Analysis Of Factors Contributing To Low Demand For Health Insurance In Indonesia

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Abstract.

This study analyzes the demand for insurance products in Indonesia as developing countries remains relatively low despite the significant market potential. From an economic perspective, insurance is a method for reducing risk by transferring and combining the uncertainty of financial losses. Thus, insurance is a social tool that transfers personal risks to all members of a group by utilizing pooled funds to pay for losses incurred under agreed upon terms. The insurance business in Indonesia has recently grown rapidly, including the entry of foreign investors into insurance businesses, either through share ownership or majority ownership in national insurance companies, with the increasing need for risk protection in a dynamic socio-economic context, it is crucial to more comprehensively understand the factors that drive and hinder insurance demand in developing countries. This study aims to review existing literature that explores the factors influencing insurance demand in developing countries, including individual, social, economic, and institutional aspects. A systematic literature review method was employed to analyze scholarly articles published over the past two decades. The findings reveal that factors such as income, education level, trust in financial institutions, financial literacy, government regulations, and risk perception significantly influence individuals' decisions to purchase health insurance products. These findings provide insights for policymakers and insurance industry stakeholders to design strategies aimed at enhancing insurance literacy and penetration in developing countries. The study also identifies research gaps that could be addressed in future empirical investigations. Additionally, cultural factors and access to insurance in Indonesia services also play a crucial role.

***Keywords**: Demand; developing countries; health insurance and insurance.*

I. INTRODUCTION

Insurance is a vital part of the modern financial system, providing protection against various risks faced by individuals and institutions[1]. Some also define it as a financial protection mechanism that transfers the risk of economic loss due to an unforeseen event (e.g., illness, accident, fire, death) from the insured to the insurance company[2], [3]. Insurance plays an increasingly vital role in supporting financial stability and economic development, especially amidst increasing global uncertainty and socioeconomic vulnerability[4]. Countries around the world demonstrate that government spending, or public sector spending, including through a social insurance system for the health of their citizens, in the form of spending on public health programs and spending on individual health services, constitutes the largest portion of a country's health expenditure[5]. The government's role in taking a larger role is driven by the fundamental nature of health care, the uncertain cost of healthcare needs, and long-standing pro-people public policies. In many developed countries, insurance penetration is generally high due to high income levels, robust regulatory systems, and high public trust in financial institutions[6]. Conversely, in many developing countries, demand for insurance products remains relatively low despite positive economic growth and large populations representing promising market potential[7]. The phenomenon of low insurance demand in developing countries is a multidimensional issue involving social, economic, cultural, and institutional factors[8]. For example, in Indonesia, income, education level, knowledge of insurance, risk perception, and trust in insurance institutions significantly contribute to an individual's decision to purchase insurance products.

On the other hand, structural barriers such as limited access to insurance services, lack of public education, and weak regulations also act as inhibiting factors[9]. Sometimes, differences in characteristics between regions, as well as the influence of local cultural values on risk perception and social dependency, further exacerbate the complexity of this problem[10]. This is why private health insurance remains undervalued. Improvements in healthcare services can also be viewed as negative if they are caused by irresponsible behaviour (moral hazard) by both insurers and providers[11], [12]. According to Morrissey (2008), moral hazard is a loss arising from intentional negligence by insurers to obtain benefits from their insurance policies, where insurers intentionally neglect their health. In general, private insurance health expenditures in countries worldwide accounted for approximately 4.7% of non-investment health expenditures (CHE) in 2014. Total private insurance spending in 2015 was approximately 3.9% of Indonesia's health expenditures (excluding investment)[13].The government has undertaken various efforts to address the issue of medical services, from formulating regulations on the medical and health system to promoting various projects for underprivileged groups, ensuring equitable access to medical services for all levels of society. One way to address this issue is the establishment of the Community Health Insurance (Jamkesmas) scheme, which is also available to lower-income communities. Jamkesmas is a program to safeguard the health of Indonesian citizens, implemented by the Ministry of Health since 2004[14].

