ECONOMIC STIMULUS AND HEALTH SECURITY

M. ARIEF ROSYID HASAN

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Editor's Introduction

M. Arief Rosyid Hasan, since we met him, has been an inspirational figure. Kak Arief, as we called him, got us involved in a number of activities he initiated.

Being around him, makes us as juniors have optimism and enthusiasm to continue doing things. Growing awareness that youth is too valuable to let it pass by and be "mediocre." A generation that must continue to build a track record of goodness (achievement) and provide benefits that have a broad impact, even for the people and nation.

"Serving generations" and mainstreaming youth is a commitment that he carries out consistently. Through concrete and real ideas and roles. Since he was a student until now he has become a youth leader. It's only natural that he is one of the "70 Influential Figures in Indonesia" according to Men's Obsession (2015) and "25 Young Figures from the Republika Initiative" (2020).

Meanwhile, his consistency in developing the sharia economic ecosystem starts with moving the mosque economy. Becoming a mosque caretaker, building mosque youth networks, and initiating a number of mosque-based economic initiatives.

Becoming Commissioner of Bank Syariah Indonesia (BSI) places him as a historical actor at the center of the transformation of Islamic banking in Indonesia. This mandate provides a wider space for him to build collaboration and consolidation of youth and people in the economic field.

His work has been recognized by the public with the award for "Best Sharia Economic Activist Figure" according to Bank Indonesia (2021), "10 Inspirational Young Leaders in Business, Economics and Entrepreneurship Categories" according to JCI Indonesia's TOYP (2022), and "Economic Driver and MSMEs" version Kabar Makassar Award (August 2023).

As juniors, of course we still have a long way to go. The challenge given by Mr. Arief, by attracting us to be directly involved in the benefit movement he launched, is a rare opportunity for us.

Therefore, as a form of appreciation, we took the initiative to compile his thoughts into a book. From here it will be clear to read his ideas and responses to a number of issues that are of concern to him. Once identified, two books become.

First, Economic Stimulus and Health Security. Contains his writings on National Health Insurance in the context of economic growth. Average serious academic writing that has been published in scientific journals and international seminar proceedings.

We add to this by translating three articles prepared as opinions in the media and excerpts from his dissertation “Formulation of Additional Health Insurance Policy for National Health Insurance Participants” which will be published as a book.

The second book, Commitment to Benefits. It is a collection of opinions written in the period October 2022-September 2023. Each article has its own context and has been published in a number of different media such as *Harian Fajar*, *Tribun Timur, Republika*, *Koran Sindo, Bisnis Indonesia, Media Indonesia, Kompas.com*, and the website Arief Rosyid *www.ariefrosyidhasan.id.*

Because of that, in this book we stitched it together by making a few changes, so that each article can be linked according to a related theme.

We specially prepared these two books as gifts for Kak Arief's 37th birthday, on September 4, 2023. A small initiative based on the intention of bringing benefits. For readers who are interested in the themes raised or for those who want to explore the author's ideas.

Happy reading!

Editor
RA - DAA

ECONOMIC STIMULUS AND HEALTH SECURITY

NATIONAL HEALTH GUARANTEE FORMING A WELFARE STATE

THE WELFARE state discourse began to be raised since the beginning of the year by Todung Mulya Lubis in his article, Kompas "Welfare State" (9/1/2023), raising the question whether Indonesia is included in a welfare state? Tauchid Komara Yuda responded with Kompas' "Welfare State or Prosperous Society" (28/1/2023), continuing the question whether we are truly capable of committing to a welfare state?

The welfare state in Pauline Gregg's book, “The Welfare State; An Economic and Social History of Great Britain from 1945-to Present Day”, explains the idea of a welfare state as a country that has a national health system, insurance and other social services. So that the presence of the National Health Insurance (JKN) program is not only a manifestation of social insurance but also a manifestation of the concept of a welfare state. On the other hand, JKN can be interpreted as a tool for state intervention to improve welfare and social justice for all Indonesian people.

The term welfare state or welfare state in principle refers to the meaning that the state has a responsibility to realize the welfare of the people by providing guarantees to the community. This includes meeting the basic needs of the community which include the need for social services, health care, reducing community social costs and social security. In accordance with this context, JKN is a bridge to a welfare state.

In its own journey, JKN is slowly providing an equalizing effect on inequality in access to health services. Data obtained from the analysis of the National Team for the Acceleration of Poverty Reduction (TNP2K) in 2017 found that since JKN was implemented, more and more poor people have been able to access health facilities. This means that the JKN program increases the ability of low socio-economic class people to access health facilities, especially private clinics.

It is hoped that the aim of introducing JKN will ultimately result in breaking the economic burden on society. Currently, the JKN program scheme is purely oriented towards meeting all basic health needs and protecting against economic problems resulting from health care costs which can lead to poverty.

If this is taken more fundamentally, poverty will be closely related to how difficult it is to access public health services. Communities with low economic capabilities will be increasingly marginalized due to the high costs of health care. Families with low-income levels are at risk of forever living in a chain of poverty because of expensive health costs.

