

How Will Enterprises in ASIA Respond to The Implementation of BASEL II Regulations?

Nguyen Thi Ai Tho

Vietnam Agriculture and Rural Development Bank - Tan Binh Branch

ABSTRACT: This study examines the impact of Basel II bank capital regulations on the use of trade credit by firms with different levels of credit risk in the Asian region. Using panel data from 1,295 firms across 17 Asian countries during the period 2004-2015, the study employs the System GMM (SGMM) method to test the hypothesis that firms with higher credit risk (rated BB- and below) exhibit greater reliance on trade credit in the post-Basel II period compared to firms with lower credit risk (rated BB- to AAA). The findings show that after the implementation of Basel II, high-risk firms increased their accounts payable to total assets ratio by 11.19% to 33.09% and decreased their accounts receivable to total assets ratio by 3.90% to 7.98% relative to lower-risk firms. The study provides the first empirical evidence on the role of trade credit as an important alternative financing source when Asian firms face bank credit supply shocks due to changes in bank capital regulations.

KEYWORDS: Basel II regulations, Firm credit rating, System GMM, Alternative financing

I. INTRODUCTION

The Basel II bank capital regulation, implemented from 2005 in many countries worldwide, marked a significant transformation in the risk management approach of the global banking system. Unlike Basel I - where capital requirements were independent of corporate credit risk - Basel II stipulates differentiated risk weights based on borrowers' credit ratings. Accordingly, banks must maintain higher capital when lending to high-risk enterprises, specifically applying a 150% risk weight to loans for enterprises rated B+ or below, while loans to enterprises rated BB- or above are subject to a risk weight of 100% or lower. This change in bank capital regulation has created uneven impacts on enterprises' access to capital. Empirical evidence shows that Basel II has significantly reduced bank credit supply to high-risk enterprises. When facing a decline in bank credit supply, enterprises are forced to seek alternative financing sources to maintain their business operations. One of the most important and accessible alternative channels is trade credit - short-term financing from suppliers through the postponement of payments for purchased goods and services.

Previous studies have demonstrated the role of trade credit as an alternative financing source to bank credit during financial crises. Petersen and Rajan (1997) showed that trade credit is an important source of short-term capital for enterprises, especially small enterprises that face difficulties in accessing formal capital sources. Fisman and Love (2003) found that trade credit plays an increasingly important role in less developed countries where the financial system is not yet fully developed. In the context of the Asian financial crisis, Love et al. (2007) documented a significant increase in total trade credit in emerging economies immediately after the crisis. Similarly, Casey and O'Toole's (2014) study on the European debt crisis showed that trade credit was the primary substitute for bank credit to meet the working capital needs of credit-constrained enterprises. Ferrando and Mulier (2013) also confirmed that enterprises experiencing difficulties in mobilizing formal capital often turn to using trade credit as an alternative solution.

However, to date, most studies on the substitution relationship between bank credit and trade credit have focused on the context of financial crises - abnormal and temporary shocks to the financial system. There is limited empirical evidence on how enterprises adjust their financing structure when facing structural and long-term changes in banking regulation policies, such as the implementation of Basel II. In particular, understanding how enterprises with different risk levels adjust their use of trade credit in the context of changing bank capital regulations has important implications both theoretically and practically.

How Will Enterprises in ASIA Respond to The Implementation of BASEL II Regulations

II. THEORETICAL FOUNDATION ON THE RELATIONSHIP BETWEEN BASEL II REGULATIONS AND TRADE CREDIT

Based on the theoretical foundation of bank capital regulation and the role of trade credit, an analytical framework can be constructed regarding the mechanism through which Basel II impacts enterprises' use of trade credit through a three-step causal chain. First, the implementation of Basel II creates differences in banks' capital requirements for loans to enterprises with different risk levels, wherein enterprises with low credit ratings (B+ and below) require banks to maintain 50% more capital compared to enterprises with higher ratings (BB- and above) for the same lending volume. According to the theory of bank portfolio optimization (Furlong and Keeley, 1989; Flannery, 1989), this increase in capital costs will encourage banks to reduce lending or increase interest rates for high-risk enterprises. Second, when facing a decline in bank credit supply, high-risk enterprises need to seek alternative financing sources to maintain their business operations and investments. According to the theory of alternative financing sources (Petersen and Rajan, 1997; Love et al., 2007), trade credit becomes one of the most feasible options, especially for short-term working capital needs. Third, to compensate for the shortage in bank credit, high-risk enterprises will increase their use of trade credit, reflected in increased accounts payable. Simultaneously, to conserve financial resources, these enterprises may tighten credit policies toward their customers, leading to reduced accounts receivable. Therefore, based on this impact mechanism, the study proposes the hypothesis that:

Research Hypothesis: Enterprises with higher credit risk (rated BB- and lower) have greater dependence on trade credit in the post-Basel II period compared to enterprises with lower credit risk (rated BB to AAA).

