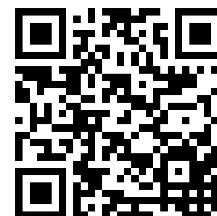


The Fiscal Space for Health in Vietnam: Challenges from Population Aging



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ABSTRACT: Vietnam's population is aging, leading to a higher proportion of elderly individuals. Despite significant health financing reforms, But changes in epidemiology, demographics, and growing demand for health care will continue to put pressure on health spending. This paper examines the fiscal space for health in Vietnam amidst population aging by analyzing data from 2009 to 2020. Findings reveal that healthcare resources have not kept pace with the escalating demands due to the aging of Vietnam's population faster than forecast. Total health expenditure as a percentage of GDP shows this clear increase. Private healthcare spending, particularly out-of-pocket expenses, is on the rise. Spending from the health insurance fund also increases every year,, placing future burdens on young workers. In addition, the State budget allocations for healthcare have also grown, but economic growth will compensate for this shortfall.

KEYWORDS: out of pocket expenditure; state budget; population aging; health insurance fund; health financing; total health expenditure.

I. INTRODUCTION

Vietnam has made significant strides in healthcare, with coverage reaches over 90%, despite being a low-middle income country. In 2020, the average healthcare spending per person over 65 was approximately 1.57% of GDP, totaling around 690 USD. Moreover, the health insurance coverage for this age group has reached almost 100%. The World Bank predicts a 1.5-fold increase in the population over 65 by 2030, rising from an estimated 8% in 2020 to 9.5% in 2030 (Teo et al., 2019). On average, per capita medical spending for the elderly is projected to rise by about 36.88 USD annually. Consequently, by 2030, healthcare spending for this group is expected to surge to nearly 3.7 billion USD, compared to 2020. The combination of Vietnam's aging population and low income levels raises concerns about the strain on social welfare policies due to the growing healthcare needs of the elderly. This prompts the question of how to ensure adequate health financing for this demographic.

The effects of population aging on the health financing system have been extensively researched. For instance, Tang & Li (2022) examined this in their study on "The impact of population aging on health financing," using data from 45 countries spanning 2000 to 2019. Their findings revealed that the health burden of the elderly adversely affects the financial balance of health care. Consequently, the authors suggested that enhancing the efficiency of healthcare resources is the key to ensuring financial stability in health care.

A study closely related to the article's research is "The future of health financing in Vietnam" by the World Bank (Teo et al., 2019). The authors examined Vietnam's health financing model, evaluated the current and potential future impacts of relevant policies and reforms, and assessed the financial viability of various health funding sources. Subsequently, they put forth recommendations to stabilize healthcare financing in Vietnam, which include: advancing macroeconomic development, elevating health as a priority, augmenting resources allocated to the health sector, boosting non-repayable aid and foreign assistance specifically for healthcare, and enhancing the efficiency of public health expenditure.

Vietnam's population is aging faster than forecast and the disease burden is shifting to chronic and non-communicable diseases, this change will affect various aspects of social life, including the healthcare service system, social security, psychology, and lifestyle... The key concern lies in how Vietnam can sustain health spending levels amidst this demographic shift. To tackle this issue, we examined the effects of population aging on health expenditure, considering factors like external financial aid, out-of-

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pocket payments, contributions from the Health Insurance Fund, and medical expenses covered by the State Budget for the elderly in Vietnam.

II. RESEARCH OBJECTIVES AND METHODOLOGY

The primary aim of this research is to propose ways for Vietnam to uphold adequate public health expenditure, ensuring continued progress in health outcomes and addressing emerging health issues. This involves evaluating current and potential future impacts of policies and reforms, as well as identifies the financing potential of different sources of fiscal space for health.

“Fiscal space for health” refers to the ability of governments to increase spending for the health sector, without jeopardizing the government’s long-term solvency or crowding out expenditure in other sectors. Within the limits of this research, we refer to a health finance space that directly impacts the health finances of the elderly group, including: (1) Increase foreign aid specific to the health sector; (2) maintain private healthcare and pay out of pocket; (3) increase contributions to the Health Insurance fund and (4) prioritize government spending on health. This paper will look at each of these potential sources of fiscal space and highlight the prospects of raising additional sources of financing for health from each one.