Thus, there are high and expensive health costs, this can make people poorer due to illness and higher health costs.

Financial Protection

The thing that is hard to deny at this time is that JKN has been transformed as a system of social economic protection, especially for vulnerable groups. The impact of JKN is felt in reducing spending figures or out-of-pocket (OOP) spending for the public's health needs.

Based on a report from the ThinkWell Institute in 2022 regarding the results of estimating the effect of JKN on OOP spending, it was found that in aggregate the JKN program succeeded in reducing the OOP rate. The estimation results show that people who use JKN issue OOP 6% less than people who are not JKN participants. Likewise, the impact of JKN on contribution recipient participants (PBI) has made savings of 22% for the long-term method and for non-PBI participants it has succeeded by as much as 2%.

The OOP indicator itself is one of the economic burdens that every time becomes a problem in society. Based on WHO National Health Account data, household spending statistics for health costs in Indonesia are still high, namely 35 percent. The OOP rate for health care in Indonesia is quite high compared to other countries, namely Thailand, Malaysia and Fiji which have an OOP of 28 percent. Other countries such as Chile, Costa Rica, China and Cuba have OOP values below Indonesia, namely 23 percent.

This decline in OOP then means that JKN can clearly change health services that were previously a drain on pockets to become relatively accessible to the public. JKN makes health services or facilities as proper public goods rather than commercial commodities that are difficult for the public to access. JKN turns people's financial disadvantages or disasters into beneficial benefits. This is supported by data from the 2015 and 2016 Susenas microsimulation results which show that JKN-KIS has saved 984 thousand to 1.18 million people from poverty in 2015 and 990 thousand to 1.16 million people in 2016.

From this point of view, we can conclude that JKN is a political formulation of the Welfare State concept. Why is that? This is because the JKN social security program strictly prioritizes all citizens through various existing policies, especially for people who are in vulnerable groups. Groups that have major obstacles in obtaining accessibility, availability, affordability, and acceptability of health services.

Principles of Compassion Capitalism

Like life, JKN has developed and grown from two sides. On the one hand, it is a form of implementation of the welfare state, namely the government's responsibility in fulfilling the right to health, but on the other hand, JKN is a form of implementation of the modern insurance economy. In other words, JKN carries out two functions at the same time, namely implementing the welfare state and operating the insurance system.

Something that is currently still being debated is that BPJS Health is the provider of JKN or social insurance in Indonesia but implements an insurance premium system. So that JKN users are certainly required to pay contributions according to the class they have chosen. The available classes are different in terms of the facilities obtained by the participants; in other words, participants will receive health services according to what they paid for.

However, from an economic aspect, the JKN program offers us a way to understand something that is now better known as compassionate capitalism. Compassionate capitalism that does not completely focus on profit but also prioritizes principles that put the interests of many people above mere profit. As mentioned by Rich Devos in his book compassion capitalism, the principle of capitalism with high social concern stands on one principle: People Helping People Helping Themselves.

This paradigm can be used to understand the implementation of JKN in Indonesia. JKN carries this spirit that people are not only forced to buy their own health services but rather people are empowered to help themselves and others to fulfil their health rights. In this way, the health services obtained can provide comprehensive prosperity because health costs are not borne only by one person, but by everyone in a spirit of mutual cooperation to help others.

In closing, in the view of the author, social protection, namely health, is an important substance in fulfilling citizenship rights. Therefore, the distribution of resources within a country is necessary to fulfil citizens' right to health. If Indonesia upholds the principle of

unity and oneness then it would not be wrong if for the sake of welfare and justice for all Indonesian people, this principle would also apply to the implementation of health insurance in Indonesia.

ADDITIONAL INSURANCE URGENCE FOR REASONABLE COMMUNITIES

IT MUST be acknowledged that the government's discourse to design a new "BPJS for the rich" scheme has given rise to a new discussion space regarding the management of National Health Insurance (JKN) social health insurance in Indonesia. An article from the Managing Director of BPJS Health, Gufhron Mukti, in Kompas (27/01/23) stated that the use of health services at BPJS was right on target, which might be an interesting trigger to continue this discussion.

This discussion can be started again by changing the direction of the main conversation, namely no longer just talking about how to use health service packages by JKN participants but about how to fulfil the various needs and desires of JKN participants regarding this health insurance.

However, we must have the courage to say that the health services and facilities provided by the JKN program today do not fully represent the existing needs of the community. There are demands regarding the need for participants to be upgraded and the need for

participants to get medical packages outside of BPJS Health insurance coverage.

The facts found are that there are still many JKN participants who spend out of pocket (OOP) to pay for their own treatment. There is still a tendency for BPJS Health insurance participants to use their personal funds to pay for health access.

From the results of research conducted by the Center for Economic Studies and Health Policy at the University of Indonesia (PKEK-UI), it was found that as many as 42 percent of JKN patient research respondents still used personal costs to buy medicine. In another aspect, data was obtained that 85.2 percent of research respondents from JKN patients reached into their pockets to pay for medication for chronic diseases that were not guaranteed by BPJS Health.