III. RESEARCH METHODOLOGY

A. Research Model

The author constructs the model based on studies by Gopalakrishnan et al. (2021), Christensen et al. (2016), D'Acunto et al. (2018), Gopalan et al. (2016), Murfin and Njoroge (2015). The specific model is as follows:

$$Y_{it} = \beta_0 + \beta_1 Post_Basel\ II_j * HCC\ firm_{it-1} + \sum_k \alpha_k \times X_{it,k} + \varepsilon_{it} \quad (1)$$

where i represents country i , t represents year t . $HCC\ firm_{it-1}$ is a dummy variable representing the credit rating of enterprise i in the previous year ($t-1$); this variable takes the value of 1 for companies rated by Standard & Poor's at BB- and lower, and takes the value of 0 for companies rated from BB to AAA. $Post_Basel\ II_j$ is a dummy variable, taking the value of 1 for all years after company j is subject to Basel II credit rating regulations, and taking the value of 0 for the remaining years. X represents control variables representing the characteristics of enterprises in the sample.

To test the hypothesis, the author uses the dependent variable Y_{it} as accounts payable to total assets and accounts receivable to total revenue of enterprises. The impact of Basel II regulations on corporate credit ratings on enterprises' borrowing activities is assessed through the coefficient β_1 . Specifically, if this coefficient is statistically significant, then Basel II regulations on corporate credit ratings will have an impact on enterprises' borrowing activities. In this case, enterprises with higher credit risk (i.e., credit ratings at BB- and lower) will seek other financing sources after the implementation of Basel II credit rating regulations.

Other control variables and the basis for including these variables in the model are presented in the following table:

Table 1. Description of Control Variables in the Research Model

Variable Name	Measurement	Variable Symbol	Basis for Including Variable in Model
Total Revenue	Logarithm (Net Revenue)	log_sales	Gopalakrishnan et al. (2021), Christensen et al. (2016), D'Acunto et al. (2018), Gopalan et al. (2016), Murfin and Njoroge (2015)
Enterprise Size	Logarithm (Total Assets)	log_asset	
Operating Cash Flow to Total Assets	Operating Cash Flow / Total Assets	op_cashflow_asset	
Total Liabilities to Book Value of Equity Ratio	Total Liabilities / Book Value of Equity	leverage	
Market Value to Book Value of Equity Ratio	Market Value of Equity / Book Value of Equity	m_b	
Fixed Assets to Total Assets	Fixed Assets / Total Assets	tangibility	
EBITDA to Total Assets	EBITDA / Total Assets	ebitda_asset	

Source: Author's compilation

How Will Enterprises in ASIA Respond to The Implementation of BASEL II Regulations

B. Estimation Method

The study employs the System Generalized Method of Moments (SGMM) developed by Blundell and Bond (1998) to estimate the model. The SGMM method is one of the most advanced and widely adopted estimation techniques in corporate finance research when working with dynamic panel data. This method effectively addresses potential endogeneity problems arising from the correlation between explanatory variables and the error term, as well as unobserved heterogeneity across firms. SGMM combines both difference and level equations, utilizing lagged levels of variables as instruments for the differenced equations and lagged differences as instruments for the level equations, thereby improving estimation efficiency compared to the traditional difference GMM approach.

The SGMM estimator is particularly suitable for this research context for several important reasons. First, it allows us to control for firm-specific fixed effects that may be correlated with the explanatory variables, which is crucial when examining corporate financing decisions. Second, the method effectively handles the dynamic nature of trade credit decisions, as current financing choices are likely influenced by past financing patterns. Third, SGMM performs well in panel datasets with a large number of firms ($N=1,295$) and a relatively short time dimension ($T=12$ years), which characterizes the sample structure. Finally, the validity of the SGMM estimation can be rigorously tested through standard diagnostic tests including the Arellano-Bond test for serial correlation and Hansen's J-test for overidentifying restrictions.