To achieve the research goal, we employ two research methods as following:

Data collection method: We gather and utilize forecast data sets from the General Statistics Office, the World Bank, World Health Organization and Viet Nam Social Security concerning health spending for individuals aged 65 and above in Vietnam during the period 2009-2020. Additionally, we delve into Vietnam's demographic landscape, prior studies on challenges confronting Vietnam's health financing amidst the impact of population aging, and in this article, we define "elderly" as individuals aged 65 years and older.

Analysis and synthesis method: Utilizing the gathered data, we scrutinize the current status of health expenditure from four primary sources: external financial aid, out-of-pocket payments, contributions from the Health Insurance Fund, and government allocations for healthcare. Consequently, we propose two fundamental recommendations: sustaining out-of-pocket medical expenses and augmenting the contribution fee to the Health Insurance Fund.

III. RESULT

3.1. Demographic

In Table 1, the aging index is calculated as the ratio between the number of elderly people and 100 people under 15 years old. If in 2009, every 2.36 people of working age had to support one elderly person, then in 2014 it was 2.28 and in 2020 it was 2.29. Thus, the total dependency ratio of Vietnam's population decreased by 1.1% during the research period. According to Ogura and Jakovljevic (2014), when the overall dependency ratio calculated on the basis of population 15-64 reaches 50, that is, for every two people of working age, one person outside the working age must bear the burden of the population. entering the period of "golden population structure"; and the proportion of people aged 65 and over accounts for 7%, the population is considered "aging", so Vietnam is entering a period of gradually reducing the "golden population structure" and starting the period of population aging.

Table 1: Proportion of population by age group and aging index

Years		2009	2014	2020
Targets				
1. Population proportion (%)				
1.1	0 – 14 Y	24.5	23.5	22.4
1.2	15 – 64 Y	69.1	69.4	69.6
1.3	65 years old or older	6.4	7.1	8.0
2. Aging index (%)		26.1	30.2	35.7

(Source: compiled from General Statistics Office in Vietnam data)

Table 1 indicates a significant rise in Vietnam's aging index, with a nearly 10% increase between 2009 and 2020. This uptick reflects improvements in health and longevity among the population. However, it also presents challenges in ensuring adequate healthcare for the elderly and managing healthcare expenditures. Additionally, Vietnam's adoption of medical advancements has led to saving numerous lives, altering the societal role of women, enhancing social integration, emphasizing social security, and

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notably reducing postpartum mortality rates (Ogura and Jakovljevic, 2014). These factors contribute to a faster-than-expected increase in Vietnam's aging population.

3.2. Health expenditure per capita

In this section, we compare the average health expenditure per capita with the average health expenditure of the elderly group and the group aged 64 and under. We discovered that medical spending for the elderly was, on average, 4.8 times higher than for individuals aged 64 and under from 2009 to 2020.

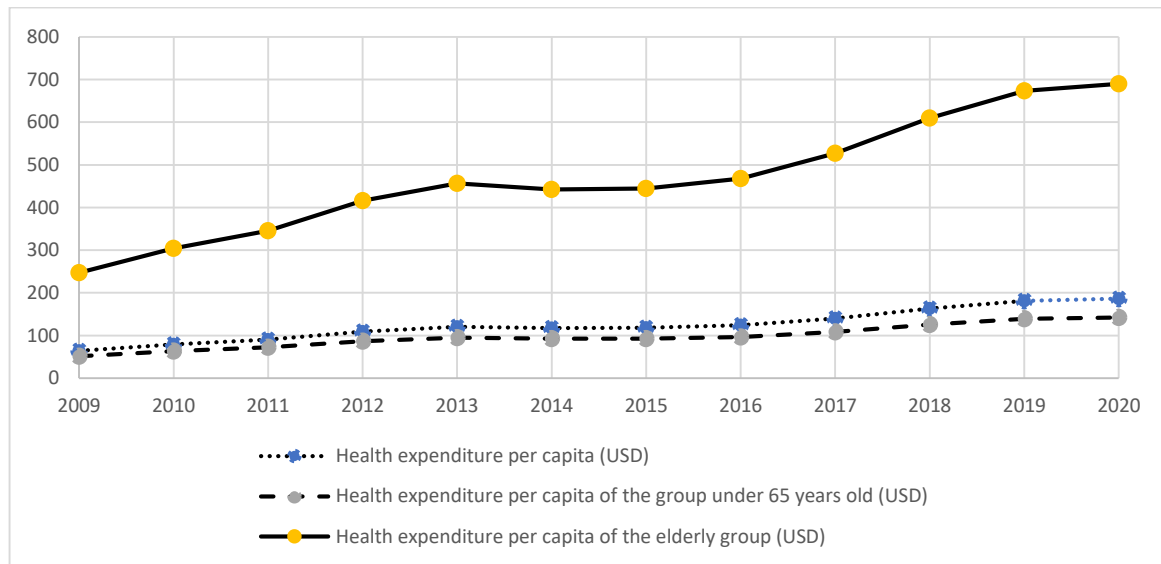


Figure 1. Comparison of average health spending per capita
(Source: compiled from data sources of WB, WHO and VSS)