This is of course a dilemma, because the presence of the JKN program in Indonesia actually started from its initial enthusiasm, namely to reduce the number of OOP or health spending from the community. With the existence of the JKN health insurance scheme, it is hoped that it can provide financial guarantees to the public to access health services.

The fact that there is OOP from the community seems to show that participants covered by the JKN program still need additional protection to cover health needs that are not or are not covered by the JKN health insurance program. Or in other words, health services that are not covered by the standard Indonesian Case Based Groups (INA

CBG's) tariffs are additional costs that must be borne independently by JKN health insurance participants.

Demand for Additional Health Insurance

Based on the dissertation research conducted by the author, data was obtained that the demand for BPJS Health participants for an additional health insurance package (AKT) or a similar increase in inpatient class which was not covered in the JKN program during 2019-2022 has increased by 391.28% annually.

The existence of this request shows that JKN participants still want other benefit packages or tend to want to upgrade additional packages which have been limited by the limit in BPJS Health services.

If viewed from the point of view of the financial class, there are special segments of society that need to be facilitated through payment mechanisms or arrangements for new benefit packages in JKN health services.

They are people with middle and upper economic status who are interested in using additional health insurance services for services that are not covered by BPJS Kesehatan.

It is this financial capability that encourages people or individuals with higher incomes to tend to buy additional health insurance that technically does not use the JKN payment scheme, such as private health insurance, reimbursement to offices, or paying for it themselves.

This segment of course needs to be seen as a new market share by BPJS Kesehatan which must be given special treatment so it doesn't contribute to OOP figures in Indonesia. In another sense, the JKN program needs to think about a model of fulfilling the wishes of community groups above the standard level of JKN claims. So that this model can fulfil the wishes of the people who ask for extra services or VVIP and at the same time make JKN participants not need to look at options outside of JKN health insurance.

Automatically by doing so, social insurance principles such as JKN whose participation is mandatory (mandatory) can be carried out by the community voluntarily without having to ignore all the needs and desires that arise from the community.

The Need for Accommodating Policies

There is a tendency that the government has responded to requests for AKT through the Coordination of Benefit (COB) mechanism with the issuance of Ministry of Finance Regulation (PMK) Number 141/PMK.02/2018 concerning Coordination Between Guarantee Providers in Providing Health Service Benefits.

However, the implementation of this model has not run optimally due to several factors, namely the absence of premium and benefit arrangements for AKTs that provide JKN additional benefits, the limited availability of hospitals to carry out split bills, and most importantly, the absence of clear regulations for AKTs to held in JKN.

There is an urgency to create an umbrella regulation that aims to accommodate requests for top-up services by JKN participants, whether the additional benefits are paid by employers, participants or AKTs. Detailed policies regarding AKTs such as split billing, for example, need to be made so that it is clear what type of service and what the mechanism is for split billing.

So far there is only BPJS Health Regulation No. 4 of 2020 which states that split billing can be done by health facilities, but this rule does not clearly regulate technically so that not all BPJS providers, especially hospitals (RS), do not want to do it. The policy regarding cost sharing has also been written in Permenkes No 3 of 2023 but the mechanism for implementing the payment of the difference in costs is still ambiguous and has the potential to be problematic.

If we want to refer to it as benchmarking, we can look at Taiwan. Participants in National Health Insurance (NHI) or BPJS Health Taiwan can choose to use this health insurance or pay out of pocket. This mechanism has also been regulated in detail in the insurance program and even includes the proportion of costs that can be paid by the patient.

Returning to the context of JKN health insurance, cost-sharing like this can also be done to provide easier access to wider medical care and at the same time to keep health service costs under control. Because in principle split billing or split billing is one way that can be used when top up services occur with JKN health insurance.

If things like this are regulated with clear policies, it is very possible that the presence of JKN can solve the problem of uncertainty and adverse selection for health insurance participants. The existence of JKN also by taking into account the wishes of the community, will very likely be able to solve the problem of incongruity between the patient's utility level and the amount of premium paid by the patient. So that in the end, the concepts of efficiency and justice in the JKN program can run hand in hand. This may be used as a basis for developing the direction and policy of the JKN program in the future.

PRIVATE INSURANCE DON'T COMPETE WITH HEALTH BPJS

HEALTHY IS a right, this is stated in the 1945 Constitution Article 28H. For people who have health problems, the state organizes the National Health Insurance (JKN) program with the Health Social Security Administration Agency (BPJS) as the organizer. This is because the unpredictable cost of accessing health services such as hospitals can impoverish a person. In fact, Ali Ghufron Mukti, Main Director of BPJS Health, said "sick people are now prohibited from paying" because there is JKN and BPJS Health.

