

# Beyond Coverage

The Social and Economic Impact  
of Insurance in ASEAN

2025/2026

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Prudential plc  
Report

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# Foreword



## Foreword

Prudential believes that a robust insurance industry is essential for fostering economic development and enhancing social welfare. Insurance provides crucial protection and risk mitigation, enabling businesses and individuals to engage in economic activities with greater confidence and fewer concerns. Health insurance offers an effective means for individuals to address health issues, focusing on prevention and better health, and by extension, higher productivity. Life insurance can supply capital and optimise resource allocation through long-term investments in the real economy.

Prudential, in partnership with PwC, conducted an analysis of the social and economic impact of the insurance sector across six ASEAN nations: Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam. The findings indicate that non-life insurance (including health insurance) and life insurance positively influence GDP and contribute to advancing the United Nations' Sustainable Development Goals. Higher levels of insurance coverage can lead to increased GDP and GDP per capita in the ASEAN-6 countries. The study also highlights short- and long-term policy actions that can boost insurance uptake and showcases some of Prudential's extensive experience spanning over a century in serving customers and investing in Asia.

By sharing these findings, our goal is to provide initial policy recommendations on the critical role the insurance industry plays in supporting societal resilience and promoting sustainable economic growth and continue our work alongside other stakeholders in ASEAN to harness the potential of the insurance sector.

### Steven Chan

Group Chief Government Relations and Policy Officer

Prudential plc

# Executive Summary

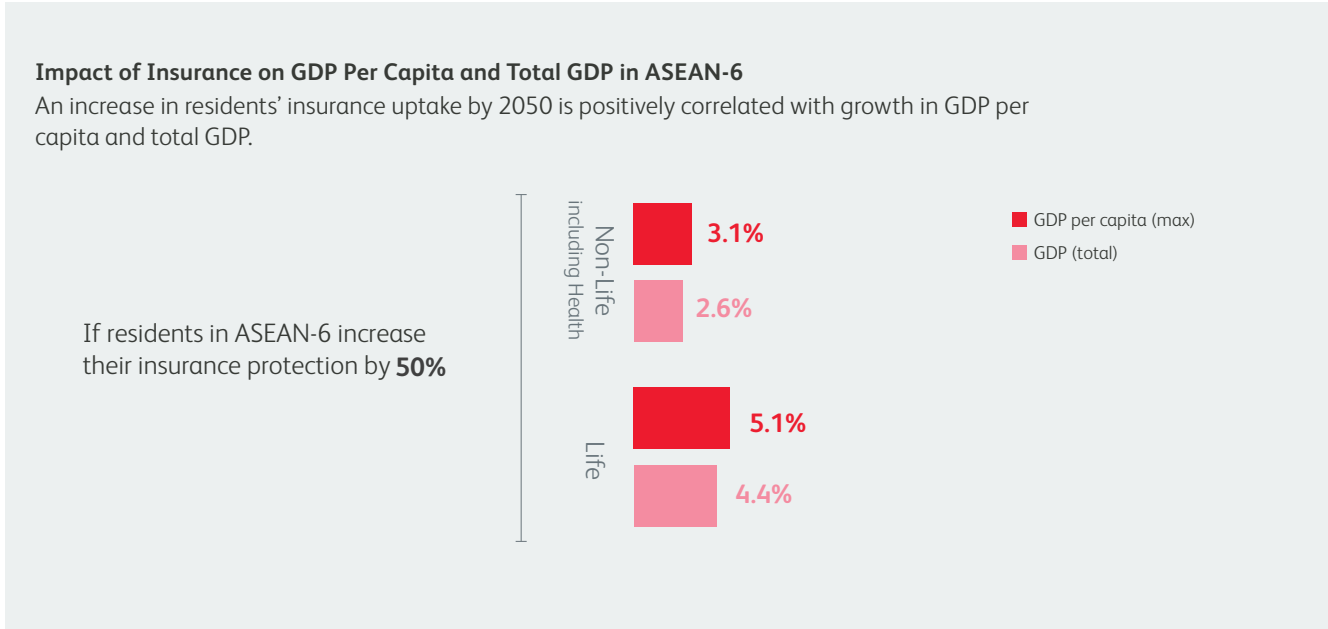
This study examines the social and economic impact of non-life insurance (including health insurance) and life insurance in six selected ASEAN countries – Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam (hereafter referred to as 'ASEAN-6').

Non-life insurance and life insurance have been identified as significant contributors towards achieving key Sustainable Development Goals (SDGs). Developing appropriate policies to encourage the growth of the insurance industry can support efforts in advancing the SDGs.

Non-life insurance and life insurance have been found to positively impact economic growth through various channels including labour force participation, capital deepening and human capital accumulation. Quantitative modelling was employed to measure the impact and the results indicate a positive correlation between the uptake of insurance protection, and economic growth across the ASEAN-6 economies.

If residents in ASEAN-6 increase their non-life insurance (including health insurance) protection by 50 per cent by 2050, the maximum increase in GDP per capita in ASEAN-6 could be 3.1 per cent and the total GDP in ASEAN-6 could increase by 2.6 per cent. For life insurance, the maximum increase in GDP per capita in ASEAN-6 could be 5.1 per cent and the total GDP in ASEAN-6 could increase by 4.4 per cent.

Policy recommendations to advance the insurance industry and maximise its contributions to social and economic development include short-term priorities such as fiscal incentives and favourable regulatory frameworks. Long-term policies should focus on talent development, public-private partnerships (PPPs), the industry ecosystem and public awareness. Further research is needed to explore opportunities and challenges in expanding insurance coverage in each market.



# 1. Insurance is More than Just Coverage

For millions of families and business owners across ASEAN, an insurance policy can mean the difference between a temporary setback and a lasting crisis. We often think of insurance as just a financial safety net – a payout after an accident or coverage for a hospital bill. But in reality, its impact goes far beyond dollars and cents. Insurance can keep a family's hopes alive after a traumatic incident, allow an entrepreneur to take bold steps without fear and help whole communities bounce back faster when adversity strikes. Insurance does not merely offer protection from losses; it empowers people to keep moving forward.

Across Southeast Asia, the promise of insurance is beginning to unfold. The region's insurance sector is expanding rapidly, fuelled by rising incomes, urbanisation and growing awareness of the need for protection. In recent years, insurance growth in ASEAN has even outpaced overall economic growth – a sign of both progress and untapped potential. Yet coverage remains far from widespread. On average, ASEAN countries have an insurance penetration of only around 3% of GDP, less than half the global average. Outside of Singapore – where coverage is relatively high – most markets remain in the low single digits. This means a flood, an illness or an accident still has the potential to push many households into debt or poverty. These gaps point to an enormous opportunity for policymakers and insurers to broaden coverage and strengthen economic security for all.

What would it mean to unlock this untapped potential? The benefits would extend well beyond individual peace of mind. With greater insurance coverage, businesses could invest more confidently, knowing they can weather unexpected setbacks; this fuels entrepreneurship, job creation and stable growth. Families would no longer have to deplete their life savings to cope with medical emergencies, leading to healthier, more financially secure communities.

Even governments would feel the difference. When more citizens are insured, fewer people depend solely on public aid in a crisis, allowing public funds to be used more efficiently on long-term development. In short, wider insurance coverage can be a cornerstone of economic resilience and inclusive growth – sparking prosperity that is more broadly shared and sustained.

These possibilities raise some critical questions. How can insurance strengthen health systems and reinforce the broader social safety net? What untapped value might lie in wider coverage, not just for economic growth but for poverty reduction and community wellbeing? How can governments and insurers work together to make this vision a reality? These are the questions at the heart of this study. The chapters that follow explore them across six ASEAN countries, showing that when insurance is fully embraced, it becomes a powerful tool for healthier societies and more resilient economies. As ASEAN's populations grow and new risks emerge – from climate change to ageing demographics – finding answers is more important than ever. By looking beyond mere coverage, this report shines a light on insurance's potential to be a springboard for inclusive growth and lasting resilience. The goal is to inspire policymakers and industry leaders to work hand in hand in building a future where insurance is not just about safeguarding against loss but about empowering people, strengthening communities and securing prosperity for generations to come.