Health spending per capita in Vietnam nearly tripled from 2009 to 2020. Health spending for the elderly is on average 4.8 times higher than for the group aged 64 and under, increasing from 247.1 USD in 2009 to 689.68 USD per capita in 2020 (Figure 1). Therefore, a 0.1% increase in the aging population (equivalent to about 100,000 people) results in a health spending rise of approximately 69 million USD/year. Assuming a yearly increment of 36.88 USD in medical spending per elderly person and a forecasted annual aging rate of 0.15% (World Bank, 2018), by 2030, the aging population is projected to grow by 10 million people, leading to a total health spending surge of 3,688 million USD.

3.3. Assessing Fiscal Space for Health

In the context of Vietnam's population aging faster than expected, how can Vietnam maintain sufficient public health spending to maintain and improve good health outcomes as well as respond to challenges? New knowledge about health? In other words, what are the main sources of health financing space in Vietnam?

Fiscal space for health refers to the ability of governments to increase health spending without jeopardizing the government's long-term solvency or crowding out spending in other areas needed to achieve the goals. other development goals (Somanathan et al, 2014). Financial space for health can be created from many different sources, in this study we group them into the following four categories:

1. Increase foreign aid specific to the health sector;
2. Maintain private healthcare and pay out of pocket;
3. Increase contributions to the Health Insurance fund;
4. Prioritize government spending on health.

3.3.1. Health financing from foreign aid.

The distribution of health expenditure from four main sources is illustrated in Figure 2. External support in the form of development assistance for health is a crucial means of providing extra funding for low- to middle-income countries. As a nation's income rises, the share of health development aid diminishes, eventually leading to the cessation of this support. Vietnam is also in the process of phasing out such funding.

For the elderly population, medical expenditure accounts for a small fraction (1.9% in 2009, decreasing to 1.11% in 2020). This aid only plays an important role in various disease-focused programs, emphasizing policy advocacy, enhancing the capacity of

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regulatory bodies, and investing in equipment procurement systems for remote areas. The forthcoming sections of this paper will delve into the elimination of this funding source.

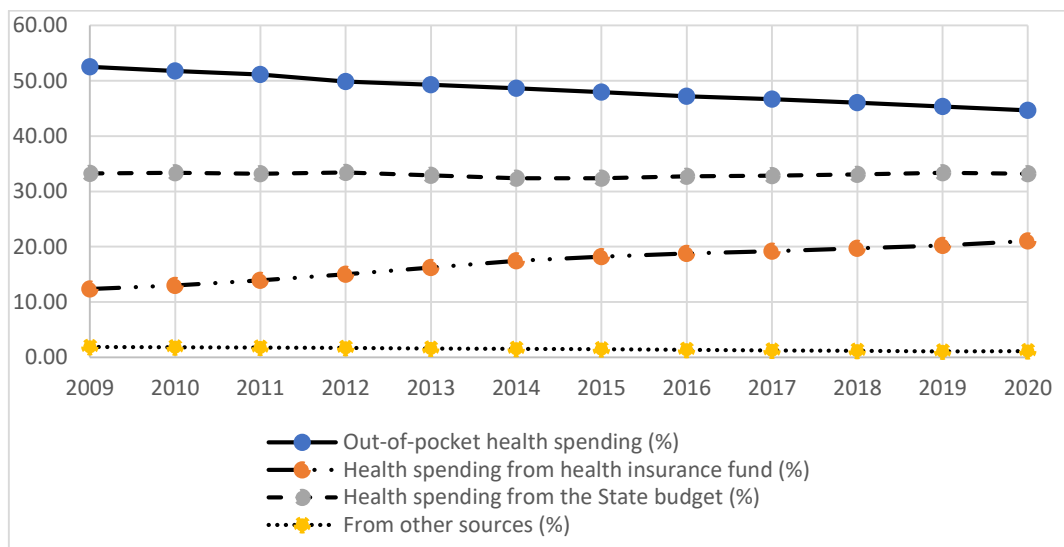


Figure 2: Proportion of health spending from sources for the elderly group
(Source: compiled from data sources of WB, WHO and VSS)