The JKN and BPJS Kesehatan programs are still very young. Born alias operated for the first time in 2014. Before there was JKN, people who could not afford it were covered by *Jamkesda*, *Jampersal*, and there were also Askes and *Jamsostek* for formal workers. While those who do not join them, will prevent 'poor because of medical expenses' by buying private health insurance (askes). So, actually private health insurance is more senior than JKN because it has existed since 1970. Even in terms of regulations, the Law on Insurance

Business existed in 1992, while the Laws related to JKN and BPJS Health were only issued in 2004 and 2011.

Even though they are more senior, data from the National Social Security Council (DJSN) sismonev website states that JKN participants have reached 95.74% of Indonesia's population or 254 million more people. Meanwhile, from the author's doctoral research, only about 1% of the Indonesian population, or around 2 million people, have private health insurance. Apart from the disproportionate number, from that percentage, as many as 1.5 million people were participants from just 1 private health insurance company.

Quoting from the OJK Institute, the growth of the insurance sector is relatively slow, as can be seen from the insurance market penetration in 2021 which only reached 3.18% and stagnant at the addition of contributions/premiums of 0.44%. The slow growth of private health insurance in Indonesia refers to several factors, including difficult claim processes, expensive premiums, etc. Private health insurance contributions per person per month are around 350 thousand to 8 million rupiah or even more, with the main benefit being hospitalization, where what is guaranteed overlaps with what is also guaranteed by the JKN program. The main characteristic of private health insurance is product customization, meaning that participants can decide what benefits they want to guarantee. However, this will increase the amount of fees that must be paid. This is very different from BPJS Kesehatan, whose lowest contribution is 42 thousand, which can guarantee, for example, heart disease services according to basic health needs (KDK), which can cost hundreds of millions. JKN

and BPJS Health are not competitors to private health insurance. Because being a JKN participant is mandatory, whereas buying private health insurance is voluntary.

DJSN is the regulator of the JKN program, the Financial Services Authority (OJK) is the regulator of the insurance business. These regulators together with BPJS Kesehatan and private health insurance companies need to sit down together to discuss their respective goals and find common ground to become a common goal. In the current era, what is needed is collaboration or cooperation between private health insurance and BPJS Health. How can the mandate of the 1945 Constitution be fulfilled, namely the right to health and health insurance, while the market or private sector also develops.

In the author's doctoral research, we saw a real example of collaborative efforts between BPJS Health of Taiwan and South Korea and private health insurance there. Strictly speaking, Taiwan prohibits private health insurance from guaranteeing or selling products that have been guaranteed by the Taiwan Health BPJS. Whereas in South Korea there is no such prohibition, private health insurance there consciously does not sell the same thing. The lesson that can be taken from the two countries is to sell different things from BPJS Health or social insurance in each country. It is not surprising that these two countries are ranked 1st and 2nd in the world out of 91 countries for the best health service facilities based on Numbeo, which is the world's largest database of data provided by the public or health service users. The score is calculated by looking at technology, qualifications of

medical personnel, medical equipment, waiting time, accessibility of medical locations and friendliness of staff.

Returning to Indonesia, there are actually a lot of products that can be sold by private health insurance and they do not overlap with the services guaranteed by JKN. For example, from the author's doctoral research, it was found that JKN participants very much asked to be upgraded to an inpatient room. JKN only guarantees treatment rooms of class 3.2 and a maximum of 1. In the author's research, it was discovered that there was an increase in requests for upgrading to treatment room class from JKN participants. from the author's research, it is known that there were nearly 159 thousand requests for a class upgrade during 2019-2022. If the data included VIP, VVIP, Suite rooms and so on which are not guaranteed by JKN, the number of requests for upgrades could be even higher. Opportunities like these should be seized by private health insurance companies.

Apart from research and development from the private health insurance side, there is no harm in having a two-way chat with BPJS Health to find each other's points of interest. BPJS Health and Private Askes do have their own backgrounds and goals. The Main Director of BPJS Kesehatan for the 2014-2021 period at the S3 session, the writer stated that the writer wanted to force the two of them to marry. However, collaboration between the two is needed. If BPJS Health with its social principles and private health insurance with its commercial principles exchange ideas to achieve national health insurance and a better private health insurance market.

ECONOMIC STIMULUS DURING THE PANDEMIC: HOPE AND REALITY

INTRODUCTION

The COVID-19 pandemic has shocked the economy not only in Indonesia but also the world economy. OECD (2020) calculates that the annual economic growth of many countries is negative or experiencing a decline. The IMF (2020) also projects that the annual economic growth of developed and developing countries will be negative. This is in line with data released by BPS (2020) where the decline in the Indonesian economy has been recorded since the first quarter of 2020. In the first quarter, Indonesia's growth rate has experienced a contraction to 2.97 percent. A deeper contraction occurred in the second quarter where growth was negative by 5.32 percent.

If we look in more detail by business sector, almost all business fields are feeling the impact of this world epidemic. There is only one business sector that is able to grow and improve, namely the information and communication sector. And the rest experienced a slowdown in growth and some even had a negative value. The sectors

that experienced the deepest decline were Transportation and Warehousing at -30.84 percent and Accommodation and provision of food and drink at -22.02 percent (BPS, 2020). Similar to Indonesia, retail and transportation sector revenues in Malaysia also experienced a significant decline (Fabeil, Pazim, & Langgat, 2020).