## 2. A Snapshot of Insurance in ASEAN

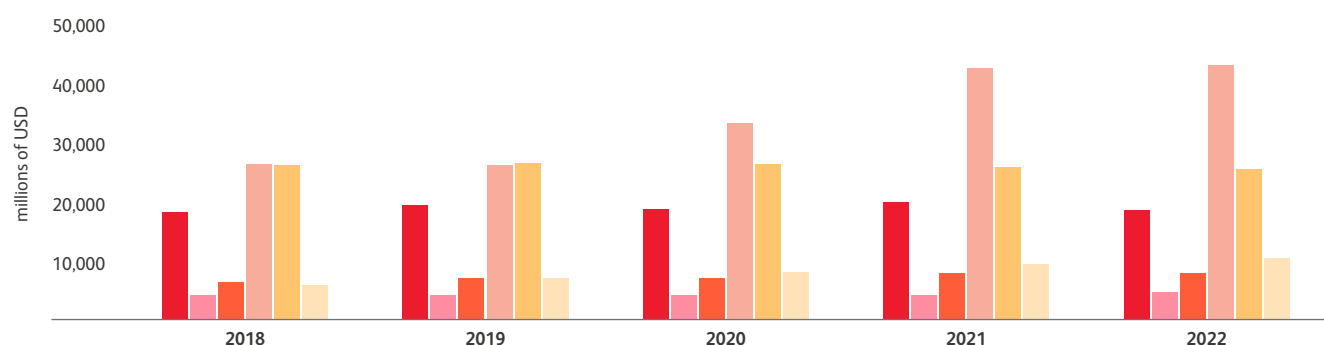
Insurers have historically played a pivotal role in enhancing social wellbeing and fostering sustainable economic growth globally. This paper, through a blend of qualitative analysis and quantitative econometric regression, evaluates the impact of insurance coverage on the SDGs and various economic drivers in the ASEAN-6.

The ASEAN insurance market experienced robust growth at a compound annual growth rate (CAGR) of 6.1 per cent from 2018 to 2022, in contrast with a CAGR of 4.9 per cent for GDP during the same period<sup>1</sup>. This growth was driven by factors including rising incomes, urbanisation and increased awareness of, and demand for, insurance products. Growth in life insurance was a significant part of the overall insurance market growth, reflecting growing middle-classes increasingly seeking financial security and protection. Non-life insurance also registered notable growth, particularly in motor and health insurance segments. The growth in health insurance reflects greater awareness of health risks, and the desire to protect against and manage out-of-pocket spending on health alongside rising healthcare costs.

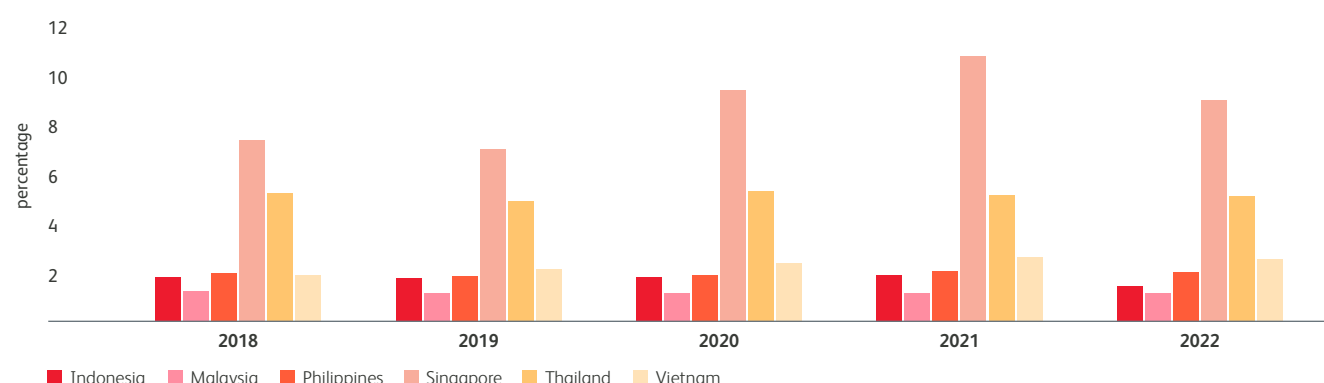
Notably for this report, the ASEAN-6 countries represent 99 per cent of the insurance premiums in the ASEAN insurance market.

Insurance penetration in ASEAN, measured as the ratio of total insurance premiums to GDP, varies significantly across member states. As of 2022, on average, the penetration rate for the region was around 3%. There is, of course, significant variation across the markets in Asia, with the most mature insurance market, Singapore, at 9.2 per cent penetration, while other markets, with the exception of Malaysia, generally seeing penetration rates below 3 per cent, significantly lower than the global average of 6.7 per cent<sup>2</sup>. The relatively low penetration in these countries points to untapped opportunities for policymakers and insurers to broaden and enhance insurance offerings, thereby fostering social and economic development.

### Gross Insurance Written Premiums in ASEAN-6<sup>1</sup>



### Insurance Penetration Rate in ASEAN-6<sup>1</sup>


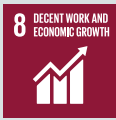



1. The ASEAN Insurance Council, ASEAN Statistical Report 2023. No insurance industry data for Laos.

2. Statista – <https://www.statista.com/statistics/381174/insurance-penetration-in-selected-countries-worldwide/>

### 3. Insurance Contributes to Sustainable Development

Insurance plays a role in advancing social development by contributing to the United Nations' SDGs<sup>3</sup>. Adopted in 2015, the SDGs are a global initiative aimed at eradicating poverty, protecting the planet and ensuring peace and prosperity for all by 2030. Comprising 17 goals, the SDGs are ambitious in scope and vision. Health and life insurance, through providing financial protection, promoting economic stability and fostering resilience against unforeseen risks, contribute to the aim of achieving the SDGs, particularly those highlighted below.

SDG	Description
 <p><b>SDG 3:</b> Good Health and Well-being</p>	<p>SDG 3 aims to “ensure healthy lives and promote well-being for all at all stages.” There is potential for health and life insurance to play a role in achieving this goal, for example by enhancing access to preventive care, diagnostics and treatment. Insurance can protect vulnerable populations, offering peace of mind, providing access to needed medicines and vaccines and encouraging early disease detection. By shifting to a preventive, value-driven<sup>4</sup> care model, insurers can incentivise healthy behaviours and collaborate with healthcare providers. Insurance can enhance financial security and reduce the protection gap by shielding vulnerable populations against potentially catastrophic healthcare costs.</p>
 <p><b>SDG 8:</b> Decent Work and Economic Growth</p>	<p>Health and life insurance contribute to SDG 8, which aims to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”. Insurance enhances labour force participation by providing financial security and health risk protection, typically resulting in fewer missed workdays and, thus boosting productivity. Life insurers collect upfront premiums for long-duration policies, giving them large, stable pools of financing, which can be deployed into long-term, job-creating projects, such as infrastructure, housing and green energy<sup>5</sup>. Insurance can provide financial stability during unforeseen events. By pooling premiums into long-term investments, life insurers boost national savings rates and deepen capital markets, transforming savings into investments in bonds, equity and real estate.</p>
 <p><b>SDG 9:</b> Industry, Innovation and Infrastructure</p>	<p>SDG 9 aims to “build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation”. Life and health insurance are essential for mobilising financial resources and improving service access. Insurance companies have become key financiers of green infrastructure, providing capital for clean energy and sustainable projects<sup>6</sup>. Beyond investments, the life insurance industry is weaving environmental, social and governance criteria into its products and underwriting processes, thereby incentivising more sustainable practices. They drive technological innovations that are vital for financial inclusion. Digital finance solutions promote financial inclusion in underserved areas, expanding access to insurance products.</p>

3. United Nations Department of Economic and Social Affairs. Sustainable Development - The 17 Goals. Retrieved from <https://sdgs.un.org/goals>

4. Value-driven care arrangements link the payment for patient services to the outcomes achieved, emphasising quality, equity and cost-effectiveness.

5. The Social and Economic Value of Insurance, A Geneva Association Paper, September 2012, [www.genevaassociation.org](http://www.genevaassociation.org)

6. Green Infrastructure in the Decade for Delivery: Assessing Institutional Investment, OECD (2020)

## Insurance Contributes to Sustainable Development

 <p><b>SDG 13:</b> Climate Action</p>	<p>SDG 13 aims to “take urgent action to combat climate change and its impacts”. Health and life insurance can contribute to SDG 13 by addressing climate-related health risks and ensuring access to healthcare during climate-induced events. Insurers can adopt responsible investment strategies, including decarbonising their portfolios and transitioning to net-zero business models<sup>7</sup>. By incorporating climate risks into risk management frameworks and strategies, insurers can make more informed and sustainable investment decisions. By implementing innovative green financing mechanisms, such as investments in green bonds, transition financing and adaptation financing, and by increasing ESG investments and climate-related health product offerings, insurers can make a substantial and lasting contribution to climate action. Insurers have signed up for frameworks like the UN Principles for Responsible Investment, illustrating how their investment strategies are being reoriented to support climate action.</p>
 <p><b>SDG 17:</b> Partnerships for the Goals</p>	<p>Health and life insurance can play an integral role in advancing SDG 17, which aims to “strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development”. Insurance companies can form global partnerships with governments, NGOs and other stakeholders to address health and social challenges. These collaborations, leveraging financial resources, knowledge sharing and technology transfer, can drive sustainable development and improve wellbeing. Insurers can use data to advocate for inclusive health policies and promote public-private financing models. Through these partnerships, insurers offer targeted social services to underserved populations. There are numerous examples of these types of partnerships. One such example is the UNDP-ICMIF Insurance Innovation Challenge – a global initiative launched in 2023 by the United Nations Development Programme’s Insurance and Risk Finance Facility and the International Cooperative and Mutual Insurance Federation. It is a multi-stakeholder partnership designed to spur innovative microinsurance solutions for underserved populations, especially women in developing countries, which touch on SDGs Goals 3, 8 and 17.</p>

### Summary

Health and life insurance contribute significantly to SDGs 3, 8, 9, 13 and 17. They enhance access to healthcare and financial protection, promote inclusive education through investments in talent development, boost economic growth by improving workforce productivity and support resilient infrastructure and industrialisation. Insurance supports sustainable urban development via funding for green projects. Additionally, insurers address climate change impacts by adopting responsible investment strategies. Partnerships with governments and NGOs fortify efforts to implement sustainable development initiatives and improve overall community resilience.