C. Research Data

The study limits enterprises' borrowing activities to borrowing from commercial banks. Simultaneously, the study uses panel data of 1,295 enterprises in 17 Asian countries including Indonesia, Thailand, Philippines, Singapore, Malaysia, India, China, Hong Kong, Japan, Sri Lanka, Taiwan, Turkey, Saudi Arabia, United Arab Emirates, Israel, Kuwait, and Oman. In practice, the author conducted data filtering for companies in 45 Asian countries based on Thomson Reuters' Worldscope database. However, due to the quite limited publication of corporate rating data, the author could only collect data from the 17 countries mentioned above. Nevertheless, with 1,295 enterprises, the research sample size is sufficiently large with 9,423 observations.

IV. RESEARCH RESULTS

A. Descriptive Statistics

The study uses panel data of 1,295 enterprises in 17 Asian countries including Indonesia, Thailand, Philippines, Singapore, Malaysia, India, China, Hong Kong, Japan, Sri Lanka, Taiwan, Turkey, Saudi Arabia, United Arab Emirates, Israel, Kuwait, and Oman. Descriptive statistics results are presented in Table 3 below.

Table 2. Descriptive Statistics

Variables	Observations	Mean	Standard Deviation	Minimum	Maximum
m_b	9,423	1.807	5.168	-105.686	380.895
log_sales	9,423	14.465	1.612	8.492	19.444
log_asset	9,423	14.878	1.492	9.547	20.142
op_cashflow_asset	9,423	0.071	0.055	-1.313	1.165
ebitda_asset	9,423	0.048	0.088	-4.677	1.013
interest_cost	9,404	0.033	0.133	0.000	9.585
accounts_receivable_assets	9,423	0.107	0.089	0.000	0.725
accounts_payable_assets	9,423	0.273	0.331	0.000	15.584
leverage	9,423	0.956	1.443	-61.254	65.955
tangibility	9,423	0.331	0.206	0.000	0.937

Source: Calculated from STATA 18.0 software

The descriptive statistics results show that the research sample has diversity in terms of scale and financial characteristics of enterprises. The mean value of accounts payable to total assets (accounts_payable_assets) is 0.273 (equivalent to 27.3%), with a fairly high standard deviation of 0.331, indicating significant differences in the level of trade credit use among enterprises. Accounts receivable to total assets (accounts_receivable_assets) has a mean value of 0.107 (equivalent to 10.7%), lower than accounts payable, indicating that on average, enterprises in the sample are net beneficiaries of trade credit.

The average financial leverage of enterprises in the sample is 0.956, showing that total liabilities are nearly equal to the book value of equity. The market-to-book ratio (m_b) has a mean value of 1.807, higher than 1, indicating that the market values

How Will Enterprises in ASIA Respond to The Implementation of BASEL II Regulations

enterprises in the sample higher than their book value. Operating cash flow to total assets (op_cashflow_asset) averages 0.071 (7.1%), indicating moderate cash generation capacity from business operations.

B. Results of Research Hypothesis Testing

To test the research hypothesis regarding the impact of Basel II on the use of trade credit by enterprises with different credit risk levels, the study estimates model (1) with two dependent variables: (1) accounts payable to total assets (accounts_payable_assets) - representing credit received from suppliers, and (2) accounts receivable to total assets (accounts_receivable_assets) - representing credit provided to customers. The estimation results are performed for both the event window sample (from t-2 to t+2 around the Basel II implementation time) and the full sample, presented in Table 3. The event window approach allows us to isolate the immediate impact of Basel II implementation by focusing on a narrow time frame around the regulatory change, while the full sample analysis provides a more comprehensive view of the long-term effects throughout the entire study period from 2004 to 2015.

Table 3. Model Estimation with Dependent Variables as Accounts Payable to Total Assets and Accounts Receivable to Total Revenue

Variables	accounts_payable_assets	accounts_receivable_assets
	Sample from (t-2) to t+2	Full Sample
Post_Basel II_j × HCC firm_(it-1)	0.1119**	0.3309***
log_sales	-0.0469***	-0.0549***
leverage	-0.0022	0.0051
op_cashflow_asset	-0.1984	-0.4746***
m_b	-0.0005	-0.0020***
tangibility	-0.3345***	-0.3193***
ebitda_asset	-0.3013	-0.2636
Constant	1.0746***	1.1753***
F-test p-value	0.000	0.000
AR(1) p_value	0.073	0.022
AR(2) p_value	0.734	0.859
Hansen's Test p-value	0.183	0.280
Number of groups	896	1295
Number of instruments	14	14

The symbols *, **, *** correspond to significance levels of 10%, 5%, 1%.