The large-scale social restriction (PSBB) policy followed by the implementation of a work from home system for ASN and most private employees to prevent the spread of the COVID-19 virus is one of the triggering factors. Many business actors reduced or even stopped the production process during the PSBB period. This is due to changes on both the demand and supply side including (1) a decrease in turnover due to reduced demand (2) difficulty in obtaining raw materials (3) hampered distribution chains and (4) difficulty in carrying out production activities (Damuri & Hirawan, 2020).

If viewed spatially, economic paralysis occurs evenly throughout Indonesia. However, the province of Bali was recorded as the area with the deepest economic contraction, namely -10.98 percent, followed by DKI Jakarta, Banten and DIY. In fact, all provinces on the island of Java have a smaller economic growth rate than Indonesia. This condition certainly affects the Indonesian economy as a whole considering that Java and Bali contribute more than fifty percent to Indonesia's GDP (BPS, 2020).

Discussion of the economic downturn in response to the pandemic often focuses on macroeconomics. In fact, on a micro scale, business actors feel the impact most directly. This is as stated by Economist Paul Krugman where "Countries do not buy or sell goods

overseas; companies do" (ITC, 2020). Studies on the impact of the pandemic outbreak on businesses have been carried out but the majority are only in the scope of MSMEs (Fabeil et al. (2020); Shafi, Liu, and Ren (2020); Dai, Hu, and Zhang (2020); Turner and Akinremi (2020))). Discussion of the impact of the crisis on large businesses is still limited. In fact, all business scales feel the same impact, for example mining activities (Govinden, Pillay, & Ngobeni, 2020). During a pandemic, when employees continue to work from home while business owners try to improve their supply chain and look for new domestic and foreign contracts (Turner & Akinremi, 2020).

The government has taken quick steps to develop policies and programs to provide economic stimulus during the new normal period. These policies include refocusing activities and reallocating budgets for handling Covid-19, social protection funds, and business incentives in the form of business capital assistance for MSMEs and working capital loans for work-intensive corporations. Then provide a tax stimulus for workers and business actors such as employee income tax borne by the Government, exemption from import income tax, reduction of Article 25 PPh installments and provision of Value Added Tax incentives affected by Covid-19. Apart from that, there is also a simplification of the total number of import export activities (Ministry of Finance, 2020a). Meanwhile, from the monetary side, the government has provided a stimulus for MSMEs in the form of providing interest subsidies, delaying principal and interest payments for KUR customers (Ministry of Finance, 2020b).

The policy package that has been created by the government to provide economic stimulus is of course supported by a large budget. The hope is that if implementation in the field is right on target and meets the needs of business actors, economic activity can revive. However, whether the policies that have been prepared are in accordance with what business actors expect. Therefore, the aim of this research is to see the suitability between the performance of the existing economic recovery stimulus policy package and what policies business actors actually want. In addition, this research will examine the impact of the COVID-19 pandemic experienced by all business actors, both micro-small and medium-large businesses.

LITERATURE REVIEW

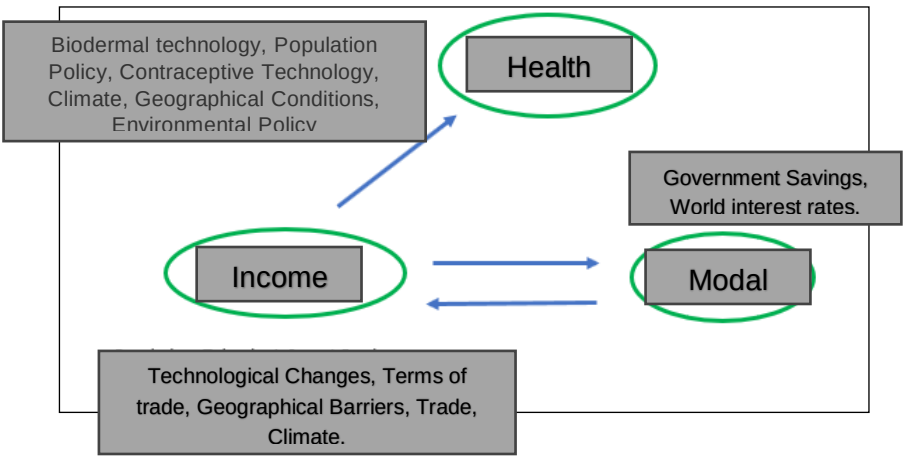
a. Pandemic and Economy

The theory of D. E. Bloom and Canning (2006) states that the relationship between the epidemic and the economy is like the relationship between health and the economy which are interrelated like a vicious circle (vicious cycle) because there are always trade-offs. Epidemics can hamper the economy because the population's deteriorating health can reduce the income to be received and reduce self-protection against threats from other diseases. Conversely, economic activity is needed by the population to be able to generate income that can be used to meet good nutritional intake and health costs. Frenk (2004) stated the same thing where health performance

and economic performance have a vital relationship. Developed countries have better health levels and basic facts reveal that poverty has a negative impact on the life expectancy of the population. And conversely, national income has a direct effect on the development of the health system in a country, for example, by establishing public insurance policies.

