification impacts increasing consumer trust to buy halal products. Based on the description above, the following hypothesis can be formulated:

H1 = Halal certification has a positive and significant effect on trust.

Trust and Intention

Trust in halal product manufacturers is essential to shape consumer intentions and behavior. This is based on consumers' preference to buy products from trusted brands and well-known manufacturers (Ismail et al., 2019). Consumer trust has been shown to positively and significantly affect buying intention in halal products (Handriana et al., 2020; Romle et al., 2016; Triantoro et al., 2020). The existence of a high level of trust from consumers impacts increasing their intention to buy halal products. Buying intention is the stage where consumers form their choice among several brands that are incorporated in the device of choice, then ultimately make a purchase on the most preferred alternative or the process where consumers buy an item or service based on various considerations (Septianti et al., 2021). Trust becomes a consumer action to depend on the integrity of the product provider accompanied by positive expectations and perceptions from consumers so that the individual will then use halal products (Nurachmi & Setiawan, 2020).

Based on the description above, the following hypothesis can be formulated:

H2 = Trust has a positive and significant effect on buying intention in halal products.

Halal Certification and Intention

Halal certification provides quality assurance that is valued by consumers and leads to broader product acceptance (Rajagopal et al., 2011). Halal certification has been shown to positively and significantly affect buying intention in halal products (Faturohman, 2019; Fitria et al., 2019; Majid et al., 2015; Nurhasanah & Hariyani, 2017). The higher the consumer's perception of the halal certification of a product, the higher the consumer in buying intention in halal products.

Based on the description above, the following hypothesis can be formulated:

H3 = Halal certification has a positive and significant effect on buying intention in halal products.

Halal Certification, Trust and Intention

Halal certification is used to inform and convince consumers that the product is halal and sharia-compliant (Shafie & Othman, 2006). However, halal certification was found to have no significant effect on intention in buying halal products (Putri & Rimadias, 2020; Setiawan & Mauluddi, 2020). Trust can mediate the effect of halal certification on buying intention. Zakaria et al. (2015) show that trust acts as a mediator between the relationship between halal certification and buying intention. Based on the description above, the following hypothesis can be formulated:

H4 = Trust mediates the effect of halal certification on intention in buying halal products.

Intention and Behavior

Ajzen, (1985) argues that human behavior is first influenced by intention (behavior intention). Thus, a person's buying behavior will be influenced by buying intention before the purchase decision is actually implemented. Intentions have a positive and significant effect on the consumption behavior of halal products (Huda et al., 2018; Kadengkang & Linarti, 2020; Khan et al., 2017). The higher a person's intention towards halal products, the higher the consumption behavior.

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Based on the description above, the following hypothesis can be formulated:

H5 = Intention has a positive and significant effect on the consumption behavior of halal products.

Based on the hypothesis development, this study's framework (research model) is illustrated in Figure 1.

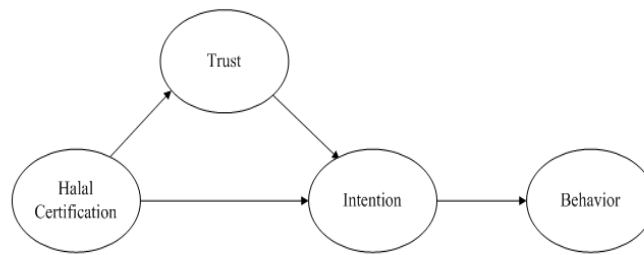


Figure 1: Research Model

III. METHOD

Type of Research

This research is causal research, which explains the effect of independent variables on the dependent variable. The variables to be used consist of halal certification, trust, intention, and behavior. Measuring variables in this study will use a Likert scale where the latent variables to be measured are translated into indicators. Then these indicators are used as a starting point for compiling instrument items (questionnaires) which can be in the form of statements or questions (Sekaran & Bougie, 2016). This study will use a Likert scale with a range of categories 1-7, namely 1 = strongly disagree; 2 = disagree; 3 = quite disagree; 4 = neutral; 5 = quite agree; 6 = agree; 7 = totally agree.

Variables

Latents	Indicators	References
Halal Certification	<ul style="list-style-type: none"> • knowledge of halal certification bodies (HC1), • the inclusion of the halal logo on product packaging (HC2), • product content according to halal certification (HC3). 	(Aziz & Chok, 2013)
Trust	<ul style="list-style-type: none"> • product performance that meets expectations (TR1), • the product can be trusted (TR2), • the product is reliable (TR3), • product confidence (TR4). 	(Handriana et al., 2020)
Intention	<ul style="list-style-type: none"> • Interest in buying halal products (IN1) • main preference on halal products (IN2), • tendency to refer products to others (IN3) • tendency to always seek information about products of interest (IN4). 	(Haro, 2018)
Behavior	<ul style="list-style-type: none"> • the routine use of halal products (BV1), • routine purchases of halal products (BV2), • purchases of halal products compared to non-halal products (BV3), • significant budget allocations in purchasing halal products (BV4). 	(Adiba, 2019)

Population and Sample

The population of this study is Jakarta residents who are female and aged 15-60 years, where the data in 2020 amounted to 3.304.885 people (BPS-Statistics of DKI Jakarta Province, 2020). Due to the absence of a complete sampling frame, this study uses a non-probability sampling technique, namely purposive sampling, with the respondent's criteria (1) being Muslim (2) having bought and used local brands of halal cosmetics and personal care products at least once. In the absence of a complete sampling frame and the method of analysis to be used is SEM analysis, this number of studies requires a sample of at least five times the number of parameters to be analyzed (Ferdinand, 2014). This study requires a sample of at least five times 16 indicators, namely 90 respondents. However, considering many women in Jakarta, the target number of respondents in this study was 160 (10 times 16 indicators).

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Analysis Method

This research use component/variance-based structural. Component/variance based structural equation modeling is an alternative to covariance-based SEM known as partial least square (PLS). SEM-PLS consists of measurement and structural models (Ghozali & Latan, 2015).

IV. RESULTS AND DISCUSSION

Evaluation of Measurement Model (Outer Model)

Evaluation of the measurement model can be seen from convergent validity results. Convergent validity is seen from the value of the outer loading. The value of the outer loading indicator, which is more significant than 0.7, is valid. But the value of outer loading which is greater than 0.6 still tolerated for exploratory study. The value of the outer loading of this study can be seen in Figure 2.