Implementing suitable policies to foster the growth of the insurance industry could be an effective method for advancing the achievement of the SDGs and contributing to social development.

7. The second paper, co-authored with Eastspring Investments, details a practical investment approach for constructing a climate transition portfolio in capital markets.



## 4. Insurance Contributes to Economic Development

The Long-Term Growth Model (LTGM)<sup>8</sup>, a tool developed by the World Bank, provides a framework to assess the implications of growth through economic analysis and forecasts, considering five key factors that determine economic output (see detail below). Three of these factors are more closely related to the insurance industry: labour force participation, capital deepening and human capital.

### The Five Underlying Factors of the LTGM

1

#### Labour Force Participation (LFP)

Refers to all people who supply labour for the production of goods and services between age 15 and 64.

2

#### Working-Age Population (WAP)

Refers to people between age 15 and 64.

3

#### Total Factor Productivity (TFP)

Reflects the technological advancements and innovation that increase productivity, efficiency and output, leading to higher levels of economic activity.

4

#### Capital Deepening

Represents the growth of capital, such as machinery, equipment and infrastructure.

5

#### Human Capital (HC)

Reflects the knowledge, skills and abilities of a country's workforce.

### Labour Force Participation

Health insurance impacts labour force participation by improving health conditions<sup>9</sup>. Individuals with health insurance are more likely to receive timely and better medical treatment, which contributes to better health outcomes and reduces adult mortality risk<sup>10</sup>. Health insurance offers financial protection<sup>11</sup> and access to medical services without excessive out-of-pocket expenses<sup>12</sup>, promoting disease prevention and early detection<sup>13</sup>.

Improving health outcomes encourages working-age individuals to join the labour market and existing workers to remain employed or delay retirement<sup>14</sup>, reducing hiring friction and production losses<sup>15</sup>. This effect is observed in both men and women, expanding and extending workforce participation<sup>16</sup>. In ageing societies, enhancements in health status are shown to significantly increase labour force participation among older adults, helping to mitigate adverse effects of an ageing population<sup>17</sup>.

Employer-provided health insurance significantly boosts labour force participation, as it is crucial in job selection and retention<sup>18</sup>. A healthier workforce, in turn, contributes to improved work performance and reduces absenteeism and presenteeism<sup>19</sup>.

### Capital Deepening

Insurance, particularly life insurance, plays a critical role in investment and capital accumulation, thereby fostering economic growth.

Insurance market activity, both as a financial intermediary and as a provider of risk transfer and indemnification, allows different risks to be managed more efficiently. This encourages the accumulation of new capital and mobilises domestic savings into productive investments. Life insurance companies, in particular, facilitate long-term investments, whereas non-life insurance companies tend to focus on short-term investments<sup>20</sup>. Over recent decades, with supportive and responsive policy and regulatory frameworks, life insurance has evolved from offering protection to incorporating savings, investment and wealth transfer mechanisms.

8. <https://www.worldbank.org/en/research/brief/LTGM>
9. Currie, J., & Madrian, B. C. (1999). Health, health insurance and the labor market. *Handbook of Labor Economics*, 3, 3309-3416.
10. Institute of Medicine (US) Committee on the Consequences of Uninsurance. (2002). *Care without coverage: Too little, too late*. National Academies Press.
11. Habib, S. S., Perveen, S., & Khuwaja, H. M. A. (2016). The role of micro health insurance in providing financial risk protection in developing countries-a systematic review. *BMC Public Health*, 16, 1-24.
12. Sepehri, A., Sarma, S., & Oguzoglu, U. (2011). Does the financial protection of health insurance vary across providers? Vietnam's experience. *Social Science & Medicine*, 73(4), 559-567.
13. Simon, K., Soni, A., & Cawley, J. (2017). The impact of health insurance on preventive care and health behaviors: evidence from the first two years of the ACA Medicaid expansions. *Journal of Policy Analysis and Management*, 36(2), 390-417.
14. Currie, J., & Madrian, B. C. (1999). Health, health insurance and the labor market. *Handbook of Labor Economics*, 3, 3309-3416.
15. Van der Hout W. (2015). The value of productivity in health policy. *Applied Health Economics and Health Policy*, 13, 311-313. <https://doi.org/10.1007/s40258-015-0173-6>.
16. Bloom, D. E., Kuhn, M., & Prettnner, K. (2015). The contribution of female health to economic development. *NBER Working Paper 21411*. National Bureau of Economic Research, Cambridge, MA.
17. Böheim, R., Horvath, T., Leoni, T., & Spielauer, M. (2023). The impact of health and education on labor force participation in aging societies: Projections for the United States and Germany from dynamic microsimulations. *Population Research and Policy Review*, 42(3), 39.
18. Sheu, S. J. (2002). *Labor force participation and employer provided health insurance*. Texas A&M University.
19. Ridhwan, M. M., Nijkamp, P., Ismail, A., & M Irsyad, L. (2022). *The effect of health on economic growth: A meta-regression analysis*. *Empirical Economics*, 63(6), 3211-3251. Retrieved from <https://doi.org/10.1007/s00181-022-02226-4>
20. Arena, M. (2006). Does insurance market activity promote economic growth? A cross-country study of industrialized and developing countries. *World Bank Policy Research Paper 4098*. World Bank.

## Insurance Contributes to Economic Development

Insurers maintain the stability of the financial market, primarily through long-term investments. Insurers receive premiums upfront for policies extending over many years, allowing them to adopt a long-term investment horizon, which helps stabilise prices in financial markets. By offering protection against various risks faced by households and businesses, insurance companies play a crucial role in safeguarding financial stability. This protection fosters a sense of security and confidence, encouraging investment and stimulating economic activity.<sup>21</sup>

### Human Capital

Health insurance boosts human capital development by enhancing productivity and promoting self-development through improved wellness. Better health enables individuals to engage in education, skill development and career advancement, driving economic progress and societal wellbeing<sup>22</sup>.

Life insurance has positive impacts on human capital and productivity. As a means of saving and investment, it enhances individuals' financial security, enabling them to allocate more resources towards personal development, education and skill enhancement<sup>23</sup>.

### Linking Economic Growth Drivers to Economic Growth

Labour force participation, capital growth and human capital are three key drivers of economic growth and all can be bolstered by insurance. The quantitative analysis used for this study employed a method that combines “fixed effect regression” with the LTGM to quantify the impact of insurance on these drivers.

## 4.1 Fixed Effect Regression

Fixed effect regression is employed using annual data from 1999 to 2019 for ASEAN-6<sup>24</sup>. Regression, a commonly used quantitative method, was utilised to understand the relationship between a dependent variable (y) and independent variables (x) through calculating coefficients<sup>25</sup>. Control variables are incorporated to enhance robustness. Fixed effect regression allows for control of both observable and unobservable factors across time and entities, making it suitable for analysing multiple entities.

The study investigated the relationship between economic growth drivers (y) and insurance premiums<sup>26</sup> (x), using STATA software for the analysis. Three regressions were conducted to test the impact on (i) labour force participation, (ii) capital deepening and (iii) human capital<sup>27</sup>.

Regression 1 analysed the relationship between insurance and labour force participation<sup>28</sup>. The results indicate that:

Non-life insurance (including health insurance) has a statistically significant effect on labour force participation. Holding control variables constant, a 1 per cent increase in non-life insurance premiums (indicating a larger market size) will result in a 0.033 per cent increase in the labour force participation rate.

Life insurance does not have a statistically significant effect on labour force participation.

Regression 2 analyses the relationship between insurance and capital deepening. The capital-to-output ratio is used as the proxy for the latter. The results indicate that:

Non-life insurance (including health insurance) does not have a statistically significant effect on capital deepening. This is because non-life insurance primarily provides financial protection rather than serving as an investment vehicle.