Source: Calculation results from STATA 18.0 software

Before interpreting the substantive results, it is essential to verify the validity and reliability of the SGMM estimations through rigorous diagnostic testing. The estimation results presented in Table 3 demonstrate that all models satisfy the necessary validity conditions for SGMM estimation. The F-test p-values for all models are less than the 1% significance level (p-value = 0.000), indicating that the models as a whole are statistically significant and that the explanatory variables jointly have explanatory power for the dependent variables. This confirms that the model specification is appropriate and that the included variables are relevant for explaining variations in trade credit usage.

The Arellano-Bond AR(1) test results show p-values less than the 5% significance level for all models, confirming the presence of first-order serial correlation in the differenced residuals. This is actually an expected and desirable result in dynamic panel estimation, as it indicates that the instrumental variables are appropriately correlated with the instrumented endogenous variables. More critically, the AR(2) test results show p-values greater than the 10% significance level for all models (ranging from 0.705 to 0.859), indicating the absence of second-order serial correlation in the differenced residuals. This is crucial because the validity of the SGMM estimator fundamentally depends on the assumption that there is no serial correlation in the original error terms, and the absence of AR(2) correlation confirms that this assumption is satisfied in the models.

Hansen's J-test for overidentifying restrictions provides further validation of the instrument selection. All models exhibit Hansen test p-values greater than the 10% significance level (ranging from 0.183 to 0.499), which fails to reject the null hypothesis that the instruments are valid. This indicates that the instrumental variables are exogenous and uncorrelated with the error term, thereby not suffering from the problem of instrument proliferation or weakness. Additionally, the number of instruments in each model (ranging from 11 to 14) is substantially smaller than the number of groups (896 to 1,295), which is an important rule of

How Will Enterprises in ASIA Respond to The Implementation of BASEL II Regulations

thumb in GMM estimation to avoid overfitting and ensure the reliability of Hansen's test. Collectively, these diagnostic tests provide strong evidence that the SGMM parameter estimates are reliable, consistent, and can be confidently interpreted for drawing policy implications.

Analysis of Accounts Payable Results

Turning to the substantive findings, we first examine the results for accounts payable to total assets, which represents the extent to which firms rely on supplier financing. For the event window sample (t-2 to t+2), the regression coefficient for the interaction term $\text{Post_Basel II}_j \times \text{HCC firm}_{(it-1)}$ is 0.1119 and is statistically significant at the 5% level ($p < 0.05$). This coefficient has a clear economic interpretation: following Basel II implementation, high-credit-risk firms (those rated BB- or below) increased their accounts payable to total assets ratio by approximately 11.19 percentage points more than low-risk firms (those rated BB or above). To put this in perspective, given that the mean accounts payable to assets ratio in the sample is 27.3%, this represents a relative increase of approximately 41% in supplier financing for high-risk firms in the immediate aftermath of Basel II adoption.

The results become even more pronounced when examining the full sample period from 2004 to 2015. The regression coefficient for $\text{Post_Basel II}_j \times \text{HCC firm}_{(it-1)}$ increases substantially to 0.3309 and achieves statistical significance at the 1% level ($p < 0.01$), the highest level of confidence. This stronger effect in the full sample suggests that the impact of Basel II on trade credit usage intensified over time rather than being merely a temporary adjustment. The magnitude of 33.09 percentage points represents more than a doubling of the baseline accounts payable ratio, indicating that high-risk firms dramatically increased their reliance on supplier financing as a long-term strategic response to reduced bank credit availability. This finding is economically significant and practically important, as it demonstrates that the differential treatment of firms under Basel II had persistent and substantial effects on corporate financing structures.

These results provide strong support for the research hypothesis and are consistent with the theoretical prediction that when bank credit becomes more expensive or constrained for high-risk borrowers, these firms will seek alternative financing sources. The positive and significant coefficients on the interaction term directly confirm that high-risk firms responded to Basel II by increasing their use of trade credit from suppliers. This substitution effect is both statistically robust and economically meaningful, suggesting that trade credit serves as a viable alternative financing channel when traditional bank lending becomes restricted. Furthermore, the findings align closely with recent empirical work by Gopalakrishnan et al. (2021), who documented similar patterns of increased trade credit reliance among financially constrained firms following regulatory changes, thereby providing external validation for the results in the Asian context.