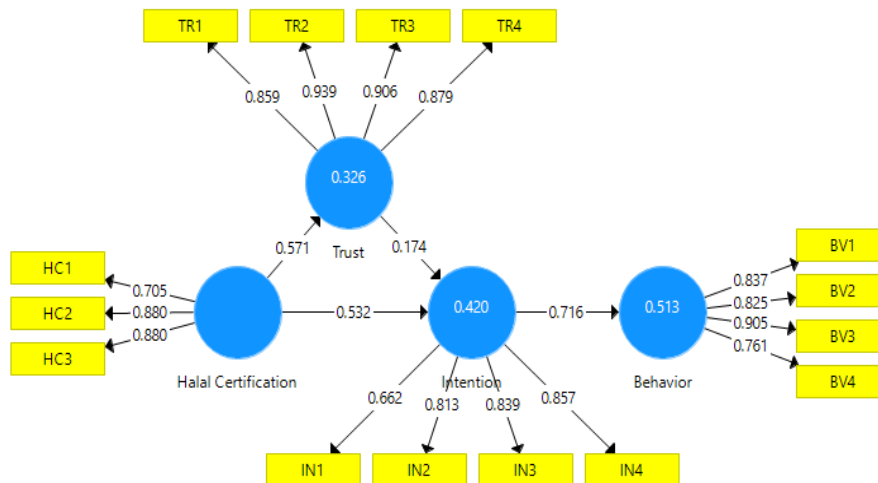


Figure 2: The Values of Outer Loading

Based on Figure 2, all indicator variables have an outer loading value greater than 0.6. It means all indicators are valid. It can be concluded that the construct has good convergent validity. The other evaluation of the measurement model is seen in reliability and construct validity results. The reliability of a construct can be seen from the value of Composite Reliability and Cronbach's Alpha.

The construct validity is seen from Average Variance Extracted (AVE) value. It compares the square root value of AVE with the correlation between respective latent constructs in the model. Constructs have good reliability if the Composite Reliability value is more significant than 0.8 and the value of Cronbach's Alpha is more significant than 0.7. The values of Composite Reliability, Cronbach's Alpha, and Average Variance Extracted (AVE) can be seen in Table 3.

Table 3: The Values of Composite Reliability, Cronbach's Alpha, Average Variance Extracted (AVE)

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Behavior	0.853	0.901	0.695
Halal Certification	0.759	0.864	0.682
Intention	0.808	0.873	0.635
Trust	0.918	0.942	0.803

Based on Table 3, all constructs are valid. This can be seen from all constructs that have AVE values above 0.5. All constructs are reliable. This is because all constructs must have Composite Reliability values, which are more significant than 0.7. The values of Cronbach's Alpha are more significant than 0.7.

The following evaluation of construct validity is discriminant validity by comparing the square root values of AVE with the correlation between the respective latent constructs. If the AVE square root value of each construct is greater than the correlation between constructs, the model has good discriminant validity. The comparison of AVE

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square root values with inter-construct correlations can be seen through The Fornell-Larcker Criterion (see Table 4).

Table 4: The Fornell-Larcker Criterion

	Behavior	Halal Certification	Intention	Trust
Behavior	0.834			
Halal Certification	0.612	0.826		
Intention	0.716	0.632	0.797	
Trust	0.604	0.571	0.478	0.896

The Fornell-Larcker Criterion shows that the diagonal value in bold is the square root of AVE, while other values are the correlations between the respective latent construct. The discriminant validity is achieved when a diagonal value (in bold) is higher than its row and column values. It can be concluded that discriminant validity for all constructs is achieved (Table 4).

Evaluation of Structural Model (Inner Model)

Evaluation of the structural model looks at the relationship between constructs and the significance values indicated by the value of T-statistics based on PLS output. The coefficient path that has a T-statistic value ≥ 1.654 is significant. The path coefficient can be seen in Table 5.

Table 5: Path Coefficient

	Original Sample (O)	T Statistics	P Values	Results
Halal Certification -> Intention	0.532	5.848	0.000	Significant
Halal Certification -> Trust	0.571	8.150	0.000	Significant
Intention -> Behavior	0.716	15.410	0.000	Significant
Trust -> Intention	0.174	2.299	0.011	Significant

Based on Table 11, the direct relationship test between constructs shows that the image construct of halal certification has a positive effect on trust with a parameter coefficient value of 0.571 and is significant because the p-value is $0.000 < 0.05$ and the T-statistics value is $> T\text{-table}$ ($8.150 > 1.654$). The trust construct has a positive effect on intention with the parameter coefficient value of 0.174 and significant because the p-value is $0.011 < 0.05$ and the T-statistics value is $> T\text{-table}$ ($2.299 > 1.654$). The halal certification construct has a positive effect on intentions with a parameter coefficient value of 0.532 and significant because the p-value is $0.000 < 0.05$ and the T-statistics value is $< T\text{-table}$ ($5,848 > 1.654$). The intention construct has a positive effect on behavior with the parameter coefficient value of 0.716 and is significant because the p-value is $0.000 < 0.05$ and the T-statistics value is $> T\text{-table}$ ($15,410 > 1.654$). Thus, H1, H2, H3, and H5 are accepted.

In addition to the direct effect, the indirect effect can be seen in Table 8. In this study, the indirect effect seen is the effect of halal certification on intentions through trust.

Table 6: Specific Indirect Effects

	Original Sample (O)	T Statistics	P Values	Results
Halal Certification -> Trust -> Intention	0.099	2.017	0.022	Significant

Based on Table 6, the effect of halal certification on intentions through trust is 0.099. This indirect effect is positive and significant because the p-value is $0.022 < 0.05$ and the T-statistics value is $> T\text{-table}$ ($2.017 > 1.654$). Thus, H4 is accepted. Evaluation of the structural model is also done by looking at the value of R-Square. The value of R-Square shows the variability of the model that the constructs can explain in the model. The R-Square value of the results of this study can be seen in Table 7.

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Table 7: R-Square

	R-Square
Behavior	0.513
Intention	0.420
Trust	0.326

Based on Table 7, the R-Square value of trust is 0.326, which means that the variability of the construct of trust in halal products that the construct of halal certification can explain is 32.60%. In contrast, other variables outside the model explain the remaining 67.40%. The value of R-Square of intention is 0.420, which means that the variability of the construct of intention that can be explained by the construct of halal certification and trust is 42.00%. In comparison, other variables outside the model explain the remaining 58.00%. The behavioral R Square value of 0.513 means that the variability of the behavioral construct that can be explained by the intention construct is 51.30%, while other variables outside the model explain the remaining 48.70%.

Evaluation of the structural model is also done by looking at the value of F Square. F Square assesses the effect size model (Table 10). In addition to evaluating the R Square values of all endogenous constructs, the change in the R Square values when certain exogenous constructs are eliminated from the model can be used to evaluate whether if any constructs are omitted it can have a substantive impact on the endogenous constructs.