Life insurance has a statistically significant effect on investment and capital deepening, as life insurance serves as a source of long-term investment for the economy. Holding control variables constant, a 1 per cent increase in life insurance premiums (indicating a larger market size) results in a 0.032 per cent increase in the investment ratio.

21. European Central Bank. (2009). *The importance of insurance companies for financial stability*. ECB.
  22. Weil DN. (2007). Accounting for the effect of health on economic growth. *The Quarterly Journal of Economics*, 122(3), 1265-1306. <https://doi.org/10.1162/qjec.122.3.1265>.
  23. Shindo, Y. (2023). The impact of life insurance on human capital investment during the steady growth period in Japan: Simulation Analysis in an Overlapping Generations Model with Endogenous Growth. *New Frontiers in Regional Science: Asian Perspectives*, 71-85. Retrieved from [https://doi.org/10.1007/978-981-99-1067-0\\_4](https://doi.org/10.1007/978-981-99-1067-0_4)
  24. Panel data: Panel data is a dataset that contains information from multiple time periods and multiple statistics for the same individuals, groups or entities. The panel data used in this research contains the data of independent, dependent and control variables for ASEAN-6 from 1999 to 2019. The period of 2009 to 2019 was selected as it represents the most recent decade unaffected by the Covid-19 pandemic. The regression is run based on the panel data, across six countries.
  25. The regression assumes linear relationships between the dependent and independent variables. However, economic behaviours often exhibit non-linear dynamics, like the impact of market saturation on limiting the effect of increasing insurance premiums. This could lead to overestimations.
  26. One limitation from use of this factor is that insurance premiums might include insurance products that are not very effective, because they do not pay out very often (policies with very low loss ratio).
  27. Detailed methodology and regression results are disclosed in the annexure.
  28. The regression analyses of labour force participation employed in this study are based on relevant historical data across genders. Analyses pertaining to male labour force participation produced statistically robust and significant results using two control variables: male unemployment rate and male tertiary education enrolment, effectively delineating the impact of insurance penetration. In contrast, regressions involving female labour force participation did not yield statistically significant results or exhibited biases, despite incorporating several control variables, including female unemployment rate, female tertiary enrolment, sex ratio, fertility rates, gender inequality index and number of maternity leave days entitlement. This discrepancy arises principally due to omitted variable bias; female labour force participation is substantially affected by intricate socio-cultural determinants, including but not limited to gender equality norms, societal attitudes and the comprehensiveness of social welfare frameworks. These influential variables introduce considerable complexity and require innovative approaches to quantification and measurement to ensure consistent and meaningful inclusion in economic models across diverse national contexts in ASEAN.
- To maintain methodological integrity within current data constraints, female labour force participation is treated as a constant variable in this model. This conservative approach, endorsed by the World Bank, highlights the need for more nuanced and comprehensive gender-disaggregated data. This methodological choice is not indicative of a disregard for the economic significance of female participation or gender dynamics; rather, it explicitly recognises existing limitations in data availability and measurement fidelity and advocates for its prioritisation in future research frameworks. While this study utilises binary gender categories due to current data availability, it acknowledges the importance of inclusive data practices that reflect the full spectrum of gender identities.
- For further information, see:
- Wooldridge, J. M. (2019). *Introductory econometrics: A modern approach*. Cengage.
- Angrist, J. D., & Pischke, J. S. (2009). *Mostly harmless econometrics: An empiricist's companion*. Princeton University Press.
- Klasen, S., & Lamanna, F. (2009). The impact of gender inequality in education and employment on economic growth: New evidence for a panel of countries. *Feminist Economics*, 15(3), 91-132.

## Insurance Contributes To Economic Development

Regression 3 analysed the relationship between insurance and human capital. The results indicate that:

Non-life insurance (including health insurance) has a statistically significant effect on human capital growth by improving health conditions and productivity. Holding control variables constant, a 1 per cent increase in non-life insurance premiums (indicating a larger market size) results in a 0.004 per cent increase in human capital.

Life insurance has a statistically significant effect on human capital growth. Holding control variables constant, a 1 per cent increase in life insurance premiums (indicating a larger market size) leads to a 0.004 per cent increase in human capital.

### Summary of Regression Results – Coefficients

	Non-life insurance (including health insurance)	Life insurance
Labour force participation	0.033	Statistically insignificant
Capital deepening	Statistically insignificant	0.032
Human capital	0.004	0.004

## 4.2 Long-Term Growth Model

Utilising the insights on the relationship between insurance premiums and growth drivers from the fixed effect regression analysis, the LTGM model is used to project changes in GDP per capita and overall GDP, stemming from the growth of non-life and life insurance in ASEAN-6.

Three scenarios of accumulative insurance market growth were developed for each country, projecting increases by 2050: (i) a 50 per cent increase; (ii) a 100 per cent increase; and (iii) a 200 per cent increase<sup>29</sup>. Below is the summary of overall impact of non-life and life insurance on GDP per capita and total GDP in ASEAN-6<sup>30</sup>.

### Non-Life Insurance

If residents in ASEAN-6 increase their non-life insurance (including health insurance) protection by 50 per cent by 2050:

- The maximum increase in GDP per capita in ASEAN-6 could be 3.1 per cent, where GDP per capita could increase from USD 22,797 to USD 23,494. This is the projected increase in Thailand.
- The total GDP in ASEAN-6 could increase by USD 285 billion from USD 10,893 billion to USD 11,178 billion, or 2.6 per cent, during the period, compared to baseline projections.

### Life Insurance

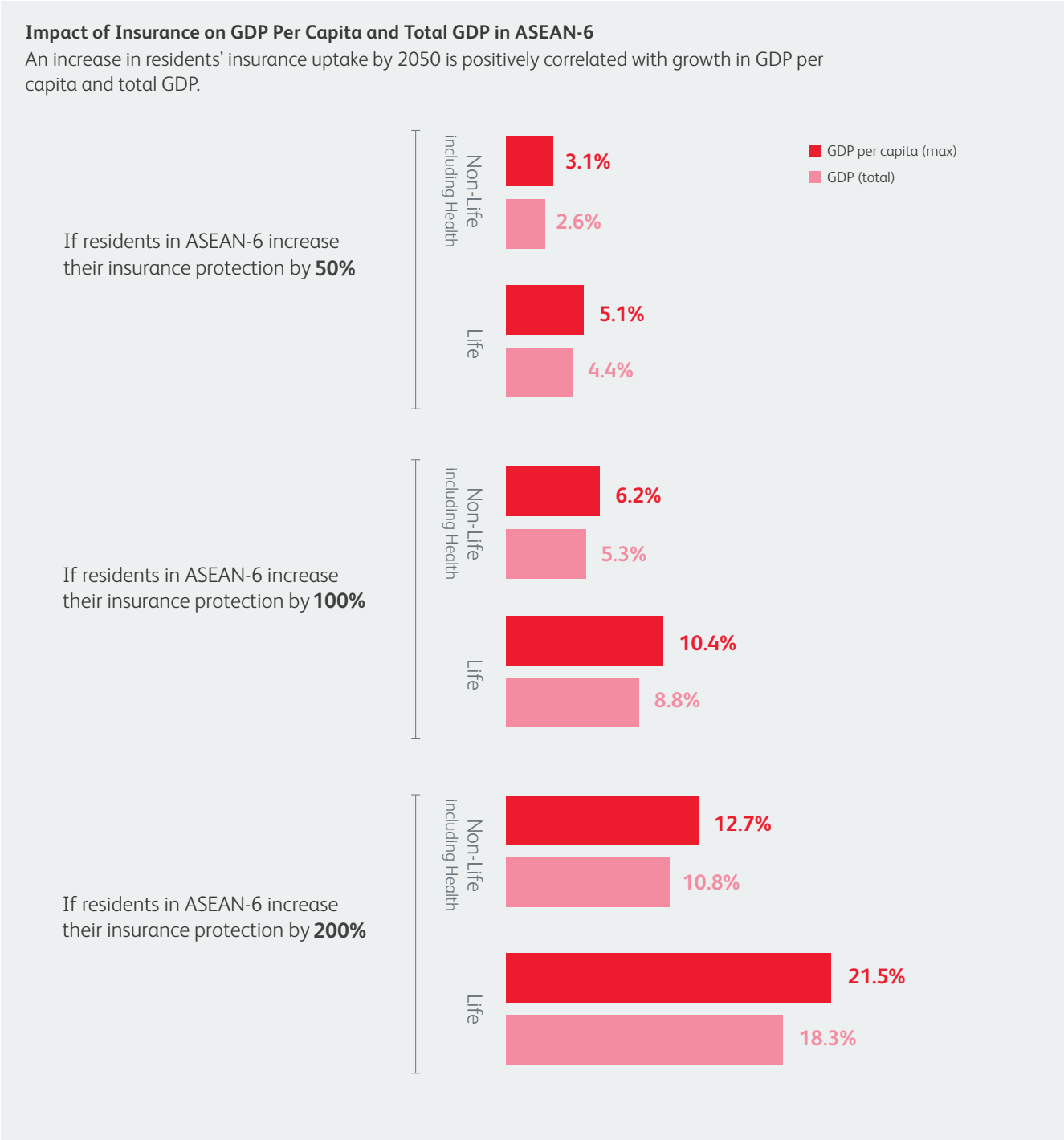
If residents in ASEAN-6 enhance their life insurance coverage by 50 per cent by 2050:

- The maximum increase in GDP per capita in ASEAN-6 countries could be 5.1 per cent, where GDP per capita could increase from USD 30,644 to USD 32,203. This is the projected increase in Malaysia.
- The total GDP in ASEAN-6 could increase by USD 474 billion from USD 10,893 billion to USD 11,367 billion, or 4.4 per cent, during the period, compared to baseline projections.