Theories regarding the relationship between the economy and health continue to develop and are not free from debate. According to Weil (2013), economic growth has a negative impact on health. An improving economy does not result in improvements in health. This is because excessive consumption as a result of increased income has in fact increased cases of obesity, diabetes and other diseases caused by consumption of inappropriate foods. In addition, an increasing population increases the risk of contamination of food and water due to the large amount of waste produced. And also the increasing amount of pollution resulting from economic activities. Alsan, Bloom, and Canning (2006) have a similar opinion that better health does not have to wait for the economy to improve. Measures to reduce the burden of disease, provide healthy food for children, adopt a healthy lifestyle, in itself will contribute to creating a better economy.

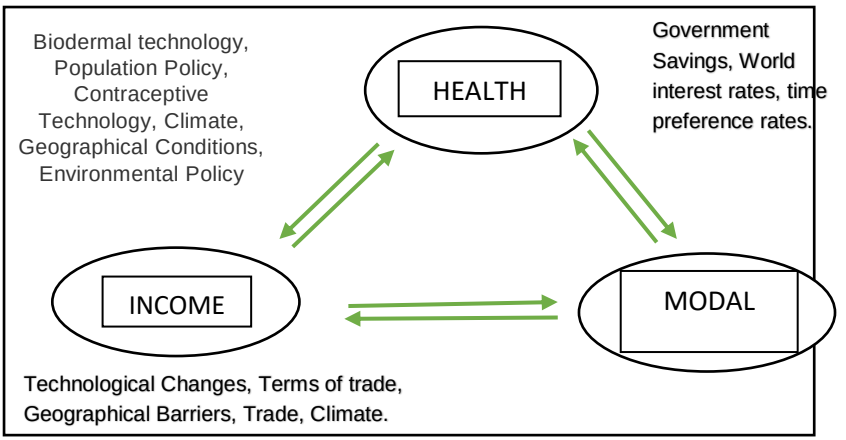
Figure-1 : Traditional View of Health and Income



Sumber : D. Bloom and Canning (2003)

D. Bloom and Canning (2003) stated that there are two views regarding the relationship between health and the economy. The first view shows the traditional view where economic growth is caused by a process of accumulation of many factors where health is seen as a by-product. This can be seen more clearly in Figure 1. The next view is depicted in Figure 2. Figure 2 shows a new paradigm where health interacts directly with the economy through worker productivity and indirectly influences investment in both human and physical capital. This view produces many interactions and relationship patterns. The figure below shows that health spending not only effects welfare but also increases economic growth.

Figure-2 : A new look at Health and Income



Cases of large-scale health problems such as epidemics and pandemics have occurred long ago. Starting from the Black Death, the London Plague, Influenza, Spanish Flu, AIDS/HIV, Bird Flu to the current COVID-19 outbreak. All epidemics always leave an extra economic recovery process for countries that experience them.

The COVID-19 pandemic we are currently experiencing started in China and is ultimately affecting countries around the world. This is because China plays an important role in the supply chain in the global market. Apart from that, this pandemic has also dealt a blow to the financial sector, tourism, which could result in global economic growth falling by up to 1.5 percent throughout 2020 (OECD, 2020). This is in line with the review of Abiad et al. (2020) that this outbreak greatly affected other Asian countries through economic aspects. There was a sharp decline in domestic demand,

tourism and travel business, trade and production, supply disruption to economic activities in the PRC. The decline in demand for goods and services from the PRC will certainly have a significant impact because the PRC is the second largest economy in the world and contributes one third of global economic growth. In addition, the PRC is also a major export market for many countries.

An economic study of Australia conducted by PWC (2020) resulted in the conclusion that the Australian economy was also affected by this pandemic. The sector that has been most affected is the domestic business which relies on the arrival of tourists from outside Australia and the export business. Apart from that, commodity prices are also rising because the Chinese government is focusing on building health infrastructure as an effort to create economic growth while overcoming the pandemic. In addition, the value of the Australian Dollar depreciated against the US dollar. As a result, Australia's economic growth is predicted to fall to 1.32 percent at the start of the contraction and will continue to decline until it peaks at 5.2 percent. This is because household consumption is estimated to decrease by 37.9 billion Australian dollars in 2020, tax revenues decrease by 25.8 billion Australian dollars, social costs increase due to loss of life also excessive fear, hoarding of food and medical products.

Apart from health and economic aspects, UNDP (2020) revealed that the covid pandemic has also triggered a human development crisis. The condition of human development in 2020 is equivalent to the decline in human development in the 1980s. But

unfortunately, the current crisis is hitting all elements of human development starting from income (the biggest contraction since the Great Depression in the 1930s), health, to education (school dropout rates are increasing due to the lack of access to education using the internet). The simulations carried out show that there will be a decrease in the value of GNI per capita reaching 4 percent.