National Health Insurance (JKN), as stipulated in Presidential Decree No. 82 of 2018, provides health protection for all participants, including those who have paid health insurance premiums, or whose premiums have been paid by the central or regional government. Data from the Central Statistics Agency (BPS) shows that 77.83% of Indonesia's population had health insurance in 2024. This figure increased by 2.29 percentage points compared to the previous year's figure of 75.54%. BPJS Kesehatan remains the most widely used health insurance program, reaching 70.61%. This number, the majority, or 46.61%, are BPJS Kesehatan Premium Assistance Recipients (PBI) a low-income group whose premiums are covered by the government[15]. Meanwhile, the other 24% are non-PBI BPJS participants, who pay their premiums independently. The premiums for the health care program under the BPJS Kesehatan (Social Security Agency for Health) will follow social insurance calculations. Social insurance premiums are calculated not based on morbidity rates but rather as a percentage of wages. Calculating premiums based on a percentage of income/wages demonstrates equity and social solidarity, as well as the government's regulatory and protective function for low-income residents[16].In addition to Indonesia BPJS, 4.09% of the population relies on the Regional Health Insurance (Jamkesda). Meanwhile, 2.58% of the population receives health insurance from their employer or workplace, and 0.55% have private insurance. However, despite the continued increase in health insurance coverage, approximately 22.17% of Indonesia's population remains unprotected[17].

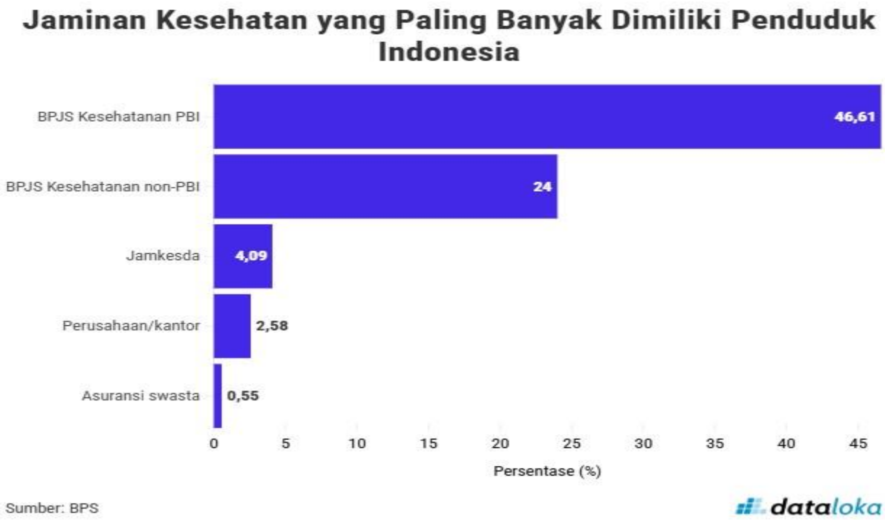

Fig 1. Graph of the Most Common Health Insurance Coverages in Indonesia
Source: Indonesia Central Statistics Agency (BPS), 2024

From an economic perspective, insurance is a method for reducing risk by transferring and combining the uncertainty of financial losses[18]. Thus, insurance is a social tool that transfers personal risks to all members of a group by utilizing pooled funds to pay for losses incurred under agreed upon terms[19].The insurance business in Indonesia has recently grown rapidly, including the entry of foreign investors into insurance businesses, either through share ownership or majority ownership in national insurance companies[20], with the increasing need for risk protection in a dynamic socio-economic context, it is crucial to more comprehensively understand the factors that drive and hinder insurance demand in developing countries[21]. This understanding can provide a basis for formulating more targeted public policies and encourage insurance companies to develop more inclusive products and distribution strategies[22]. Based on this background, this article aims to conduct a literature review of various previous studies that discuss the factors influencing insurance demand in developing countries. This research raises the following research question: what are the main factors influencing insurance demand in developing countries, based on the findings of previous literature? Furthermore, this study also aims to identify gaps in the literature that can serve as a basis for further empirical research[23], [24].By reviewing various theoretical perspectives and previous studies, this article is expected to contribute to the development of knowledge in financial economics and provide input for policymakers, and insurance industry practitioners in formulating strategies to increase insurance literacy and penetration in developing countries, particularly Indonesia.[25]