3.3.2. Private health insurance and out-of-pocket medical expenses.

Private health insurance presents both opportunities and risks for achieving health system performance objectives. In numerous countries, private health insurance plays a crucial role by investing resources into the health system and enhancing its responsiveness. However, it also poses significant equity challenges and tends to raise healthcare costs in many instances. When public funding is limited, private insurance can act as a transitional mechanism, bolstering capacity and providing financial protection to specific population segments (such as vulnerable groups: children, the elderly, disabled individuals, and those with special needs). In this study focuses on examining the financial burden on households in Vietnam from 2009 to 2020, as data on private health insurance in Vietnam is unavailable, leaving a gap in the analysis.

Despite efforts to reduce households' out-of-pocket health expenses, this financial aspect remains the primary spending component in the healthcare financing system for the elderly and households with elderly members. However, the proportion of out-of-pocket spending has decreased from 53.49% in 2009 to 44.64% in 2020 (Figure 2) on average, attributed to the decline in total out-of-pocket health expenditure per capita. Nevertheless, out-of-pocket expenses for the elderly have risen from 0.19% in 2009 to 1.14% in 2020, indicating an annual increase of approximately 0.01% (Figure 3). This trend is driven by the growing prevalence of non-communicable and chronic diseases among the elderly population, while the Vietnamese healthcare system has not adapted timely to address this shift in disease burden and the escalating demand for medical care among the elderly.

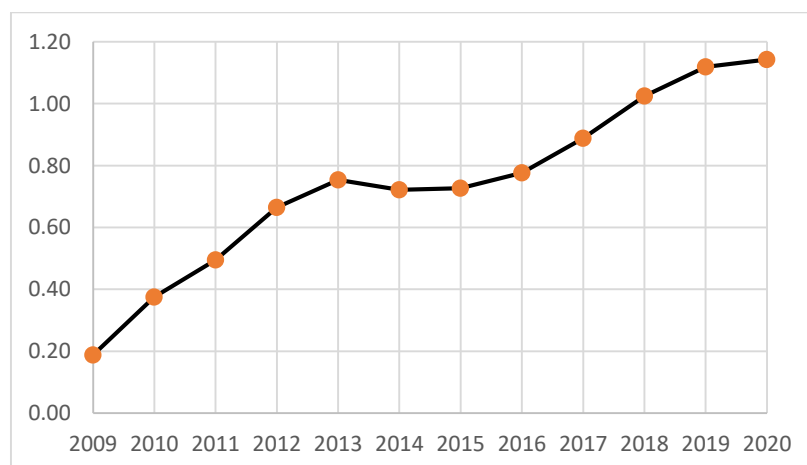


Figure 3: Proportion of annual out-of-pocket medical spending of the 65+ group
(Source: Calculation based on research findings)

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In the future, out-of-pocket health spending for the elderly will keep rising. One solution is combining private and social health insurance via benefit packages. This includes supplementary health care to cater to various needs, enhancing care quality and health protection. Simultaneously, this approach aims to lessen the financial strain on the State Budget.