Table 8. F-Square

	Behavior	Halal Certification	Intention	Trust
Behavior				
Halal Certification			0.329	0.484
Intention	1.053			
Trust			0.035	

The effect size value of halal certification on trust is 0.484 (large). The effect size value of halal certification on intention is 0.329 (large). The value of the effect size of trust on intention is 0.035 (low). The value of the effect size of the intention on behavior is 1.058 (high).

Evaluation of the structural model is also seen through the value of Q-Square. The value of Q-Square is used to measure how well the observed values generated by the model and its parameter estimates are. The value of Q-Square > 0 indicates that the model has predictive relevance. The magnitude of the value of Q-Square has a range of $0 < Q\text{-Square} < 1$ where the closer to 1 the predictive relevance of the model is getting better. The following is the Q-Square value from the blindfolding menu for the results of this study which can be seen in Table 9.

Table 9. Q-Square

	SSO	SSE	Q ² (=1-SSE/SSO)
Behavior	640.000	427.549	0.332
Halal Certification	480.000	480.000	
Intention	640.000	481.575	0.248
Trust	640.000	486.470	0.240

The Q-Square values of belief, intention and behavior are 0.240, 0.248 and 0.332, respectively. The three values of Q-Square are greater than 0 so that it shows evidence that the observed values have been reconstructed properly so that the model has predictive relevance.

The Effect of Halal Certification on Consumer Trust

Halal certification has a positive effect on consumer trust. The effect of halal certification on consumer trust is proven to be significant. This shows that halal certification affects consumer trust in halal cosmetic products. The higher consumer perception regarding halal certification impacts increasing consumer trust to buy halal cosmetic products.

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The results of this study are consistent with the research results by Novagusda & Deriawan, (2019) and Yusuf et al., (2019), which shows that halal certification has a positive and significant effect on consumer trust. The existence of halal certification impacts increasing consumer trust to buy halal products. This is because halal certification identifies that the product meets halal requirements (Razalli et al., 2013). Halal product manufacturers include halal certification to increase consumer trust (Rahman et al., 2015).

In this study, halal certification is reflected through knowledge of halal certification bodies (HC1), the inclusion of the halal logo on product packaging (HC2), and product content according to halal certification (HC3). The inclusion of a halal logo on product packaging and information on product content according to halal certification are the two indicators that contribute the most to the measurement of halal certification. Consumers feel that the inclusion of a halal logo on product packaging and information on product content according to halal certification shows that the product has been certified halal.

The Effect of Trust on Intention

Trust has a positive influence on consumer intentions to buy halal products. The effect of trust on consumer intentions is proven to be significant. This shows that trust affects consumers' intentions to buy halal cosmetic products. The higher the trust in halal cosmetic products, the higher the purchase intention for halal cosmetic products.

The results of this study are consistent with the results of research by Handriana et al., (2020); Romle et al., (2016); Triantoro et al., (2020), which show that trust has a positive and significant effect on the purchase intention of halal products. The higher the trust in halal products, the higher the purchase intention.

In this study, trust is reflected through product performance that meets expectations (TR1), the product can be trusted (TR2), the product is reliable (TR3), and product confidence (TR4). Trustworthy products are the indicators that contribute the most to measuring trust. Consumers feel that the product's perception can be trusted shows their trust in halal products. Consumers will feel calm if the product purchased can be trusted in halal (Bakar et al., 2017).

Effect of Halal Certification on Intention

Halal certification has a positive influence on consumer intentions to buy halal products. The effect of halal certification on consumer intentions is proven to be significant. This shows that halal certification affects consumers' intentions to buy halal cosmetic products. The higher consumer perception regarding halal certification impacts increasing consumer intention to buy halal cosmetic products.

The results of this study are consistent with the results of research by Faturohman, (2019); Fitria et al., (2019); Majid et al., (2015); Nurhasanah & Hariyani, (2017), which show that halal certification has proven to have a positive and significant effect on buying intention in halal products. The higher the consumer's perception of the halal certification of a product, the higher the buying intention in halal products. This is because halal certification provides quality assurance valued by consumers and leads to broader product acceptance (Rajagopal et al., 2011).

In this study, halal certification is reflected through knowledge of halal certification bodies (HC1), the inclusion of the halal logo on product packaging (HC2), and product content according to halal certification (HC3). The inclusion of a halal logo on product packaging and information on product content according to halal certification are the two indicators that contribute the most to the measurement of halal certification. Consumers feel that the inclusion of a halal logo on product packaging and information on product content according to halal certification shows that the product has been certified halal.

The Effect of Halal Certification on Intentions through Trust

Halal certification positively influences consumer intentions to buy halal products through trust. The effect of halal certification on intentions through trust is proven to be significant. This shows that halal certification indirectly influences consumers' intentions to buy halal cosmetic products through trust.

The results of this study indicate that the effect of halal certification on buying intention can be mediated by trust. Zakaria et al., (2015) show that trust acts as a mediator between the relationship between halal certification and buying intention. Halal certification is used to inform and convince consumers that the product is halal and sharia-compliant (Shafie & Othman, 2006).

Halal certification can build consumer trust to not hesitate to buy products (Yusuf et al., 2019). Based on the Commitment-Trust Theory of Relationship Marketing, trust plays an essential role in instilling consumer trust and

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creating commitment considered necessary in purchasing behavior (Morgan & Hunt, 1994). This shows the validity among consumers of the belief in the product's halal status (Aziz & Vui, 2012).

The Effect of Intentions on Consumption Behavior of Halal Products

Intentions have a positive influence on the consumption behavior of halal products. The effect of intention on the consumption behavior of halal products is proven to be significant. This shows that the higher the consumer's intention to buy halal cosmetic products, the higher the consumer behavior in consuming halal cosmetic products.

The results of this study are consistent with the results of research by Huda et al., (2018); Kadengkang & Linarti, (2020); Khan et al., (2017), which shows that intention has a positive and significant effect on the consumption behavior of halal products. The higher the intention towards halal products, the higher the consumption behavior.

In this study, consumption behavior is reflected through the routine use of halal products (BV1), routine purchases of halal products (BV2), purchases of halal products compared to non-halal products (BV3), and significant budget allocations in purchasing halal products (BV4). The purchase of halal products compared to non-halal products is the indicator that contributes the most in measuring consumption behavior. Consumers feel that when they buy halal products compared to non-halal products, they already have the behavior to buy and consume halal products.