In summary, insurance generally exerts a significantly positive influence on economic growth by fostering additional growth in GDP per capita as well as total GDP. Life insurance has a more substantial impact than non-life insurance, owing to its larger market size and its role in long-term investment.

29. The growth curve tends to gradually flatten when the level or quantity of a variable reaches a certain threshold. For the insurance industry, the current large market size makes it challenging to replicate the rapid growth observed over the past two decades. Since the marginal diminishing effect is not accounted for in fixed effect regression and LTGM, the impact results are based on a premium increase rate of 50%. Scenarios of 100% and 200% increases will be provided for reference only.

30. Detailed market-specific impact is enclosed in the annexure.



## 5. Policy Recommendations: Driving Sustainable and Inclusive Growth

The insurance industry plays a crucial role in driving sustainable economic growth, mitigating social vulnerabilities and fostering resilience. The quantitative analysis undertaken for this study underscores the potential positive impact insurance can make. However, policy gaps and regulatory barriers in ASEAN markets are among the factors that have hindered the uptake of health and life insurance.

Rising medical costs have hindered the affordability of private health insurance. At the same time, however, claims for health insurance are surging due to advancements in medical technology, the increased prevalence of chronic diseases, an ageing population and unfavourable behaviours such as fraud, waste and abuse. Consequently, these rising claims inevitably drive up insurance premiums, making private insurance less affordable. This financial strain exacerbates inequalities in access to quality healthcare within ASEAN countries. Addressing these issues requires concerted efforts from policymakers, healthcare providers and insurance companies to develop sustainable and inclusive solutions.

Another factor impeding the development of the insurance sector in ASEAN is the general scarcity of long-term asset classes. Life insurers seek long-term, investment-grade assets and instruments to match their long-term policy liabilities. Many ASEAN markets lack suitable long-term investment options. The bond markets, for instance, are often underdeveloped, with fewer options for long-dated sovereign and corporate bonds. Other long-term investment vehicles, including infrastructure projects, real estate and private equity, are inconsistently available and distributed across the region. Regulatory treatment varies in terms of permissible assets into which insurers can invest.

Therefore, introducing effective policies to encourage individuals to use insurance and promote the industry's development is vital in order to harness its potential to deepen capital markets, support jobs and economic growth, and foster prosperity through savings, investment and protection.

This section explores short-term and long-term priorities and recommendations, which combined can help deliver progress towards the SDGs and wider growth and prosperity. Case studies highlight international experiences to illustrate potential approaches to support sector maturity.

### 5.1 Measures to Support Immediate Progress

These recommendations have the potential for immediate, positive impacts while laying the groundwork for continued growth through strategic policies.

#### Fiscal Incentives

Fiscal incentives, such as tax deductions or premium credits for health, life and micro-insurance, have proven to be effective in promoting the adoption of insurance protection. Specific fiscal policies tailored to vulnerable groups can also make insurance accessible and inclusive beyond higher income groups.

Fiscal incentives can serve as catalysts for insurers' product innovation and service enhancement. For example, grants or tax credits for research and development in insurance technology (insurtech), such as dynamic pricing and parametric insurance, will attract investments in these areas, thereby creating momentum for new growth opportunities within the industry.

This recommendation aligns with SDG 3 (Good Health and Well-being), SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation and Infrastructure).

#### Supportive and Responsive Regulatory Frameworks

Introducing supportive and responsive regulatory frameworks can rapidly catalyse product development and bolster market resilience. For instance, the implementation of regulatory sandboxes for testing innovations and fast-track approvals for low-risk products encourages entrepreneurship, resulting in a more diverse range of product offerings. These frameworks allow companies to experiment with new ideas in a controlled environment, fostering creativity and innovation. They support responsive feedback mechanisms with industry to ensure robust and resilient, long-term growth of the sector and enable collaboration between industry participants and policymakers and regulators across a range of areas that support industry development, including capital and customer treatment, product and service design and operational resilience.

These recommendations align with SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation and Infrastructure).



## Case studies

### Hong Kong's Voluntary Health Insurance Scheme (VHIS)<sup>31</sup>

Hong Kong's VHIS, launched in 2019, stands out as Asia's first government-regulated voluntary health insurance scheme. This distinctive financing instrument blends the features of private insurance with robust government oversight. The government's role in regulating and certifying insurance plans under the scheme is a collaborative effort to tackle healthcare financing and accessibility challenges in the region. VHIS-certified plans provide enhanced benefits and flexible options, including tax-deductible premiums and guaranteed lifetime renewal. The scheme's tax incentives, certified plans and enriched benefits are pivotal in fostering the expansion of the health and life insurance industry while offering individuals valuable options to secure their healthcare needs.

### Singapore's Regulatory Sandbox<sup>32</sup>

In Singapore, the Monetary Authority of Singapore (MAS) has implemented a regulatory framework that promotes innovation in the insurance industry. They introduced the 'Regulatory Sandbox', which provides a conducive environment for insurers to experiment with new business models, products and technologies. Additionally, MAS launched the 'Sandbox Express' with fast-track approvals for activities where the risks are low and well understood by the market, allowing tests under pre-determined rules. Since 2022, 'Sandbox Plus' has been available to offer one-stop assistance in areas of regulatory support and financial grants.

### Switzerland's Fintech Licence<sup>33</sup>

In Switzerland, the Federal Office of Private Insurance fosters innovation in the insurance sector through the fintech licence, a regulatory framework that simplifies and accelerates the licensing process. This framework breaks down market entry barriers for insurance-related startups, including those focusing on insurtech. The initiative promotes innovation and entrepreneurship, attracting investment into the Swiss insurance industry.

### United Kingdom: Regulatory Sandboxes and Fintech Licences<sup>34</sup>

The UK's Financial Conduct Authority (FCA) has been a pioneer in using regulatory sandboxes and flexible licensing to spur fintech innovation. In 2016, the FCA launched one of the world's first regulatory sandboxes as part of Project Innovate, allowing firms – including startups not yet authorised – to test new financial products and business models with real consumers in a controlled environment. This sandbox provides access to regulatory expertise and tailored safeguards, helping innovators reduce time-to-market and cost while ensuring consumer protection measures are built in. Alongside the sandbox, the FCA and Bank of England adopted a pro-innovation licensing approach. A joint 'New Bank Start-up Unit' was created to guide new entrants, contributing to dozens of new fintech firms (including about 50 challenger banks) gaining authorisation since 2013. These tools show the FCA's role in fostering competition and enabling novel services under appropriate oversight, helping to boost fintech activity, investment and inclusion.

31. Health Bureau of Hong Kong SAR Government. (2019). *Voluntary Health Insurance Scheme (VHIS)*. <https://www.vhis.gov.hk/en/>

32. Monetary Authority of Singapore. (2024). *Overview of Regulatory Sandbox*. <https://www.mas.gov.sg/development/fintech/regulatory-sandbox>

33. Swiss Financial Market Supervisory Authority (FINMA). (2024). *FinTech Licence*. <https://www.finma.ch/en/authorisation/fintech/fintech-bewilligung/>

34. Financial Conduct Authority (FCA). (2022). *Regulatory Sandbox*. <https://www.fca.org.uk/firms/innovation/regulatory-sandbox>



## 5.2 Transformational Change: Long-Term Recommendations

These recommendations are designed to target systemic improvements and foster stakeholder collaboration, necessitating consistent investment and commitment from a range of stakeholders.