Ozili and Arun (2020) revealed that the corona virus triggered a global recession due to social distancing and lockdown policies in many countries. This policy resulted in reduced economic activity and affected share prices on the main stock market. The sectors most affected by the spread of this virus are not only the health and travel industry but almost all sectors such as the sports industry, financial sector, financial market, events industry, entertainment industry and even the education sector.

b. Business People and Crisis

The pandemic that occurred this time has indeed dealt a direct blow to business actors as the main component of economic activity (ITC, 2020). According to the ILO (2020), of the 1000 companies that took part in the survey, 70 percent had to shut down operations; 75 percent are expected to experience a decrease in income; and 75 percent experienced a decrease in demand and the most dramatic impact was that seven out of 10 companies had reduced production capacity which had an impact on reducing the number of employees both permanently and temporarily and reducing salaries. A similar phenomenon occurs in almost all countries in the world.

Turner and Akinremi (2020) examined the impact of the pandemic on business in China. The impact of the current pandemic is different from previous epidemics and pandemics. For example, an influenza outbreak, which has an impact on higher mortality rates, especially in urban areas and the working age population. Meanwhile, the death rate due to the Covid-19 pandemic is not as large as previous major outbreaks. Or during the 2015 MERS outbreak in South Korea, consumer spending decreased not because of decreased income but because of a disruption in the consumption pattern of the South Korean population who were afraid and chose not to leave the house often, thereby reducing their spending patterns (Jung, Park, Hong, & Hyun, 2016).

The lockdown policy implemented in China during the COVID-19 pandemic has had a different impact compared to previous pandemics. Businesses, especially the service and entertainment sectors, experienced significant losses, reaching double digits. And conversely the industry in the health sector has actually increased. Small and medium enterprises experience severity in the short term. Meanwhile, business owners are trying to improve their supply chain and look for new contracts (Turner & Akinremi, 2020). The results of this study are similar to the findings of the study by Dai et al. (2020) who also conducted a survey on business actors and innovation in China. The obstacle for upstream companies is the reduction in workforce, while downstream companies face more serious challenges related to supply chains and consumer demand.

Research and surveys related to pandemics and business actors are also being carried out in other countries and institutions. Fabeil et al. (2020) examined the impact of the COVID-19 pandemic crisis on micro-scale businesses and their strategies for recovering from the crisis in Malaysia. The method used was conducting telephone interviews where data was collected regarding the perspectives, experiences of entrepreneurs who were vulnerable to business continuity and their recovery strategies during the COVID-19 crisis. The result is that the business actors most directly affected by the travel ban policy and monitoring population mobility are micro-scale entrepreneurs. The negative impact felt by micro entrepreneurs is significantly greater than that of business actors on a larger scale. Entrepreneurs experienced business cancellations or closures and reduced income due to the closure of several supporting sectors such as retail and transportation. The same result was also felt by businesses in South Africa. Govinden et al. (2020) show that the COVID-19 pandemic has caused major disruption to South Africa's economy and society. The lockdown policy that has been implemented has paralyzed industries that depend on the movement of goods, the telecommunications sector, mining activities due to a decrease in demand for minerals, accommodation and tourism due to restrictions on travel, construction, transportation and various service sectors. Research by Shafi et al. (2020) in Pakistan also came to a similar conclusion. The COVOD-19 outbreak has affected Pakistan's economy where the main victims are micro, small and medium enterprises. Businesses face several problems such as

finances, supply chain disruptions, decreased demand, decreased sales and profits where 83% of companies are not ready or do not plan to handle such situations.

b. Economic Policy in the Pandemic Period

Various policies have been designed by governments in all countries and business innovations have been carried out by business actors as a response to the negative impact of the COVID-19 pandemic. D. E. Bloom and Canning (2006) proposed that when a new epidemic occurs, the first line of defense is isolation and quarantine. Then improving the health system and its preparedness, providing investment subsidies for making vaccines, providing nutrition and clean water facilities. Because the economy can come back to life when the population also has good health. Meanwhile, Ozili and Arun (2020) provide options including calming the money market by lowering interest rates and increasing the supply of money or credit in important sectors of the economy. As well as optimizing fiscal policy stimulus in industries that support most of the economy. This is based on research findings which show that monetary policy has a significant and negative effect on the level of economic activity after the pandemic. Likewise with government spending on fiscal policy which has a significant and positive effect on economic activity. And conversely the number of confirmed cases of the corona virus did not have a significant effect on economic activity.

UNDP (2020) itself provides three principles for responding to the crisis due to COVID-19, namely:

1. Respond through the equity principle. Residents in the low income group are the most vulnerable group. Therefore, the designed economic policy must reach the socio-economically weak population by facilitating their basic needs. So that social transfers are needed through social protection policies.
2. Focus on increasing individual capabilities during the pandemic so that it can reduce the impact of the trade off between the economy and health.
3. Focus on multidimensional improvements rather than a sector-by-sector sequential approach. This is because all the aspects that play a role are intertwined.