V. CONCLUSIONS

Halal certification has a positive effect on consumer trust. The higher consumer perception regarding halal certification impacts increasing consumer trust to buy halal products. Trust has a positive influence on consumer intentions to buy halal products. The higher the trust in halal cosmetic products, the higher the purchase intention for halal cosmetic products. Halal certification also positively influences consumer intentions to buy halal products. The higher consumer perception regarding halal certification impacts increasing consumer intention to buy halal cosmetic products. In addition to direct influence, Halal certification has an indirect effect on intentions. Halal certification has a positive indirect effect on intentions through trust. In the future, intention positively influences the consumption behavior of halal products. The higher the consumer's intention to buy halal cosmetic products, the higher the consumer behavior in consuming halal cosmetic products.

Implication

The results of this study can be used by local cosmetic companies or producers in Indonesia as a reference in business activities through a study of consumer behavior related to consumer trust in the consumption behavior of halal cosmetic products. Related to the implications of the halal certification variable, companies can increase the perception of halal certification by including a halal logo on cosmetic product packaging and information on the content of cosmetic products according to halal certification. Regarding the implications of the trust variable, the company can show that the product is a trustworthy cosmetic product. Related to the implications of the intention variable, companies can notice that consumers tend always to seek information about halal cosmetic products. Related to the implications of behavioral variables, companies can pay attention that the consumption behavior of halal cosmetic products is seen from consumers who purchase halal cosmetic products compared to non-halal cosmetic products.

Limitation

This study has limitations in its scope. Therefore, further researchers can add other constructs besides the constructs that have been used in this study. Future researchers are expected to examine another consumer trust by using antecedents or making it a moderating variable. In addition, further researchers can also expand the research area (not only the scope of Jakarta). Increase the number of samples according to the number of variables and indicators used and compare with the context of other halal products such as halal tourism, halal finance, or halal pharmacy.

REFERENCES

- 1) Adiba, E. M. (2019). Consumer Purchasing Behavior of Halal Cosmetics: A Study on Generations X and Y. *Journal of Islamic Monetary Economics and Finance*, 5(1), 169–192. <https://doi.org/10.21533/isjss.v2i1.52>
- 2) Ajzen, I. (1985). *From intentions to actions: A theory of planned behavior*. Springer.
- 3) Ajzen, I. (1991). The Theory of Planned Behavior Organizational Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- 4) Al-Mazeedi, H. M., Regenstien, J. M., & Riaz, M. N. (2013). The issue of undeclared ingredients in halal and kosher food

Consumption Behavior of Halal Cosmetic Products: The Mediating Role of Trust on The Effect of Halal Certification on Purchase Intention

- production: A focus on processing aids. *Comprehensive Reviews in Food Science and Food Safety*, 12(2), 228–233. <https://doi.org/10.1111/1541-4337.12002>
- 5) Alqudsi, S. G. (2014). Awareness and Demand for 100% Halal Supply Chain Meat Products. *Procedia - Social and Behavioral Sciences*, 130, 167–178. <https://doi.org/10.1016/j.sbspro.2014.04.021>
 - 6) Ambali, A. R., & Bakar, A. N. (2013). Halāl food and products in Malaysia: People’s awareness and policy implications. *Intellectual Discourse*, 21(1), 7–32.
 - 7) Armitage, C. J., & Conner, M. (2000). Social cognition models and health behaviour: A structured review. *Psychology and Health*, 15(2), 173–189. <https://doi.org/10.1080/08870440008400299>
 - 8) Aziz, Y. A., & Chok, N. V. (2013). The Role of Halal Awareness, Halal Certification, and Marketing Components in Determining Halal Purchase Intention Among Non-Muslims in Malaysia: A Structural Equation Modeling Approach. *Journal of International Food and Agribusiness Marketing*, 25(1), 1–23. <https://doi.org/10.1080/08974438.2013.723997>
 - 9) Aziz, Y. A., & Vui, C. N. (2012). The Role of Halal Awareness and Halal Certification in Influencing Non-Muslims’ Purchase Intention. *3rd International Conference on Business and Economic Research (3rd ICBER 2012) Proceeding, March*, 1819–1830.
 - 10) Bakar, A. E., Rosslee, N. N., Ariff, A. M. M., Othman, M., & Hashim, P. (2017). Consumers’ Trust and Values Towards Halal Cosmetics and Personal Care Products. *Malaysian Journal of Consumer and Family Economics*, 21–35.
 - 11) Bashir, A. M., Bayat, A., Olutuase, S. O., & Abdul Latiff, Z. A. (2019). Factors affecting consumers’ intention towards purchasing halal food in South Africa: a structural equation modelling. *Journal of Food Products Marketing*, 25(1), 26–48. <https://doi.org/10.1080/10454446.2018.1452813>
 - 12) BPS-Statistics of DKI Jakarta Province. (2020). *Jumlah Penduduk Provinsi DKI Jakarta Menurut Kelompok Umur dan Jenis Kelamin 2018-2019*. jakarta.bps.go.id
 - 13) DinarStandard. (2020). State of the Global Islamic Economy Report 2020/21 Thriving in Uncertainty. In *DinarStandard*.
 - 14) Faturohman, I. (2019). Faktor yang Mempengaruhi Minat Beli terhadap Makanan Halal. Studi pada Konsumen Muslim di. *Prosiding Industrial Research Workshop and National Seminar*, 10(1), 882–893.
 - 15) Ferdinand, A. (2014). *Metode Penelitian Manajemen. Pedoman Penelitian untuk Penulisan Skripsi, Tesis dan Disertasi Ilmu Manajemen* (5th ed.). Undip Press.
 - 16) Fitria, M. R., Aji, H., & Heryawan, A. Y. (2019). The Effect of Halal Awareness, Halal Certification and Halal Marketing Toward Halal Purchase Intention of Fast Food Among Muslim Millenials Generation. *Russian Journal of Agricultural and Socio-Economic Sciences*, 90(6), 76–83. <https://doi.org/10.18551/rjoas.2019-06.11>
 - 17) Ghozali, I., & Latan, H. (2015). *Partial Least Square, Konsep Teknik, dan Aplikasi menggunakan program SmartPLS 3.0 untuk Penelitian Empiris*. Undip Press.
 - 18) Handriana, T., Yulianti, P., Kurniawati, M., Arina, N. A., Aisyah, R. A., Ayu Aryani, M. G., & Wandira, R. K. (2020). Purchase behavior of millennial female generation on Halal cosmetic products. *Journal of Islamic Marketing*. <https://doi.org/10.1108/JIMA-11-2019-0235>
 - 19) Haro, A. (2018). Determinants of Halal Cosmet-ics Purchase Intention on Indonesian Female Muslim Customer. *Journal of Entrepreneurship, Business and Economicsness and Economics*, 6(1), 78–91. www.scientificia.com
 - 20) Huda, N., Hulmansyah, H., & Rini, N. (2018). Faktor Yang Mempengaruhi Perilaku Konsumsi Produk Halal Pada Kalangan Mahasiswa Muslim. *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, 2(2), 247. <https://doi.org/10.24034/j25485024.y2018.v2.i2.3944>
 - 21) Hussain, I., Rahman, S. U., Zaheer, A., & Saleem, S. (2016). Integrating factors influencing consumers’ halal products purchase: Application of theory of reasoned action. *Journal of International Food and Agribusiness Marketing*, 28(1), 35–58. <https://doi.org/10.1080/08974438.2015.1006973>
 - 22) Islam, T., & Chandrasekaran, U. (2015). Halal Marketing Growing Pie. *International Journal of Management Research and Review*, 2(12), 3938–3948.
 - 23) Ismail, I., Azlina, N., Abdullah, N., Ya, S., Zain, R. S., Asyikin, N., Noor, M., Abdullah, N., & Zain, S. (2019). *Halal Kopitiam Choices Among Young Muslim Consumers in Northern Region of Peninsular*. 13–21.
 - 24) Kadengkang, J. A., & Linarti, U. (2020). Pengukuran perilaku dan niat beli produk kosmetik halal melalui modifikasi theory of planned behavior (TPB). *Jurnal Ilmiah Psikologi Terapan*, 8(1), 25. <https://doi.org/10.22219/jipt.v8i1.8769>
 - 25) Kamila, E. F. (2020). Peran Industri Halal Dalam Mengdongkrak Pertumbuhan Ekonomi Indonesia Di Era New Normal. *LIKUID: Jurnal Ekonomi Industri Halal*, 1(1).