### Talent Development

Talent serves as a cornerstone for the development of the insurance industry as well as the broader economy. Government support for investment in specialised training programmes and professional certifications, the mutual recognition of core qualifications, the development of professional standards and enabling the mobility of key talent within ASEAN-6 are essential to deepen the talent pool, which is critical for the long-term growth of the insurance industry. Collaborating with academic institutions can increase the supply of skilled professionals capable of navigating the rapidly evolving industry landscape. Furthermore, introducing policy incentives and improving the living environment should remain a top priority for policymakers to attract international talent. These recommendations align with SDG 8 (Decent Work and Economic Growth) and SDG 17 (Partnerships for the Goals).

### Public-Private Partnerships

PPPs can help to address challenges facing underserved markets. By leveraging private sector expertise, PPPs can be used to manage risks and deliver affordable healthcare services to lower-income groups. Additionally, they attract investment and stimulate innovation, enhancing the quality and affordability of insurance products. Establishing platforms for public-private dialogue can help to mobilise private finance for large-scale projects.

PPPs can make a difference in driving innovation. Public and private players can collaborate to establish innovation hubs and incubators that unite insurers, technology firms and academia.

These recommendations align with SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation and Infrastructure) and SDG 17 (Partnerships for the Goals).

### Industry Ecosystem

Building an ecosystem for the development of insurance products and services can lead to advances in customer engagement by enabling cross-sectoral data sharing and leveraging combined expertise to anticipate and meet customer needs. For instance, digital health records have the potential to enhance operational efficiency, enable data-driven decision-making and strengthen insurers' risk management<sup>35</sup>. To fully realise these benefits, a comprehensive, system-wide approach is essential.

Governments can play a crucial role in supporting these initiatives by promoting cross-sectoral data sharing, the development of customised insurance coverage options and the adoption of digital platforms, data analytics, automation and artificial intelligence. Appropriate ecosystem design can create valuable inputs to public-private health system design, financing and delivery, potentially contributing to wider public finance sustainability.

These recommendations align with SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure) and SDG 17 (Partnerships for the Goals).

### Public Awareness

Governments are encouraged to invest in public awareness campaigns aimed at educating individuals and businesses about the critical importance of insurance. Initiatives that complement the industry's ongoing efforts in promoting financial literacy and emphasising the myriad benefits of insurance coverage are usually more effective at increasing awareness, ultimately driving industry growth and contributing to broader economic development.

These recommendations align with SDG 3 (Good Health and Well-being).

### Summary

Policy recommendations	Short term	Long term	SDGs addressed
Fiscal incentives	•		3, 8, 9
Supportive and responsive regulatory frameworks	•		8, 9
Talent development		•	8, 17
Public-private partnerships		•	3, 9, 17
Industry ecosystem		•	8, 9, 17
Public awareness		•	3

35. Swiss Re. (2023). *Swiss Re studies reveal that electronic health records can speed up underwriting process by more than seven times*. <https://www.swissre.com/press-release/Swiss-Re-studies-reveal-that-Electronic-Health-Records-can-speed-up-underwriting-process-by-more-than-seven-times/39285f91-f6e1-495f-83f4-c553fabeeeca#:~:text=Results%20of%20the%20studies%20indicate,upwards%20of%20seven%20times%20faster.>



### Case studies

#### NHS Apprenticeships (United Kingdom)<sup>36</sup>

In the United Kingdom, the National Health Service (NHS) and health insurance companies have joined forces to establish apprenticeship programmes across the healthcare and insurance sectors. These initiatives offer structured training and development opportunities for individuals aspiring to a career in health insurance. Participants benefit from on-the-job training, mentorship and access to specialised industry knowledge and skills. By nurturing talent through these apprenticeships, the UK health insurance industry helps promote a steady influx of proficient professionals and elevates service quality.

#### InsurLab Germany

InsurLab Germany is a leading insurtech hub within the government-supported Digital Hubs initiative in Germany, emphasising digital innovation. This platform fosters collaboration, knowledge exchange and experimentation among insurance companies, startups and research institutions. InsurLab Germany significantly enhances the growth and competitiveness of the German insurance sector. The initiative offers preferential funding for startups led by minority populations, Ultra-Orthodox individuals and female entrepreneurs, with up to 75% funding in the first year and 70% in the second year<sup>37</sup>.

#### Digital Health Records in the United States

In the United States, the adoption of digital health records has revolutionised the health insurance industry. Insurers now leverage restricted access to individuals' medical records to verify information and facilitate payment processing for covered treatments, ensuring coverage eligibility. Compliance with regulations such as the Health Insurance Portability and Accountability Act (HIPAA) promotes data privacy and security in the access, authentication, storage and transmission of electronic medical records. These regulations strike a balance between safeguarding sensitive information and enabling technology adoption, driving the growth of the health insurance sector<sup>38</sup>.

#### 'Get Covered' Campaign in the United States

The 'Get Covered' campaign is a national public awareness initiative launched by the US government under the Affordable Care Act to raise awareness about the importance of health insurance. This campaign was introduced in various states, including New Jersey and Illinois, targeting uninsured and underinsured individuals.<sup>39</sup> Nonprofit organisations like Enroll America<sup>40</sup> also played a significant role, focusing on aggressive outreach efforts. The campaign provided valuable information and resources to educate individuals and businesses about the benefits of health insurance, such as preventive care, financial protection and coverage for pre-existing conditions. Through targeted marketing, public service announcements and community outreach, the campaign effectively increased awareness and enrolment in health insurance plans, expanding the customer base and contributing to industry growth.

36. NHS Health Careers. (2024). *NHS apprenticeships*. <https://www.healthcareers.nhs.uk/career-planning/study-and-training/nhs-apprenticeships>

37. Israel Innovation Authority. (2024). *R&D Fund*. <https://innovationisrael.org.il/en/programs/rd-fund/>

38. Centers for Disease Control and Prevention. (2014). *Health Insurance Portability and Accountability Act of 1996 (HIPAA)*. <https://www.cdc.gov/php/php/resources/health-insurance-portability-and-accountability-act-of-1996-hipaa.html#:~:text=The%20Health%20Insurance%20Portability%20and,Rule%20to%20implement%20HIPAA%20requirements.>

39. New Jersey State Library. (2023). Affordable Care Act information: Get Covered NJ State Marketplace. <https://libguides.njstatelib.org/affordable-care-act>

40. Enroll America, (2023). *Welcome to Enroll America Inc*. <https://enrollamerica.org/>



## 6. Rethinking Insurance and Building Resilience

In ASEAN's dynamic economies, insurance is a strategic tool that can benefit individuals, businesses and governments. For businesses, the right insurance coverage stabilises operations and the workforce. Companies with insurance can better manage risks and withstand market shocks, avoiding losses that would otherwise disrupt supply chains and jobs. At the community and government level, broader insurance coverage means fewer people falling into poverty after a setback and less strain on public funds.

Insurance can help build a foundation for long-term inclusive growth across society. By pooling risks and protecting households, insurance improves public health outcomes (people can afford treatment and preventive care), keeps children in school (families are not forced to pull them out due to financial shocks) and ensures better working conditions (employers who insure workers invest more in safety and training).

These effects align with broader national development goals – healthier, better-educated and financially secure citizens contribute more to economic growth. Insurance even encourages investments in critical infrastructure like clinics or climate-resilient housing, often through PPPs, that make communities safer and more prosperous. By reducing the financial risks that disproportionately affect low-income and vulnerable groups, insurance helps narrow inequalities and build more resilient communities.

There is clear evidence that expanding insurance yields tangible economic benefits. Higher insurance uptake directly influences three pillars of growth: labour force participation, capital investment and human capital development. In practical terms, when more people are protected, more people can work and invest in their skills; when businesses and individuals feel secure, they are more likely to invest in assets or education for the future.

An LTGM analysis covering six ASEAN countries suggests that even a modest boost in coverage can pay off significantly. For example, if non-life insurance coverage (including health insurance) increases by 50 per cent by 2050, the maximum increase in GDP per capita in the ASEAN-6 countries could be 3.1 per cent, and the increase in GDP could be 2.6 per cent. Likewise, a 50 per cent expansion in life insurance coverage could lift GDP per capita by a maximum of 5.1 per cent and GDP by 4.4 per cent by 2050. These gains come from having a more robust workforce and greater financial confidence – essentially, insurance enables more people and businesses to contribute to growth.

To capture these benefits, policymakers and industry leaders in ASEAN can pursue both immediate and long-term strategies. In the short term, governments can introduce fiscal incentives (like tax relief or premium subsidies) to make insurance more affordable and introduce or modify regulations to encourage insurers to develop products for currently underserved groups (for instance, simplified insurance offerings tailored to gig workers or small businesses). Such supportive policies can quickly extend protection to more families and enterprises.