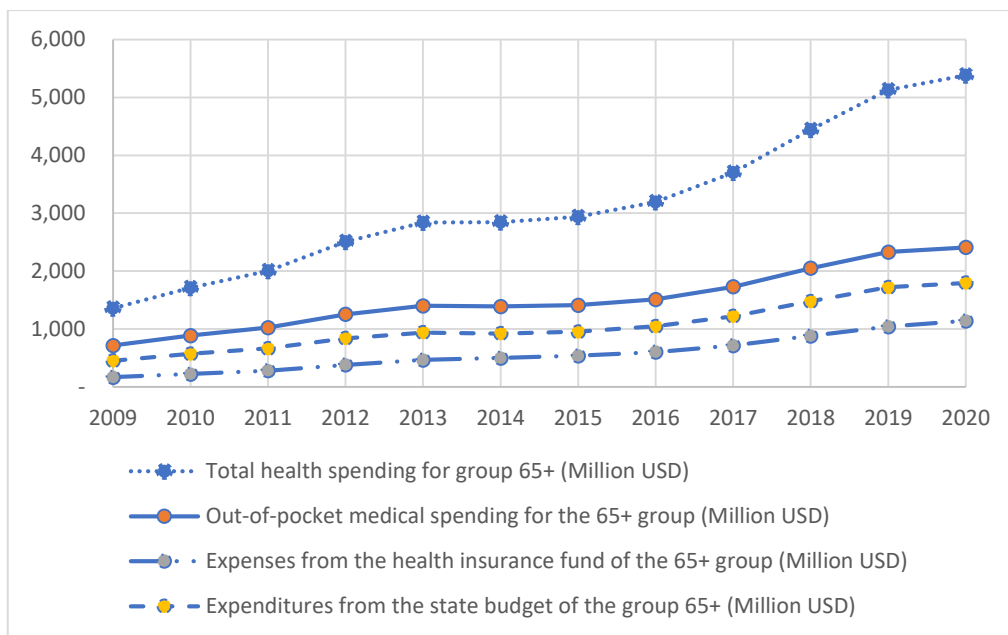


Figure 4. Total health expenditure from all sources of the elderly group (65+)
(Source: Calculation based on research findings)

With the scenario outlined in section 3.2 and maintaining the health spending rate in 2020 level of 44.46% (Figure 2) or 307.89 USD per capita (Figure 6), by 2030, the additional funding required for out-of-pocket medical expenses will reach 1.640 million USD. This translates to approximately 471.86 USD/year per elderly individual. Such a financial burden will significantly impact the elderly population, directly influencing social security concerns. Because currently, 40% of the elderly rely on their children and personal savings, while the rest receive pensions and monthly benefits averaging around 60 million VND/year (GSO, 2021).

3.3.3. payment from the health insurance fund

At present, the health insurance involvement rate among the elderly stands at 99.8% (VSS, 2022), indicating universal health coverage for this demographic. Nonetheless, a significant portion of the group's health insurance income is sourced from the Social Insurance fund and the State Budget, with the bulk of health insurance expenditures directed towards hospitals, encompassing 76% of medical outlays (Tang & Li, 2022).

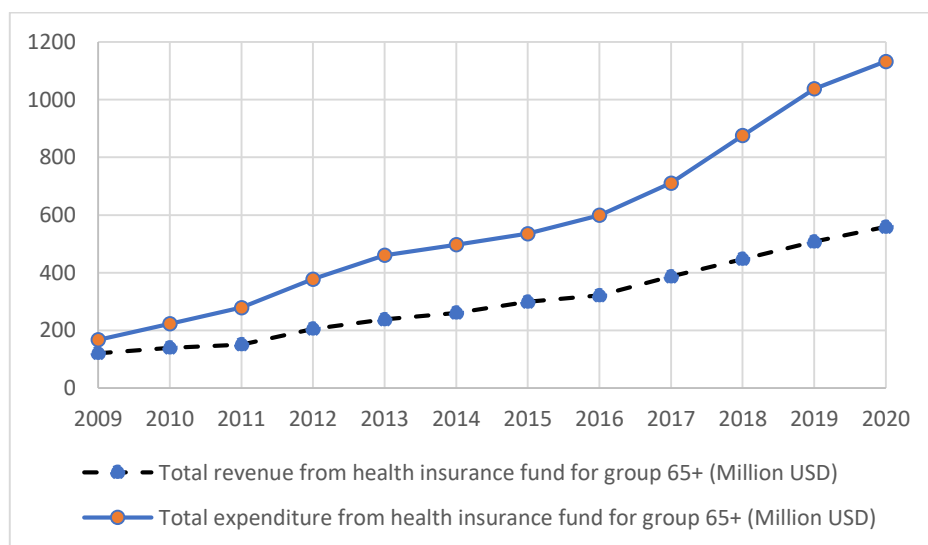


Figure 5: Revenue and expenses of the Health Insurance fund for the elderly population.
(Source: Calculation based on research findings)

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Expenditures from the Health Insurance Fund consistently exceeded revenues throughout the study period, with the gap widening significantly. Starting from 167.8 million USD versus 121.1 million USD, it escalated to 1,132.6 million USD versus 558.7 million USD. The expenditure-to-revenue ratio, nearly balanced in 2009, doubled by 2020. Despite this surge, the compensation rate from the Health Insurance Fund rose sharply from 12.35% in 2009 to 21.04% in 2020. In a hypothetical scenario outlined in section 3.2, maintaining the medical spending rate at 21.04% or 145.08 USD per capita, additional funding required for health expenses from the Health Insurance Fund in 2030 would amount to 776 million USD.