Consumption Behavior of Halal Cosmetic Products: The Mediating Role of Trust on The Effect of Halal Certification on Purchase Intention

- 26) Khan, M. M., Asad, H., & Mehboob, I. (2017). Investigating the consumer behavior for halal endorsed products: Case of an emerging Muslim market. *Journal of Islamic Marketing*, 8(4), 625–641.
- 27) Kotler, P., & Keller, K. L. (2012). *Marketing Management*, 14th ed. Pearson Education, Inc.
- 28) Ma'rifat, T. N., Ismoyowati, D., & Wikarta, J. M. (2015). Analisis Perilaku Konsumen Dalam Pembelian Produk Olahan Ayam Bersertifikat Halal di Provinsi D.I Yogyakarta. *Prosiding Seminar Agroindustri Dan Lokakarya Nasional FKPT-TPI*, September, 2–3.
- 29) Majid, M. B., Sabir, I., & Ashraf, T. (2015). Consumer Purchase Intention towards Halal Cosmetics & Personal Care Products in Pakistan. *Global of Research in Business & Management*, 1(1), 45–53.
- 30) Mangkarto, M. (2005). Sertifikat halal dan pengaruhnya terhadap Kepercayaan Konsumen pada Restoran (Studi Kasus Restoran Kentucky Fried Chicken Cabang Manado). *Jurnal Ilmiah Al-Syir'ah*, 3(2).
- 31) Morgan, R. M., & Hunt, S. D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 58(July), 20–38. <https://doi.org/10.15605/jafes.031.01.01>
- 32) Nawati, N. M., & Nasir, N. I. M. (2014). Consumers' Attitude Toward the Food Safety Certificate (FSC) in Malaysia. *Journal of Food Products Marketing*, 20(December), 140–150. <https://doi.org/10.1080/10454446.2014.921879>
- 33) Novagusda, F. N., & Deriawan. (2019). Pengaruh Pemberian Label Halal, Citra Merek dan Kualitas Multivitamin terhadap Minat Pembelian Konsumen dengan Tingkat Kepercayaan sebagai Variabel Intervening (Studi Kasus Produk Redoxon di Jabodetabek). *Jimea-Jurnal Inovasi Manajemen Ekonomi Dan Akuntansi*, 1(3), 344–359.
- 34) Nurachmi, I., & Setiawan. (2020). Pengaruh Religiusitas, Kepercayaan, dan Kepuasan terhadap Keputusan Pembelian Ulang Produk Halal. *Iqtishadia: Jurnal Ekonomi Dan Perbankan Syariah*, 7(2), 126–137.
- 35) Nurhasanah, S., & Hariyani, H. F. (2017). Halal Purchase Intention on Processed Food. *Tazkia Islamic Finance and Business Review*, 11(2), 187–209. <https://doi.org/10.30993/tifbr.v11i2.142>
- 36) Omar, K. M., Kamariah, N., Mat, N., Imhemed, G. A., Mahdi, F., & Ali, A. (2012). *The Direct Effects of Halal Product Actual Purchase Antecedents among the International Muslim Consumers*. June, 87–92. <https://doi.org/10.5923/j.economics.20120001.20>
- 37) Putri, M. J., & Rimadias, S. (2020). Analisis aspek penentu niat konsumen dalam membeli produk halal di Indonesia (telaah pada mie ramen jepang halal). *Prosiding Seminar Nasional Akuntansi*, 1–12.
- 38) Rahman, A. A., Asrarhaghighi, E., & Rahman, S. A. (2015). Consumers and halal cosmetic products: Knowledge, religiosity, attitude and intention. *Journal of Islamic Marketing*, 6(1), 148–163. <https://doi.org/10.1108/JIMA-09-2013-0068>
- 39) Rajagopal, S., Ramanan, S., Visvanathan, R., & Satapathy, S. (2011). Halal certification: Implication for marketers in UAE. *Journal of Islamic Marketing*, 2(2), 138–153. <https://doi.org/10.1108/17590831111139857>
- 40) Razalli, M. R., Yusoff, R. Z., & Roslan, M. W. M. (2013). A framework of Halal certification practices for hotel industry. *Asian Social Science*, 9(11), 316–326. <https://doi.org/10.5539/ass.v9n11p316>
- 41) Rifa'i, I., Irwansyah, F. S., Sholihah, M., & Yuliawati, A. (2020). Dampak dan Pencegahan Wabah Covid-19 : Perspektif Sains dan Islam. *Jurnal Pendidikan*, 1(1), 1–10.
- 42) Romle, A. R., Udin, M. M., Seman, N. H. A., Sabu, M. A., Samsudin, M. F., & Mostapha, N. H. (2016). The Linked of Attitude , Subjective Norms, Trust , Knowledge and Intention To Use Halal Cosmetic Products Among Students : A Case of Public University in Malaysia. *International Journal of Administration and Governance*, 2(2), 15–20.
- 43) Sekaran, U., & Bougie, R. (2016). *Research Methods for Business* (Seventh ed). John Wiley & Sons Ltd.
- 44) Septianti, W., Setyawati, I., & Permana, D. (2021). The Effect of Halal Products and Brand Image on Purchasing Decisions with Purchase Interest as Mediating Variables. *European Journal of Business and Management*, 6(6), 271–277.
- 45) Setiawan, S., & Mauluddi, H. A. (2020). An Examination of Purchasing Intention towards Halal Products. *International Journal of Economics and Management Systems*, 5, 209–216.
- 46) Shafie, S., & Othman, M. N. (2006). Halal certification: an international marketing issues and challenges. *Proceeding of the International IFSAM VIIIth World Congress Pp: 28-30.*, 28–30. <http://www.ncbi.nlm.nih.gov/pubmed/12568103>
- 47) Shamsir, R. (2016). Store Image and Its Impact on Consumer Behavior. *ELK Asia Pacific Journal of Marketing and Retail Management*, 2(4). <https://doi.org/10.16962/EAPJMRM/issn>
- 48) Sumarni, Y. (2020). Pandemi Covid-19: Tantangan Ekonomi Dan Bisnis. *Jurnal Ekonomi Dan Perbankan Syariah*, 6(2), 46–58.
- 49) Triantoro, A., Sumarwan, U., & Hannan, S. (2020). the Development of Conceptual Model on Indonesian Consumer Behavior Towards Halal-Labeled Drugs. *Indonesian Journal of Business and Entrepreneurship*, 6(3), 256–268.