In the longer term, building a strong insurance sector will require investment in people and partnerships. This means training skilled insurance professionals and educating the public about the value of insurance, so that trust and awareness grow over time. It means forging PPPs – for example, governments teaming up with insurers to provide micro-insurance in rural areas or to cover health risks that are too large for any one insurer to handle alone. Additionally, nurturing a broader insurance ecosystem (including technology platforms, data analytics capabilities and innovative distribution channels) can help integrate insurance into everyday life. Experience from other countries show that when these measures are in place, insurance uptake rises and can result in a positive impact on the economy and society.

ASEAN's evolving risks and demographics necessitate fresh resilience strategies that link risk, investment, growth and protection. The insurance industry has the potential to drive significant change by creating innovative and inclusive insurance models and products, particularly for vulnerable and low-income communities with limited resources. Insurance can provide these communities with the necessary tools to recover from crises while enhancing their financial health and resilience over time.

### Further Research

Conducting advanced market-specific research could provide more insights into the impact of health and life insurance on economies. The econometric model should consider additional factors such as the marginal diminishing effect in premium growth, cultural attitudes towards insurance, gender inequality, informal economic activity and regional healthcare access disparities. These factors may be more relevant in certain markets depending on their development level. Another factor that could guide research direction is the availability of data at the country level. Utilising additional historical, sector-specific data (eg 20-year health insurance data) and gender-disaggregated data could enhance the model's robustness. Furthermore, examining the combined impact of health and life insurance reveals a stronger overall impact than their individual contributions.

## 7. Annexure

### 7.1 Methodology

#### Fixed Effect Regression

##### Independent (x) and Dependent (y) Variables

1999–2019	Indicator	Definition	Source
x Insurance	Non-life insurance premium <sup>41</sup>	Total net non-life insurance premiums paid by policyholders	Global Financial Development Database, World Bank
	Life insurance premium <sup>42</sup>	Total net life insurance premiums paid by policyholders	
y Economic growth drivers	Labour force participation rate in the age group 15–64	The proportion of the population aged 15–64 that is economically active, meaning those who supply labour for the production of goods and services	World Development Indicators, World Bank
	Capital-to-output ratio (K/Y)	Calculated by gross fixed capital formation (USD constant 2015) divided by GDP (USD constant 2015)	
	Human capital index growth rate	Annual growth rate of human capital index, based on years of schooling and returns to education	Penn World Table

Regression 1 analyses the relationship between insurance and labour force participation.

	Non-life insurance – labour force participation	Life insurance – labour force participation
Independent variable	ln (non-life insurance premium volume)	ln (life insurance premium volume)
Dependent variable	Labour force participation rate (male)	
Control variable <sup>43</sup>	– Unemployment rate – Tertiary education enrolment	
Coefficient	0.033	0.810
p-value <sup>44</sup>	0.050	0.616
Remarks	Statistically significant	Statistically insignificant – not used in Long Term Growth Model
	Non-life insurance – labour force participation	Life insurance – labour force participation
Independent variable	ln (non-life insurance premium volume)	ln (life insurance premium volume)

41. The analysis utilised non-life insurance premiums for modelling purposes, including health insurance premiums. This approach was taken due to the data source not providing separate health insurance data. Non-life insurance safeguards individuals, businesses and organisations from financial setbacks due to incidents such as accidents, property damage, theft, liability claims, natural disasters and other specified risks.

42. Life insurance is a contractual agreement that provides a designated sum of money, known as the death benefit, to the beneficiaries upon the death of the insured individual.

43. It is essential to include control variables for a robust regression that accurately reflects the relationship between independent and dependent variables. Control variables usually refer to factors that may have significant influence on the dependent variable. These variables account for potential confounding factors that could skew results, ensuring more accurate and reliable estimates.

44. The p-value measures the strength of evidence against the null hypothesis. A smaller p-value indicates stronger evidence against the null hypothesis. For a robust regression, the p-value should be less than 0.1, and ideally, it should be less than 0.05.

## Annexure

Dependent variable	Labour force participation rate (female)	
Control variable	Unemployment rate Tertiary education enrolment Sex ratio Fertility rate Gender inequality index Number of maternity leave days entitlement	
Coefficient	-7.10	-1.35
p-value	0.014	0.516
Remarks	Statistically significant but negative due to omitted variable bias	Statistically insignificant

Regression 2 analyses the relationship between insurance and capital deepening. Capital-to-output ratio is used as the proxy for the latter.

	Non-life insurance – capital accumulation	Life insurance – capital accumulation
Independent variable	ln (non-life insurance premium volume)	ln (life insurance premium volume)
Dependent variable	Capital-to-output ratio, ie. (2015 constant values were used)	
Control variable	GDP per capita growth Domestic credit to private sector by banks Inflation rate Interest rate FDI to GDP ratio (%)	
Coefficient	0.038	0.032
p-value	0.151	0.088
Remarks	Statistically insignificant – not used in LTGM	Statistically significant

Regression 3 analyses the relationship between insurance and human capital.

	Non-life insurance – human capital	Life insurance – human capital
Independent variable	ln (non-life insurance premium volume)	ln (life insurance premium volume)
Dependent variable	Human capital index annual growth rate	
Control variable	Income per capita Fertility rate Total population General government final consumption expenditure (% of GDP)	
Coefficient	0.004	0.004
p-value	0.032	0.038
Remarks	Statistically significant	Statistically significant

### Long-Term Growth Model

Developed by the World Bank, the LTGM is an Excel-based tool used to analyse long-term growth scenarios with baseline statistics already included for each country. The model projects the growth rate of output as a function of growth rate for the key underlying factors:

where:  $g_Y = f(g_{LFP}, g_K, g_{HC}, g_{WAP}, g_{TFP})$

$g_Y$  = growth rate of output by GDP per capita

$g_{LFP}$  = growth rate of labour force participation (LFP) rate

$g_K$  = growth rate of capital deepening

$g_{HC}$  = growth rate of human capital (HC) index

$g_{WAP}$  = growth rate of working-age population (WAP). Insurance coverage has little or no direct relevance to this factor<sup>45</sup>.

$g_{TFP}$  = growth rate of total factor productivity (TFP). Insurance coverage has little or no direct relevance to this factor<sup>46</sup>.

### Linking Regression Results and LTGM for Economic Growth Projection

Independent variable (x)	Dependent variable (y)/factors in LTGM		Regression result	LTGM for economic growth projection
Non-life insurance premium	Labour force participation	Male	Statistically significant <i>coefficient = 0.033</i>	Adjusted in the model based on the result found in regression
		Female	Regression not robust due to omitted variable bias	Assumed to remain at the underlying baseline value since the regression is not robust due to omitted variable bias
	Capital accumulation (for the entire population)		Statistically insignificant	Assumed to remain at the underlying baseline value since insignificant results found in regression
	Human Capital Index annual growth rate (for the entire population)		Statistically significant <i>coefficient = 0.004</i>	Adjusted in the model based on the result found in regression
Life insurance premium	Labour force participation	Male	Statistically insignificant	Assumed to remain at the underlying baseline value since insignificant results found in regression
		Female	Statistically insignificant	Assumed to remain at the underlying baseline value since insignificant results found in regression
	Capital accumulation (for the entire population)		Statistically significant <i>coefficient = 0.032</i>	Adjusted in the model based on the result found in regression
	Human Capital Index annual growth rate (for the entire population)		Statistically significant <i>coefficient = 0.004</i>	Adjusted in the model based on the result found in regression

45. Working age population is primarily driven by demographic changes (e.g. birth rates, ageing, population policies); while it could also be affected by health conditions and mortality rates, the relevance to insurance is indirect.

46. Total factor productivity is primarily driven by technological progress, institutional quality, and innovation systems, which are not the core functions of insurance.