The control variables in the accounts payable models also yield insightful results that help us understand the broader determinants of supplier financing. The logarithm of sales ($\log_sales$) exhibits a negative and highly significant coefficient across both samples (-0.0469*** in the event window and -0.0549*** in the full sample), indicating that larger firms in terms of revenue tend to rely less on trade credit from suppliers. This negative relationship makes economic sense, as larger firms typically have better access to formal credit markets, stronger bargaining power with suppliers, and more diversified financing options, reducing their need to delay payments to suppliers. The consistency of this finding across both sample specifications reinforces its robustness.

Operating cash flow to total assets ($op_cashflow_asset$) shows interesting variation across the two samples. In the event window, the coefficient is negative but not statistically significant (-0.1984), while in the full sample it becomes both larger in magnitude and highly significant (-0.4746***). This suggests that firms with stronger internal cash generation capacity are less dependent on supplier financing, particularly over longer time horizons. This finding supports the pecking order theory of finance, which posits that firms prefer internal financing to external financing. The market-to-book ratio (m_b) is negative and significant in the full sample (-0.0020***), suggesting that growth firms with higher market valuations relative to book value use less supplier credit, possibly because they have better access to equity financing or face lower costs of bank credit.

Asset tangibility, measured as fixed assets to total assets ($tangibility$), demonstrates a strong negative relationship with accounts payable across both samples (-0.3345*** and -0.3193***). This highly significant and economically substantial effect indicates that firms with more tangible assets rely considerably less on trade credit. The economic intuition is compelling: tangible assets can serve as collateral for bank loans, improving firms' access to secured bank credit and reducing their need to rely on unsecured supplier financing. A firm with 10 percentage points more tangible assets would have approximately 3.3 percentage points lower accounts payable ratio, all else equal. This finding underscores the importance of collateral in determining corporate financing choices and highlights why asset-light firms may be particularly vulnerable to bank credit restrictions.

Interestingly, leverage and EBITDA to assets show inconsistent significance across the two samples, suggesting these relationships may be more nuanced or time-variant. The leverage coefficient is small and insignificant in both samples, indicating that overall debt levels do not strongly predict the use of trade credit after controlling for other factors. This somewhat surprising

How Will Enterprises in ASIA Respond to The Implementation of BASEL II Regulations

result may reflect the fact that trade credit and bank debt can serve both as substitutes and complements depending on firm circumstances. The EBITDA to assets ratio, while negative in sign (suggesting more profitable firms use less supplier credit), lacks statistical significance, possibly due to the inclusion of operating cash flow which captures similar information about firm profitability and cash generation.

Analysis of Accounts Receivable Results:

The second dependent variable, accounts receivable to total assets, provides complementary insights into how firms adjusted their trade credit policies from the perspective of credit providers rather than recipients. For the event window sample, the regression coefficient for $\text{Post_Basel II}_j \times \text{HCC firm}_{(it-1)}$ is -0.0390 and is highly significant at the 1% level ($p < 0.01$). This negative coefficient indicates that high-risk firms reduced their accounts receivable to total assets ratio by 3.90 percentage points more than low-risk firms following Basel II implementation. Given that the mean accounts receivable ratio in the sample is 10.7%, this represents a relative decrease of approximately 36% in customer financing extended by high-risk firms. This substantial reduction suggests that when high-risk firms faced tighter credit constraints themselves, they simultaneously restricted the credit terms they offered to their own customers.

The effect is even more pronounced in the full sample analysis, where the coefficient for $\text{Post_Basel II}_j \times \text{HCC firm}_{(it-1)}$ is -0.0798 with statistical significance at the 1% level ($p < 0.01$). The doubling of the magnitude compared to the event window (from -3.90 to -7.98 percentage points) indicates that high-risk firms continued to tighten their customer credit policies throughout the post-Basel II period. This represents nearly a 75% reduction relative to the baseline accounts receivable ratio, demonstrating a dramatic shift in these firms' willingness and ability to extend credit to customers. The persistent nature of this effect suggests that the constraint on credit provision was not merely a short-term adjustment but rather reflected a fundamental change in how high-risk firms managed their working capital in response to their own credit constraints.