Consumption Behavior of Halal Cosmetic Products: The Mediating Role of Trust on The Effect of Halal Certification on Purchase Intention

- 50) Wibowo, M. W., Permana, D., Hanafiah, A., & Ting, H. (2020). Halal food credence : do the Malaysian non-Muslim consumers hesitate? *Journal of Islamic Marketing*, May.
- 51) Yusuf, E. W., Komaladewi, R., & Sudarma, Y. S. (2019). The Importance of Halal Product Label to Building Customer Trust. *Jurnal Ekonomi Modernisasi*, 15(1), 58–66.
- 52) Zakaria, Z., Salim, M. R., Ahmad, Z., Haini, F., Ahmad, M., & Kamaludin, M. A. (2015). Trust as a Mediator in Determining Customers Purchase Intention of Halal Frozen Food. *International Academic Research Journal of Social Science*, 1(2), 283–289. <http://www.iarjournal.com/wp-content/uploads/37-P283-289.pdf>

Revaluation Asset Determinants toward Company's Value



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ABSTRACT: This study's objective is twofold. The first is to determine the effect of the investment opportunity set, leverage, and liquidity on fixed asset revaluation decisions. The second objective is to examine the effect of fixed asset revaluation decisions on firm value listed on the Indonesia Stock Exchange. The research method used is a quantitative method with statistical hypothesis testing through multiple linear regression (simultaneous and partial significance tests). The number of samples studied was 110, using panel data from 2016–2019. The results of the first stage of the study show that at the 5% significance level, the investment opportunity set and partial leverage have no effect on the revaluation of fixed assets, but liquidity has a significant negative effect on the revaluation of fixed assets. Meanwhile, the results of the second stage of the study show that the investment opportunity set has no significant effect on firm value, but leverage, liquidity, and fixed asset revaluation partially affect firm value.

KEYWORDS: Revaluation, Fixed Asset, Company Value, Investment Opportunity Set, Leverage, Liquidity.

I. INTRODUCTION

Fixed assets in the company's development from year to year have a growing influence on the company's value. The business world uses the same recording standards to determine the fair value of a fixed asset. By making company financial reporting standards comparable, understandable, reliable, and relevant, which was initiated by the International Accounting Standards Board (IASB), an institution that provides a common understanding for business people all over the world, Indonesia's role as a part of the world's business has also adapted, with the convergence of IFRS into the Statement of Financial Accounting Standards (PSAK) commencing in 2012.

As two internationally recognized standards, GAAP and IFRS have distinct approaches to assessing and recognizing firm assets. In GAAP, property, plant, and equipment are measured using historical cost or the cost of property, plant, and equipment, but in IFRS, property, plant, and equipment are assessed using fair value or fair value. PSAK was adapted from IFRS in Indonesia on January 1, 2012, so that firms in Indonesia analyze and record assets from historical cost to fair value. This amendment affects the regulation of the financial statements' recognition, recording, reporting, and disclosure of property, plant, and equipment.

One of the topics that has attracted attention in the convergence process is fixed assets. According to the principal base adopted by IFRS, fixed assets can be revalued. Thus, historical cost is not the only method of recording.

Fixed assets play an essential role in the day-to-day operations of a business. According to PSAK No. 16, the entity selects either the cost model or the revaluation model as its accounting policy and applies it to all fixed assets in the same group (IAI, 2012). Property, plant, and equipment are carried at cost after being registered as an asset, less any accrued depreciation and any accumulated impairment losses on the asset. The revaluation model should be recorded at the revaluation amount, which is the fair value at the revaluation date less accumulated depreciation and accumulated impairment losses after the revaluation date, after recognition as an asset, property, plant, or equipment whose fair value can be measured reliably. Revaluations are performed on a regular basis to verify that the carrying amount at the end of the reporting period does not change considerably from the amount estimated using fair value. Fixed assets play an essential role in the day-to-day operations of a business.

II. LITERATURE REVIEW

Revaluation Fixed Assets: Theory and Concept

A fixed asset revaluation is a reassessment of the company's fixed assets due to a rise in market value. This policy represents the real status of assets as a result of fixed asset revaluation; assets are reported using market values. The revaluation of fixed

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assets should be good news for the firm's external stakeholders since, in addition to motivating a growth in corporate performance, it is reflected in the company's profit and share price.

A. Investment Opportunity Set and Revaluation Fixed Assets

The investment opportunity set has an impact on the company's decision to reassess fixed assets. The result indicates a negative influence, indicating that the greater the investment decision, the higher the fixed asset decision. Tay (2009) and Choi (2013) explain that market to book equity has a negative effect on asset revaluation, so the higher the market to book equity, the lower the asset revaluation ability, whereas Peasnel (2000) explains that the market to book ratio has a positive effect, so the higher the market to book ratio, the higher the asset revaluation ability. The bigger the market-to-book ratio, the greater the asset revaluation. The following theories are offered in this study:

H1: There is an influence of investment opportunity set on the revaluation of fixed assets

B. Leverage and Revaluation Fixed Assets

Leverage refers to all firm assets and financial risks that will be a burden on the company in the future, affecting revenue. Companies that finance their investments with a large debt structure are deemed risky. Companies with a high degree of debt will seek to revalue their assets in order to improve the company's viability in the viewpoint of creditors. According to Barac and Sodan (2011), leverage has a positive effect on asset revaluation. This demonstrates that the more the leverage, the greater the asset revaluation, however Cahan et al. (2004) explain that leverage has a negative influence on asset revaluation, therefore the greater the leverage, the more asset revaluation will fall. The following hypothesis is proposed in this study:

H2: There is an effect of leverage on revaluation of fixed assets

C. Liquidity and Revaluation Fixed Assets

The decision of revaluation technique is significantly influenced by liquidity. Revaluations assist in providing more up-to-date information on the amount of cash that may be gained from the sale of assets, therefore increasing the company's borrowing capacity and lowering borrowing costs. Organizations with limited liquidity prefer to use the revaluation approach, but companies with strong liquidity levels do not need to re-evaluate fixed assets. According to Manly (2008) and Tay (2009), the current ratio has a negative effect on asset revaluation, so the higher the current ratio, the lower the asset revaluation. While the lower the current company's cash, the higher the asset revaluation (Barac & Sodan, 2011; Seng & Su, 2010). The formulating hypothesis in this section is:

H3: There is a significant influence of leverage on revaluation of fixed assets

D. Investment Opportunity Set and Company's Value

The direction of the company's performance in reaching its goals is determined by the success of the investment. Investment decisions are made with the goal of improving the company's worth. According to Fenandar and Raharja (2012), investors' appraisal of a high business value will promote investment, and the value of the investment will make it simpler for the firm to boost growth. This study's stated hypothesis is:

H4: There is an influence of investment opportunity set on firm value

E. Leverage and Company's Value

According to Asgharian (2003), if a firm with high leverage loses market share due to high risk from its consumers or an aggressive reaction from its competitors (customer-driven or competitor-driven), this company should have lower profitability and corporate value. If, on the other hand, the fall in sales is due to management motivation, then a better degree of profitability and firm value is projected. As a result, the amount of leverage can have a two-way impact on firm value, which can be good or negative. The following hypothesis to be tested is this topic is:

H5: Leverage has an influence on business value.

F. Liquidity and Company's Value

Liquidity with the Quick Ratio (QR) proxy for firm value indicates that the size of the company's ability to fulfil its obligations without taking into account inventory, because inventory takes a relatively long time to be realized into cash, hence it has an impact on increasing company value (Wahyudi, 2012). Firm value is very important because high firm value will be followed by high shareholder prosperity (Brigham and Houston, 2006), thus the higher the stock price, the higher the firm value. While the quick ratio (quick ratio) is more describing the company's ability to meet the needs of working capital in a faster time (Kretarto, 2001). The proposed hypothesis in this theme is:

H6: There is an effect of liquidity on firm value

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G. Revaluation Fixed Assets and Company's Value

Atkinson Atkinson (2002) states that the greater the assets owned, the greater the possibility of the company generating income. This is very possible to happen because the future operating profit depends on the amount of assets owned. The value of assets that have been revalued can be the basis for better predicting future performance because the value already shows the present value. The hypothesis therefore is:

H7: There is an effect of fixed asset revaluation on firm value

Based on theoretical reviews and literature studies regarding revaluation of fixed assets, firm value, investment opportunity set, leverage, and liquidity, the following research model is presented as follows:

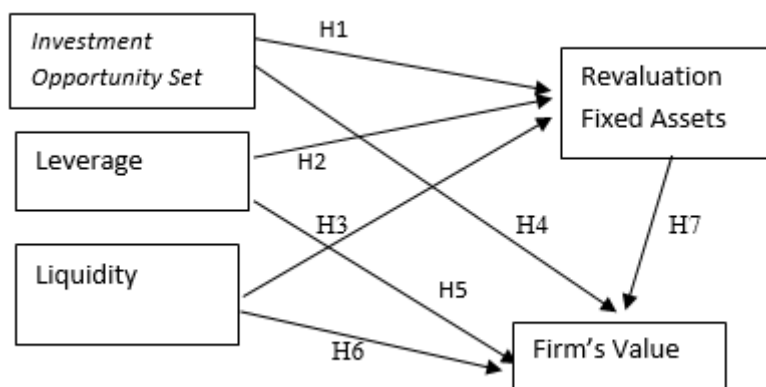


Figure 1. Research model

III. METHODOLOGY

A. Research Design

The research method used is a quantitative method with descriptive approach in order to test the theory or hypothesis (support or reject). Description approach is intended to explore for more information and data on matters that have not been investigated. The results of this study are expected to provide an accurate explanation of the research goals to be achieved.

B. Population and Sampling Procedure

The population in this study are companies that have done asset revaluation and listed on the Indonesia Stock Exchange (IDX) during the period 2016 to 2019. The determination of the sample used was purposive sampling.

C. Analysis Techniques

The analysis technique used in this study is panel data regression, which combines time series data with cross-section data. Panel data consists of several individual units observed over a certain period. If each cross-section unit has the same number of time-series observations, it is called a balanced panel, while if it is different for each cross-section unit, it is called an unbalanced panel.

This method using panel data can be used to overcome various data problems in the time series such as the lack of a number of research time periods and also to overcome the problem of lack of observation units in cross section data, therefore better estimation results are obtained through increasing the number of observations that have an impact on increasing degrees of freedom. This panel data is also intended to increase the number of research observations when using time series or cross section data the number of observations is limited.

D. Robustness Test

Normality, multicollinearity, heteroscedasticity, and autocorrelation tests are used to examine the conventional assumptions in the first stage. The empirical data used in this study reveals that the research model met all of the assumptions, allowing for the interpretation of the panel data regression equation.

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E. Variable Operations

Table 1. Variable operationalization

Variable	Proxy	Measurement	Scale
Assets revaluation	Total of Assets Revaluation	Total of Assets revaluation = Total of Assets revaluation logarithm	Ratio
Firm's value	Tobins'Q	$\text{Tobins'Q} = \frac{\text{Market capital ration} + \text{total liability} + \text{inventory} - \text{current asset}}{\text{Total assets}}$	Ratio
Investment Opportunity Set	MBVE	$\text{MBVE} = \frac{\text{Share outstanding} \times \text{Stock Closing Price}}{\text{Total equity}}$	Ratio
Leverage	DAR	$\text{DAR} = \frac{\text{Total of debt}}{\text{Total Assets}}$	Ratio
Liquidity	QR	$\text{QR} = \frac{\text{Current asset} - \text{inventory}}{\text{Current debt}} \times 100\%$	Ratio

IV. Hypotheses test

To test the simultaneous significance of the effect of independent variables on the dependent variable, the F test was applied. Meanwhile, to partially test the significance of the effect of the independent variables on the dependent variable, the t-test was performed. While the multiple regression analysis was implemented in 2 stages, stage 1 was used to determine whether there is an influence of the 3 independent variables on the dependent variable. Stage 2 is used to determine whether there is an influence between the 4 independent variables on the dependent variable, namely firm value.