Economic development means that workers' salaries and the level of subsidies from the Government increase, according to World Bank forecasts, economic growth in the period 2021 - 2025 and 2026 - 2030 respectively is 3.5% and 3.2% (World Bank, 2023). This growth indicates that the compensation level would reach approximately 900 million USD annually. However, this sum might not suffice to cover healthcare costs for the elderly and high-income individuals. A more viable solution could involve raising the health insurance contribution rate from 4.5% to 6%. This adjustment would require working-age individuals to allocate a portion of their earnings to support the elderly. By increasing the rate to 6%, it is projected that annual revenue for the Health Insurance Fund would rise by around 1,850 million USD, effectively offsetting the surge in medical expenses due to population aging.

3.3.4. State budget for healthcare.

The percentage of medical expenditure for the elderly from the State Budget remained stable during 2009-2020, hovering around 33% (Figure 2). In a projected scenario where this proportion stays constant, despite a rise in healthcare spending from 82.18 USD per person in 2009 to 229.07 USD per person in 2020 (Figure 6), the expenditure has almost tripled over the last 12 years. Referring to section 3.2, if the health expenditure rate remains at 33.21% (Figure 2) by 2020 due to economic expansion, by 2030, the additional funding from the State Budget is expected to reach approximately 1,225 million USD.

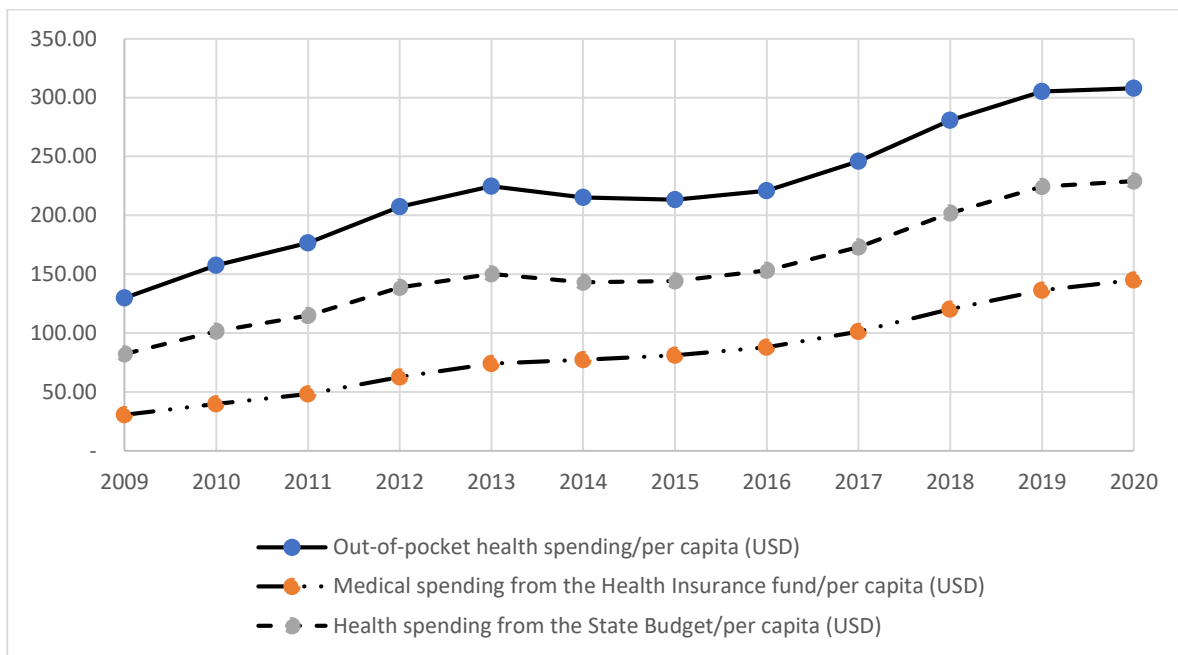


Figure 6. Health expenditure from sources per capita for the elderly group
(Source: Calculation based on research findings)

A comparison of the ratio between GDP growth and health spending from the State Budget for the elderly group (Figure 7) reveals that this ratio varies from 0.426% in 2009 to 0.521% in 2020, with a coefficient indicating the elasticity of public health spending for the elderly group compared to the average GDP growth at about 4.34. In simpler terms, for every 1% increase in GDP per capita, public health spending for the elderly group increases by 4.34% on average. According to a conservative forecast by the World Bank, Vietnam's GDP growth in 2030 is estimated to be 500 billion USD (World Bank, 2018), and maintaining the same rate as in 2020, the State Budget could potentially offset around 820 million USD. On the other hand, a more optimistic forecast from the Government of Vietnam (GSO, 2021) suggests that Vietnam's GDP in 2030 will reach 600 billion USD, resulting in a State budget compensation of approximately 1,338 million USD, a figure closely matching the additional funding from the State Budget.