II. METHODS

This study uses a systematic literature review approach to examine the issue of adverse selection in health insurance schemes. This approach was chosen to gain a comprehensive understanding of the patterns, causal factors, and impacts of adverse selection reported in various cross-country studies and insurance schemes, both public, private, and community-based. In this case, the research used a descriptive qualitative approach with a systematic literature review method[26]. This approach was chosen to identify, categorize, and analyze various factors influencing insurance demand in developing countries based on previously published scientific studies. This study did not collect primary data, but instead utilized secondary data in the form of relevant scientific articles. Data Sources, Data were obtained from various accredited scientific journal articles, both national and international, accessed through online databases such as: Google Scholar, Scopus, DOAJ, PubMed, ScienceDirect, and SpringerLink[27].Inclusion and Exclusion criteria, to maintain the quality and relevance of the literature, the following Inclusion criteria were established: Articles discussing the demand for or determinants of insurance demand in developing countries, Articles published between 2005 and 2024, Articles written in English or Indonesian, Publication type: scientific journals, research reports, or credible academic studies, with an empirical focus (quantitative or qualitative) that discuss demand in health insurance. Editorial articles, opinion articles, and non-peer-reviewed studies were excluded. In addition, studies outside the context of demand of health insurance, such as vehicle or property insurance, were also excluded[28].

The exclusion criteria included: articles that only discuss insurance in developed countries, Non-scientific articles such as opinion pieces or news, articles not available in full text. Review Procedure, the review steps were as follows: Identify search keywords such as insurance demand, determinants, developing countries, insurance, and insurance demand, Initial selection was based on the title and abstract, further screening was carried out by reading the full contents of the articles to ensure topic relevance, thematic analysis was used to group the findings into several major themes, such as economic, social, psychological, and institutional factors, then do the data analysis[29].The article selection process consisted of three stages: (1) title and abstract selection, (2) full-text review to ensure compliance with the inclusion criteria, and (3) data verification, then from the initial search results of >50 articles, 20 final articles that met the criteria were selected. Two researchers conducted the screening process independently to minimize bias. If there were differences in assessment regarding article inclusion, the two researchers discussed to reach a consensus. If the discussion did not result in an agreement, a third researcher was asked to review and decided.Primary data studies were extracted using a standardized format that included title, authors, year of publication, study locus, type of insurance, methods, and main findings related to adverse selection. In addition to data extraction, each study was assessed for quality using the appropriate risk of bias assessment tool:

- For quantitative observational studies, the Newcastle-Ottawa Scale (NOS) was used to assess methodological quality and potential bias.
- For experimental or quasi-experimental studies, the latest version of the Cochrane-Risk of bias tool was used.

Risk of bias assessment was performed independently by two investigators, with the same procedure for resolving discrepancies as in the selection stage. Quality scores were used for sensitivity analyses and to interpret the overall strength of evidence.

III. RESULT AND DISCUSSION

Insurance as a risk transfer means that insurance is essentially a company engaged in the transfer of risk from the insured to the insurer or insurance company in the event of an unforeseen loss that affects the insured object. Health insurance significantly impacts service consumption. The benefits of health insurance include relieving participants from the difficulty of providing cash, monitoring healthcare costs, and providing health data. Health insurance plays a crucial role in maintaining public health, especially during times of illness, thereby ensuring the community's need for healthcare services is met.When viewing insurance as a price effect, the origins of the insurance contract as a means of transferring income to the sick are often overlooked. The prototypical insurance contract is a form of voluntary, reciprocal exchange, in which many consumers pay premiums in exchange for claims against a collectively pooled premium fund, which can only be disbursed if they fall ill.