Table 2. Assessment stage 1 results (Goodness of Fit)

Hypotheses test	Coefficient	Std. Error	t value	Sign
Constant	5.059	1.637	3.092	.003
IOS	.007	.011	.687	.494
DAR	3.653	1.923	1.900	.060
QR	10.294	3.189	3.227	.002
R Square	.122			
Adjusted R Square	.097			
F Statistic	4.896			
Significance of F Statistic	.003			

a. Dependent Variable: Assets revaluation

Statistical parameters indicate that the probability value of the investment opportunity set of 0.494 is greater than 0.05 so that H01 is accepted. This indicates that the investment opportunity set has no significant effect on asset revaluation. While the probability value of 0.06 leverage is greater than 0.05, the decision H02 is accepted, which means that leverage has no significant effect on asset revaluation. The liquidity probability value of 0.002 is smaller than 0.05, so H03 is rejected, which means that liquidity has a significant effect on asset revaluation.

Table 3. Assessment stage 2 results (Goodness of Fit)

Hypotheses test	Coefficient	Std. Error	t value	Sign
Konstan	6.288	.327	19.203	.000
IOS	.004	.002	1.802	.074
DAR	-1.291	.375	-3.446	.001

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QR	-6.730	.641	-10.506	.000
Revaluasi Aset	-.054	.019	-2.893	.005
R Square				
Adjusted R Square				
F Statistic				
Significance of F Statistic	0.0000			

a. Dependent Variable: TOBINS'Q

Based on statistical parameters, table 3 shows the probability value of the investment opportunity set of 0.074 which is greater than 0.05, so the hypothesis H04 is accepted. This illustrates that the investment opportunity set has no significant effect on firm value. The probability value of leverage of 0.001 which is smaller than 0.05, thus H05 is rejected. This indicates that leverage has a significant effect on firm value. The liquidity probability value is 0.000 which is smaller than 0.05, so the decision of H06 is rejected. This implies that liquidity has a significant effect on firm value. The asset revaluation probability value is 0.005 that is smaller than 0.05, hence the decision H07 is rejected. This means that asset revaluation has a significant effect on firm value.

V. CONCLUSION

1. Investment opportunity set has no effect on fixed asset revaluation. Fixed asset revaluation is defined as a revaluation that can cause the value to be higher or lower. This is performed if there is a difference between the market value and the recorded value on the company's balance sheet. In the revaluation model, the cost of the asset incurred is adjusted if it increases or decreases depending on its fair value. When the asset value increases, it will be credited into the revaluation reserve and when it decreases it will be debited so it will not be taken into account in investment opportunities.
2. Leverage has no effect on fixed asset revaluation. This statement implies that companies with high debt levels will not decide to revalue their assets to increase the company's feasibility before creditors. Companies with high debt ratios will not revalue assets even though revaluation can reduce the value of debt ratios.
3. Liquidity has a positive and significant effect on asset revaluation. This indicates that asset revaluation can help provide more actual information about the amount of cash that can be received when selling assets so that it can help increase the company's borrowing capacity and reduce borrowing costs. The choice of revaluation method tends to be carried out by companies with low liquidity, while companies with high liquidity levels do not need to re-evaluate fixed assets.
4. Investment opportunity set has no effect on firm value. This shows that the signal for company growth as reflected in the high level of Investment opportunity set is not being responded to by the market. There are several reasons behind this, first because investors do not always consider the company's investment opportunity set in their investment decisions because investors might think that it is not guaranteed that the company's growth increases in the future. In addition to this, not all market participants use financial statement information carefully in making decisions, they probably rely more on technical analysis.
5. Leverage has a negative effect on firm value. This relationship is built based on the Trade off Theory. The capital structure in the trade off theory model states that the amount of debt that increases and exceeds the stipulated limit will reduce the value of the company.
6. Liquidity has a significant effect on firm value. Companies that have a good level of liquidity indicate the ability to meet financial needs. Liquidity is the basis for determining funding development policies from time to time so that it can increase investor confidence to invest or invest in the company..
7. Fixed asset revaluation has a negative effect on firm value. This result indicates that high asset revaluation can trigger a decline in firm value. The addition of the company's asset value that does not come from the purchase of new assets, but from old fixed assets which are then revalued in the present time. This condition basically does not add to the value of the company even though on paper there is a change in value so that it can trigger a decrease in the desire of investors to invest.

REFERENCES

- 1) Asggharian, Hossein, (2003), Are Highly Leveraged Firms More Sensitive To An Economic Downturn?, *The European Journal of Finance*.
- 2) Barac, Z. A., dan Sodan, Slavko., (2011), Motives For Aset Revaluation Policy Choice In Croatia. *Croatian Operational Research Review (Crorr)*, Vol. 2.

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- 3) Brigham, Eugene F dan Houston. (2006). *Fundamental of Financial Management: Dasar - Dasar Manajemen Keuangan*. Edisi 10. Jakarta: Salemba Empat.
- 4) Cahan, S. F., Courtenay, S. M., Gronnewoller, P. L., dan Upton, D. R (2004). Value Relevance Of Mandated Comprehensive Income Disclosures. *Journal of Business Finance and Accounting*, 27 (9 dan 10), 1233-1265.
- 5) Choi, Y. Peasnell, K dan Toniato, J., (2013), Has the IASB Been Successful in Making Accounting Earnings More Useful for Prediction and Valuation? UK Evidence, *Journal of Business Finance dan Accounting*. Volume 40, Issue 7-8, pages 741–768.
- 6) Manly, F. (2008), Motives For Fixed-Asset Revaluation: An Empirical Analysis, *Journal of Business Finance and Accounting*, 34(7-8), pp. 1025 – 1050.
- 7) Peasnell, K. V. (2000), Fixed Aset Revaluation And Equity Depletion In UK. *Journal of Business Finance and Accounting*, 27(3-4), pp. 359 – 394.
- 8) Seng, Dyna dan Jiahua Su, (2010). Managerial Incentives Behind Fixed Aset Revaluation: Evidence from New Zealdan Firms, *International Journal of Business Research*, Department of Accountancy and Business Law, Working paper series, No 3.
- 9) Tay, Ink. (2009). *Fixed Aset Revaluation: Management Incentives and Market Reaction*. Lincoln University., Canterbury, New Zealdan.
- 10) Wahyudi, (2012). *Pengaruh Profitabilitas, Likuiditas, dan Leverage terhadap Nilai Perusahaan*. Program Pasca Sarjana Universitas Muhammadiyah, Surakarta.

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