## 7.2 Impact of Insurance on GDP Per Capita and Total GDP by Market

### Indonesia

#### Impact of Non-life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)<sup>47</sup></b>							
Baseline: premium unchanged	<b>5,405</b>	6,547	7,820	9,243	10,854	12,697	
premium Δ 50% by 2050	<b>5,408</b>	6,565	7,868	9,346	11,043	13,018	2.5%
premium Δ 100% by 2050	<b>5,411</b>	6,583	7,917	9,450	11,235	13,347	5.1%
premium Δ 200% by 2050	<b>5,416</b>	6,619	8,015	9,659	11,628	14,027	10.5%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	<b>1,524</b>	1,913	2,353	2,849	3,404	4,028	
premium Δ 50% by 2050	<b>1,525</b>	1,918	2,367	2,880	3,464	4,130	2.5%
premium Δ 100% by 2050	<b>1,526</b>	1,923	2,382	2,912	3,524	4,234	5.1%
premium Δ 200% by 2050	<b>1,527</b>	1,934	2,412	2,977	3,647	4,450	10.5%

#### Impact of Life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	<b>5,405</b>	6,547	7,820	9,243	10,854	12,697	
premium Δ 50% by 2050	<b>5,406</b>	6,566	7,884	9,393	11,141	13,192	3.9%
premium Δ 100% by 2050	<b>5,407</b>	6,585	7,950	9,545	11,434	13,702	7.9%
premium Δ 200% by 2050	<b>5,409</b>	6,622	8,081	9,854	12,040	14,773	16.4%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	<b>1,524</b>	1,913	2,353	2,849	3,404	4,028	
premium Δ 50% by 2050	<b>1,524</b>	1,918	2,372	2,895	3,495	4,185	3.9%
premium Δ 100% by 2050	<b>1,525</b>	1,924	2,392	2,941	3,587	4,347	7.9%
premium Δ 200% by 2050	<b>1,525</b>	1,935	2,431	3,037	3,776	4,686	16.4%

47. The GDP per capita figures for all markets are reported in USD at the 2022 price level.

## Malaysia

## Impact of Non-life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	13,222	15,650	18,564	22,039	26,090	30,644	
premium Δ 50% by 2050	13,228	15,687	18,664	22,254	26,494	31,340	2.3%
premium Δ 100% by 2050	13,234	15,723	18,765	22,471	26,903	32,050	4.6%
premium Δ 200% by 2050	13,246	15,797	18,967	22,909	27,738	33,512	9.4%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	463	574	707	866	1,050	1,257	
premium Δ 50% by 2050	463	576	711	874	1,066	1,286	2.3%
premium Δ 100% by 2050	464	577	715	883	1,083	1,315	4.6%
premium Δ 200% by 2050	464	580	723	900	1,116	1,375	9.4%

## Impact of Life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	13,222	15,650	18,564	22,039	26,090	30,644	
premium Δ 50% by 2050	13,225	15,706	18,761	22,501	26,988	32,203	5.1%
premium Δ 100% by 2050	13,228	15,762	18,958	22,970	27,910	33,821	10.4%
premium Δ 200% by 2050	13,234	15,874	19,359	23,928	29,821	37,241	21.5%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	463	574	707	866	1,050	1,257	
premium Δ 50% by 2050	463	576	715	884	1,086	1,321	5.1%
premium Δ 100% by 2050	463	578	723	902	1,123	1,388	10.4%
premium Δ 200% by 2050	464	582	738	940	1,200	1,528	21.5%

## Philippines

## Impact of Non-life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	<b>4,007</b>	5,026	6,276	7,824	9,727	12,058	
premium Δ 50% by 2050	<b>4,010</b>	5,042	6,322	7,924	9,922	12,407	2.9%
premium Δ 100% by 2050	<b>4,012</b>	5,058	6,367	8,026	10,121	12,765	5.9%
premium Δ 200% by 2050	<b>4,017</b>	5,091	6,460	8,231	10,527	13,508	12.0%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	<b>484</b>	651	863	1,135	1,476	1,904	
premium Δ 50% by 2050	<b>485</b>	653	870	1,149	1,506	1,959	2.9%
premium Δ 100% by 2050	<b>485</b>	655	876	1,164	1,536	2,015	5.9%
premium Δ 200% by 2050	<b>486</b>	659	889	1,194	1,598	2,133	12.0%

## Impact of Life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	<b>4,007</b>	5,026	6,276	7,824	9,727	12,058	
premium Δ 50% by 2050	<b>4,008</b>	5,045	6,345	7,992	10,066	12,670	5.1%
premium Δ 100% by 2050	<b>4,009</b>	5,064	6,415	8,162	10,412	13,304	10.3%
premium Δ 200% by 2050	<b>4,011</b>	5,103	6,556	8,509	11,127	14,636	21.4%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	<b>484</b>	651	863	1,135	1,476	1,904	
premium Δ 50% by 2050	<b>484</b>	653	873	1,159	1,528	2,001	5.1%
premium Δ 100% by 2050	<b>485</b>	656	882	1,184	1,580	2,101	10.3%
premium Δ 200% by 2050	<b>485</b>	661	902	1,234	1,689	2,311	21.4%

## Singapore

## Impact of Non-life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	<b>87,181</b>	96,753	108,203	120,949	136,004	153,198	
premium Δ 50% by 2050	<b>87,221</b>	96,982	108,795	122,138	138,121	156,683	2.3%
premium Δ 100% by 2050	<b>87,262</b>	97,212	109,388	123,337	140,265	160,238	4.6%
premium Δ 200% by 2050	<b>87,342</b>	97,673	110,581	125,760	144,639	167,567	9.4%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	<b>531</b>	605	688	775	870	971	
premium Δ 50% by 2050	<b>531</b>	606	692	783	883	993	2.3%
premium Δ 100% by 2050	<b>531</b>	608	696	790	897	1,015	4.6%
premium Δ 200% by 2050	<b>532</b>	611	704	806	925	1,062	9.4%

## Impact of Life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	<b>87,181</b>	96,753	108,203	120,949	136,004	153,198	
premium Δ 50% by 2050	<b>87,200</b>	97,060	109,212	123,173	140,107	160,030	4.5%
premium Δ 100% by 2050	<b>87,218</b>	97,368	110,228	125,426	144,302	167,090	9.1%
premium Δ 200% by 2050	<b>87,254</b>	97,986	112,278	130,021	152,971	181,922	18.7%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	<b>531</b>	605	688	775	870	971	
premium Δ 50% by 2050	<b>531</b>	607	695	789	896	1,014	4.5%
premium Δ 100% by 2050	<b>531</b>	609	701	804	923	1,059	9.1%
premium Δ 200% by 2050	<b>531</b>	613	714	833	978	1,153	18.7%



## Thailand

## Impact of Non-life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	7,715	9,442	11,618	14,436	18,108	22,797	
premium Δ 50% by 2050	7,720	9,474	11,705	14,630	18,490	23,494	3.1%
premium Δ 100% by 2050	7,726	9,505	11,793	14,826	18,878	24,211	6.2%
premium Δ 200% by 2050	7,736	9,567	11,970	15,223	19,677	25,703	12.7%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	555	680	833	1,024	1,261	1,547	
premium Δ 50% by 2050	556	683	840	1,037	1,287	1,595	3.1%
premium Δ 100% by 2050	556	685	846	1,051	1,314	1,643	6.2%
premium Δ 200% by 2050	557	689	859	1,080	1,370	1,745	12.7%

## Impact of Life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	7,715	9,442	11,618	14,436	18,108	22,797	
premium Δ 50% by 2050	7,717	9,470	11,718	14,682	18,614	23,738	4.1%
premium Δ 100% by 2050	7,719	9,498	11,819	14,930	19,128	24,704	8.4%
premium Δ 200% by 2050	7,722	9,554	12,021	15,433	20,186	26,720	17.2%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	555	680	833	1,024	1,261	1,547	
premium Δ 50% by 2050	555	682	841	1,041	1,296	1,611	4.1%
premium Δ 100% by 2050	555	684	848	1,059	1,332	1,677	8.4%
premium Δ 200% by 2050	556	688	862	1,094	1,405	1,814	17.2%

## Vietnam

## Impact of Non-life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	<b>4,753</b>	5,793	6,972	8,246	9,612	11,076	
premium Δ 50% by 2050	<b>4,755</b>	5,809	7,014	8,337	9,779	11,357	2.5%
premium Δ 100% by 2050	<b>4,758</b>	5,824	7,057	8,429	9,949	11,644	5.1%
premium Δ 200% by 2050	<b>4,763</b>	5,855	7,143	8,614	10,296	12,239	10.5%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	<b>476</b>	595	729	873	1,025	1,185	
premium Δ 50% by 2050	<b>476</b>	597	734	883	1,043	1,215	2.5%
premium Δ 100% by 2050	<b>476</b>	598	738	893	1,061	1,246	5.1%
premium Δ 200% by 2050	<b>477</b>	601	747	912	1,098	1,310	10.5%

## Impact of Life Insurance

	2025	2030	2035	2040	2045	2050	2050 VS baseline
<b>GDP per capita (USD)</b>							
Baseline: premium unchanged	<b>4,753</b>	5,793	6,972	8,246	9,612	11,076	
premium Δ 50% by 2050	<b>4,754</b>	5,812	7,035	8,391	9,885	11,535	4.1%
premium Δ 100% by 2050	<b>4,755</b>	5,830	7,099	8,538	10,163	12,009	8.4%
premium Δ 200% by 2050	<b>4,757</b>	5,868	7,228	8,837	10,738	13,000	17.4%
<b>GDP (USD bn) (total)</b>							
Baseline: premium unchanged	<b>476</b>	595	729	873	1,025	1,185	
premium Δ 50% by 2050	<b>476</b>	597	736	889	1,054	1,234	4.1%
premium Δ 100% by 2050	<b>476</b>	599	743	904	1,084	1,285	8.4%
premium Δ 200% by 2050	<b>476</b>	603	756	936	1,145	1,391	17.4%

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