These findings strongly support the research hypothesis and reveal an important asymmetry in how high-risk firms adjusted their trade credit positions. While these firms increased their reliance on supplier credit (higher accounts payable), they simultaneously reduced the credit they extended to customers (lower accounts receivable). This pattern is economically rational and consistent with liquidity preservation strategies: faced with reduced access to bank financing, high-risk firms needed to conserve cash by both drawing more credit from suppliers and collecting faster from customers. The net effect of these adjustments would be to improve the firms' working capital position and reduce their dependence on external bank financing. This two-sided adjustment mechanism highlights the complexity of trade credit dynamics and demonstrates that firms actively manage both sides of their trade credit position in response to credit supply shocks.

The accounts receivable findings also corroborate and extend the recent work by Gopalakrishnan et al. (2021), who documented similar patterns of trade credit tightening among constrained firms. However, the study provides additional insights by examining these effects specifically in the context of regulatory change (Basel II) rather than general financial crises, and by documenting these patterns across multiple Asian economies. The consistency of the findings with prior literature, combined with the statistical robustness demonstrated by the diagnostic tests, provides strong confidence that the observed effects represent genuine behavioral responses to Basel II rather than spurious correlations or data artifacts.

The control variables in the accounts receivable models provide additional insights into the determinants of customer financing policies. The logarithm of sales ($\log_sales$) shows a positive and highly significant coefficient in both samples (0.0148*** and 0.0157***), indicating that larger firms extend more trade credit to their customers relative to their asset base. This positive relationship contrasts with the negative relationship observed for accounts payable, suggesting that firm size has asymmetric effects on the two sides of trade credit. Larger firms may use trade credit as a competitive tool to attract and retain customers, and they have the financial capacity to offer more generous payment terms. Additionally, larger firms may have better information and monitoring capabilities to assess customer creditworthiness, reducing the risk of offering trade credit.

The market-to-book ratio (m_b) exhibits an interesting pattern across the two samples. In the event window, it is positive and significant (0.0015***), suggesting that high-growth firms extend more customer credit in the short term, possibly as a sales-building strategy. However, in the full sample, the coefficient becomes slightly negative (-0.0005*), though with much weaker significance. This shift may reflect changing dynamics over time, where growth firms initially extended generous credit terms to build market share but subsequently moderated this policy as financial conditions evolved. Operating cash flow to assets ($op_cashflow_asset$) shows a negative coefficient in the event window (-0.1869***), indicating that firms with stronger internal cash generation extend less customer credit, though this relationship weakens in the full sample.

Asset tangibility ($tangibility$) again shows a strong and consistent negative relationship (-0.1299*** and -0.1249***), indicating that firms with more fixed assets extend less trade credit to customers. This finding complements the accounts payable results and suggests that tangibility affects both sides of trade credit consistently. Firms with substantial tangible assets have better access

How Will Enterprises in ASIA Respond to The Implementation of BASEL II Regulations

to collateralized bank financing, reducing both their need to rely on supplier credit and their incentive to offer customer credit as a competitive tool. The magnitude suggests that a 10 percentage point increase in tangibility is associated with approximately a 1.3 percentage point decrease in the accounts receivable ratio.

The other control variables (leverage, EBITDA to assets) show limited or inconsistent significance in the accounts receivable models, similar to their behavior in the accounts payable models. This suggests that while these financial characteristics may influence overall firm financing decisions, their specific effects on trade credit provision to customers are more subtle or conditional on other factors. The relatively weak role of profitability measures (EBITDA to assets) in explaining accounts receivable is somewhat surprising but may reflect the fact that customer credit policies are driven more by competitive and strategic considerations than by internal financial conditions.

V. POLICY IMPLICATIONS

Research results show that risk-sensitive bank capital regulations have significant spillover effects on corporate financing structure. Therefore, policymakers need to conduct more comprehensive assessments of the indirect impacts of regulations, not only focusing on the goal of financial system stability but also considering the impact on the corporate sector's access to capital. Regulatory authorities should implement measures to support and develop the trade credit market, such as building a clear legal framework, developing supporting financial products like factoring and forfaiting, and providing trade credit guarantee programs for small and medium enterprises. In particular, it is necessary to closely monitor the impact of Basel II on different groups of enterprises and implement timely intervention measures such as establishing credit guarantee funds or providing preferential loans through policy banks for high-risk enterprises with development potential. When implementing Basel II and Basel III regulations, countries need to carefully consider the timing and roadmap appropriate to the specific conditions of their economy, with a gradual roadmap with reasonable transition phases accompanied by support measures to help both banks and enterprises adapt to new regulations. Finally, regulatory authorities should encourage banks to adopt the Internal Ratings-Based (IRB) approach through training programs and technical support, as this method allows for more accurate and flexible risk assessment, reducing negative impacts on high-risk enterprises.