The lower the likelihood of someone falling ill, the lower the premium each insurance purchaser must pay to receive a specific payment in the event of illness.The difference between the payment (claim) and the premium represents a transfer of income from those who remain healthy to those who fall ill. Health insurance is purchased to achieve this income transfer when someone falls ill.The impact of health insurance on demand depends on the empirical specification used. Health insurance programs have been shown to increase healthcare utilization, with the highest effect found among the poor. A policy to increase access to healthcare (e.g., premium subsidies) will be effective if it focuses on the poor. A review of 20 scientific articles that met the inclusion criteria found that demand for insurance in developing countries is influenced by a number of factors that can be classified into five main groups: (1) economic factors, (2) demographic factors, (3) psychological factors and risk perception, (4) institutional factors, and (5) sociocultural factors and accessibility. The following is a description of the results and discussion based on each category.

1. Economic Factors

Economic factors are the most dominant determinant in most of the studies reviewed. Variables such as income level and premium prices have a strong correlation with individual or household decisions to purchase insurance products. A study by Beck and Webb (2003) showed that increasing per capita income is positively associated with insurance penetration, particularly life insurance. This finding is supported by Outreville (2013), who found that middle- and upper-income individuals tend to be more able to allocate income for risk protection. However, several studies highlight that perceived high premium prices remain a major barrier to insurance demand, especially among low-income individuals. The absence of subsidy or micro-premium schemes also limits the reach of insurance services among vulnerable groups.

2. Demographic Factors

Several demographic characteristics have been shown to influence insurance demand. Age, education level, gender, and marital status frequently appear in the studies reviewed. For example, individuals of productive age (25–50 years old) tend to be more active in seeking insurance coverage due to awareness of the financial burden within their families. Education level is also an important indicator. Individuals with higher education are more likely to understand the long-term benefits of insurance and have better financial literacy. This aligns with the findings of Chui and Kwok (2008), who stated that financial literacy significantly increases the likelihood of purchasing insurance products.

3. Psychological Factors and Risk Perception

Risk perception and attitudes toward uncertainty play a key role in insurance purchasing decisions. A study by Giné, Townsend, and Vickery (2008) found that farmers in developing countries who are aware of the risk of crop failure due to extreme weather are more likely to purchase agricultural insurance. However, a lack of understanding of how insurance works makes most individuals reluctant to purchase, even if they are aware of the risks. Furthermore, personal or family experience with risk events also increases demand. On the other hand, fatalistic attitudes and the belief that fate is predetermined often act as barriers in certain societies, as found in studies in several South Asian and Sub-Saharan African countries.

4. Institutional Factors

Institutional factors relate to public trust in financial institutions, the quality of regulations, and government involvement in strengthening the insurance industry. Trust in insurance companies is an important prerequisite for driving demand. Trust can be defined as the belief that an individual will achieve the expected outcome from a transactional partner. Trust is characterized by an individual's tendency to exhibit certain behaviors based on the belief that their partner will fulfill their expectations. It is a common belief that the truthfulness of another person's words, promises, or statements can be relied upon (Barnes, 2007). Several studies have found that people are reluctant to purchase insurance due to concerns about fraud, difficult claims disbursement, or a lack of transparency in fund management. Government interventions in the form of financial literacy campaigns, consumer protection regulations, and mandatory insurance programs have proven effective in increasing demand.