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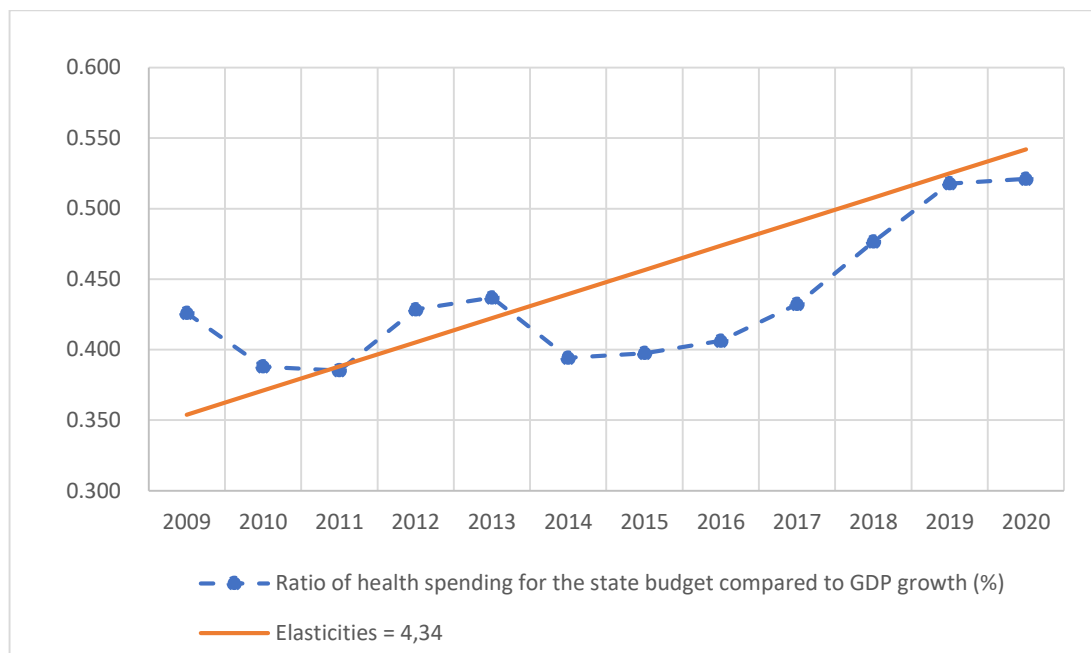


Figure 7. Ratio of health spending for the elderly group from the state budget compared to GDP growth (%)
(Source: Calculation based on research findings)

IV. CONCLUSION

As the proportion of the population over 65 years of age increases, they face greater health risks and require more medical care than younger individuals while also contributing to the insurance system. Health insurance decreases when they no longer participate in the labor market. To ensure financial resources for medical care for the elderly in the future, Vietnam still needs to maintain medical spending. Out-of-pocket health benefits, although impacting social security issues directly, align with trends in other countries undergoing health financing transitions (Teo et al., 2019), where out-of-pocket spending remains at around 44.46% of total health spending.

Health insurance payments from the Health Insurance Fund for the elderly group will likely be in deficit in the future. One possible reform is to increase the contribution rate to the Health Insurance fund up to 6%, even though this may impact business psychology, corporate profits, and the social security burden for young working-age individuals, thus potentially hindering economic growth.

Regarding the Government's health spending, the future priority of health in Government spending is also uncertain. Despite Government statements indicating that health will remain a priority in Government spending with ambitious targets, trend data reveals that Government spending on health as a share of total Government spending has not significantly increased over the past 12 years.

In terms of external support, the Vietnamese Government is gradually phasing out this financial source. In reality, over the past 12 years, this source has accounted for a very small proportion of medical spending for the elderly age group and does not directly cover the health care needs of the elderly.

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