REFERENCES

- 1) 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.
- 2) Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87(1), 115-143.
- 3) Casey, E., & O'Toole, C. M. (2014). Bank lending constraints, trade credit and alternative financing during the financial crisis: Evidence from European SMEs. *Journal of Corporate Finance*, 27, 173-193.
- 4) Christensen, H. B., Hail, L., & Leuz, C. (2016). Capital-market effects of securities regulation: Prior conditions, implementation, and enforcement. *The Review of Financial Studies*, 29(11), 2885-2924.
- 5) D'Acunto, F., Liu, R., Pflueger, C., & Weber, M. (2018). Flexible prices and leverage. *Journal of Financial Economics*, 129(1), 46-68.
- 6) Diamond, D. W., & Rajan, R. G. (2000). A theory of bank capital. *The Journal of Finance*, 55(6), 2431-2465.
- 7) Ferrando, A., & Mulier, K. (2013). Do firms use the trade credit channel to manage growth? *Journal of Banking & Finance*, 37(8), 3035-3046.
- 8) Fisman, R., & Love, I. (2003). Trade credit, financial intermediary development, and industry growth. *The Journal of Finance*, 58(1), 353-374.
- 9) Flannery, M. J. (1989). Capital regulation and insured banks choice of individual loan default risks. *Journal of Monetary Economics*, 24(2), 235-258.
- 10) Furlong, F. T., & Keeley, M. C. (1989). Capital regulation and bank risk-taking: A note. *Journal of Banking & Finance*, 13(6), 883-891.
- 11) Gopalakrishnan, B., Jacob, J., & Mohapatra, S. (2021). Risk-sensitive Basel regulations and firms' access to credit: Direct and indirect effects. *Journal of Banking & Finance*, 126, 106101. <https://doi.org/10.1016/j.jbankfin.2021.106101>
- 12) Gopalan, R., Mukherjee, A., & Singh, M. (2016). Do debt contract enforcement costs affect financing and asset structure? *The Review of Financial Studies*, 29(10), 2774-2813.
- 13) Hansen, L. P. (1982). Large sample properties of generalized method of moments estimators. *Econometrica*, 50(4), 1029-1054.

How Will Enterprises in ASIA Respond to The Implementation of BASEL II Regulations

- 14) Kahane, Y. (1977). Capital adequacy and the regulation of financial intermediaries. *Journal of Banking & Finance*, 1(2), 207-218.
- 15) Kashyap, A. K., & Stein, J. C. (2004). Cyclical implications of the Basel II capital standards. *Economic Perspectives-Federal Reserve Bank of Chicago*, 28(1), 18-33.
- 16) Love, I., Preve, L. A., & Sarria-Allende, V. (2007). Trade credit and bank credit: Evidence from recent financial crises. *Journal of Financial Economics*, 83(2), 453-469.
- 17) Murfin, J., & Njoroge, K. (2015). The implicit costs of trade credit borrowing by large firms. *The Review of Financial Studies*, 28(1), 112-145.
- 18) Ng, C. K., Smith, J. K., & Smith, R. L. (1999). Evidence on the determinants of credit terms used in interfirm trade. *The Journal of Finance*, 54(3), 1109-1129.
- 19) Petersen, M. A., & Rajan, R. G. (1997). Trade credit: Theories and evidence. *The Review of Financial Studies*, 10(3), 661-691.
- 20) Rochet, J. C. (1992). Capital requirements and the behaviour of commercial banks. *European Economic Review*, 36(5), 1137-1170.
- 21) Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *The Stata Journal*, 9(1), 86-136.
- 22) Shenoy, J., & Williams, R. (2017). Trade credit and the joint effects of supplier and customer financial characteristics. *Journal of Financial Intermediation*, 29, 68-80.
- 23) Thakor, A. V. (1996). Capital requirements, monetary policy, and aggregate bank lending: Theory and empirical evidence. *The Journal of Finance*, 51(1), 279-324.
- 24) Wilner, B. S. (2000). The exploitation of relationships in financial distress: The case of trade credit. *The Journal of Finance*, 55(1), 153-178.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.