5. Sociocultural Factors and Accessibility

Local culture and social norms also influence public attitudes toward insurance. In some communities, social solidarity and the mutual assistance system are considered sufficient protection networks, making insurance products unnecessary. This is often the case in rural communities with strong social structures. Furthermore, limited physical and digital access to insurance providers also hinders market penetration. Remote areas are often underserved by insurance agents or lack adequate digital infrastructure to access online insurance services. To improve the efficiency of the insurance market and prevent the accumulation of excessive claim burdens, the premium structure should be determined based on individual risk indicators. With this approach, the premium paid reflects the health risk faced by each participant, thereby reducing the incentive for high-risk individuals to opt-in, and increasing the incentive for healthy individuals to participate. These initiatives will not only increase participation in health insurance but will also ensure that the schemes are financially viable in the long run. Therefore, integrating these strategies is a vital step in addressing the challenges of demand in the current health insurance system. Aggressive policy interventions, such as offering targeted subsidies to low-risk groups, are recognized as a vital component in addressing the problem of demand in health insurance schemes.

Research shows that targeted subsidies can attract more healthy participants and promote the sustainability of health insurance programs. An experiments in Indonesia indicate that targeted subsidy offerings not only increase participation in health insurance, but also help balance the ratio of healthy participants to high-risk participants, which is essential for maintaining the financial stability of the insurance program. In addition, the use of advanced analytical technologies, such as big data and machine learning, also shows significant potential in reducing risks. By leveraging data analytics, insurers can better understand participant behavior and tailor their offerings to meet the needs of the wider market.These findings demonstrate that insurance demand in developing countries is multifactorial and complex. No single solution can address low community participation. Therefore, policy approaches need to be tailored to the local context. For example in Indonesia, expanding microinsurance with low-premium schemes, strengthening community-based financial literacy, and increasing transparency and trust in insurance institutions are strategies worth considering. The collaboration between the government, the private sector, and community organizations is really needed to create an inclusive insurance ecosystem that adapts to the needs of communities across various socioeconomic backgrounds to anticipate.

IV. CONCLUSION

This study highlights the importance of understanding the dynamics in health insurance through a systematic literature analysis across insurance schemes. The results identify patterns and drivers of demand in health insurance (e.g., information asymmetry between providers and participants, voluntary risk choices, and premium and benefit designs) providing an empirical basis for formulating underwriting policies and community empowerment mechanisms. Based on a systematic literature review of various previous studies, it can be concluded that insurance demand in developing countries is influenced by various interrelated factors. The main determinants of people's ability and willingness to purchase insurance products are economic factors such as income and premium prices.

Furthermore, demographic characteristics such as age and education also significantly influence insurance demand.Psychological factors and risk perception are important variables influencing individual decisions, particularly awareness of potential risks and trust in insurance products. Institutional aspects, including trust in insurance companies, regulatory quality, and the government's role in improving financial literacy, also significantly influence the success of increasing insurance penetration. Furthermore, sociocultural factors and the accessibility of insurance services are equally important, as cultural norms and geographic conditions can act as barriers or enablers to the growth of insurance demand in the community. Several initiatives can be initiated to increase demand for health insurance, including:

1. Improving Financial Literacy: The government and insurance industry players need to intensify educational programs that emphasize the benefits of insurance and how the products work in simple, easy-to-understand ways.
2. Developing Microinsurance Products: Insurance with affordable premiums and coverage tailored to the needs of low-income communities should be prioritized to increase financial inclusion.
3. Strengthening Regulation and Transparency: Regulations that protect consumers and increase transparency in insurance company operations can strengthen public trust.
4. Community- and Culture-Based Approach: Insurance marketing and education strategies should be tailored to local socio-cultural characteristics to ensure greater public acceptance.
5. Improving Service Access: Expanding distribution networks through local agents and digital platforms to reach remote areas and improve access for potential customers. Future studies should expand the scope to include digital insurance schemes and microinsurance models and employ longitudinal analyses to understand the evolution of demand on health insurance over the long term.

In addition, experimental studies evaluating policy interventions such as premium subsidies based on risk profiles or incentives for active participation can provide deeper insights into the effectiveness of mitigation strategies. Research in low and middle-income countries is also needed to capture the diverse socio-economic contexts and their impacts on risk selection behavior for demand in health insurance.

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