Meanwhile, the OECD (2020) details the interventions that can be carried out by the government through monetary and fiscal policies. Policies that can be taken in the monetary sector include setting Long Term Interest Rates low, restarting the net asset purchase program by the ECB and for several developing countries easing monetary policy by reducing the inflation rate while taking fiscal and structural steps that increase investor confidence. Fiscal policies that can be pursued include a low interest rate policy providing an opportunity for fiscal policy to be used more actively to strengthen short-term demand, spending in the form of social transfers for vulnerable social and business groups and quite large

discretionary fiscal easing measures that can be taken for developed countries. which has high debt and budget deficits but whose government can still support economic activity by changing spending and tax structures that can help reduce the impact of the pandemic.

Phillipson et al. (2020) revealed that after the pandemic, many businesses died and stopped due to outstanding debts, reduced financial reserves and investment capabilities, disrupted trade sectors, delayed economic growth and investment, employee reductions, unsold or outdated stock and reduced marketing budgets. This phenomenon greatly affected the ability of business actors to recover after the crisis. Monitoring business impact, resilience and recovery needs to be carried out on an ongoing and long-term basis, because each business has different levels of difficulty and ability to recover. When the FMD (Foot and Mouth Disease) outbreak emerged, many rural farms in England were closed for several months as a measure to prevent the spread of the disease. Governments across Europe are enacting policies to subsidize companies so they can retain employees, as well as subsidies for entrepreneurs to keep their businesses running. Subsidies for entrepreneurs are very important because proportionally there are more entrepreneurs.

The steps recommended by ASEAN (2020) to reduce the impact of COVID-19 are tax relief, subsidies including targeted support and cash assistance, and a moratorium on loan payments and pension contributions. The central bank can also lower interest rates

and sell government bonds. Apart from that, maintaining supply chains, utilizing technology and digital trade, strengthening social safety nets.

METHODOLOGY RESEARCH

The research method used in this study is a quantitative method using descriptive statistical analysis. The data used is primary data collected using a questionnaire and distributed through an online survey using the CAWI (computer-assisted web interviewing) technique. CAWI was carried out using an online questionnaire which was filled out by respondents independently using a computer, smartphone or other device connected to the internet.

The data collected is mostly closed questions. In addition, there are also 2 (two) sets of respondents' perception questions (qualitative) consisting of 10 research variables. Respondents' perceptions were quantified through a Likert scale using score intervals of 1 to 5 for each question. Before the questionnaire was sent to the prospective sample, the questions had been tested for validity and reliability.

The variables presented in the survey questionnaire are the impact of the crisis felt by business actors and the economic policies that have been rolled out by the Indonesian government to reduce the impact of COVID-19. The economic policies chosen are policies related to business actors including: (1) Relaxation/delay of loan payments (installments and interest), (2) Provision of interest

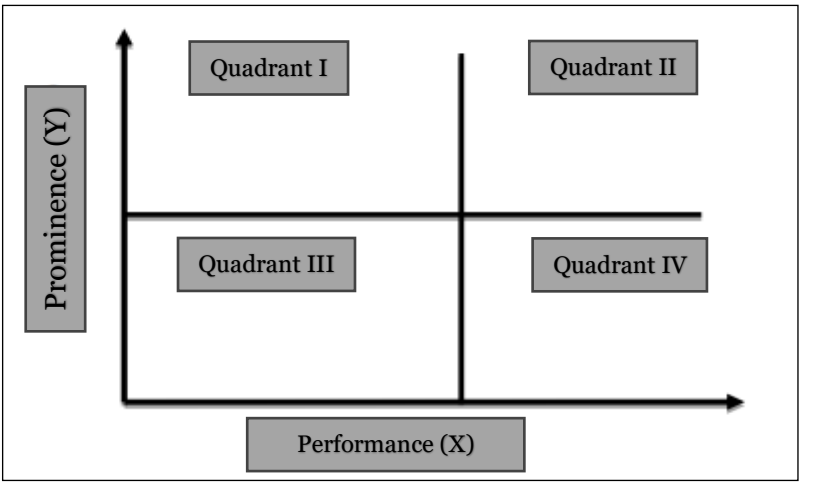
subsidies for business loans, (3) Delay in paying taxes, (4) Reducing Tax Rates, (5) Business Capital Assistance, (6) Ease of administration in applying for business loans and capital assistance, (7) Ease of electricity bills for businesses, (8) Opening of PSBB, (9) Elimination of BPJS Employment contributions during a pandemic and (10) Assistance to be able to access the digital marketplace.

The sampling technique in this research was carried out using non-probability sampling, namely purposive sampling technique. Respondents are owners or business actors of all types of business scales operating on the islands of Java and Bali. The survey was carried out for 12 days from 16 August to 27 August 2020. The total number of respondents who were obtained and who were willing to complete the questionnaire until the end of the data collection period was 196 respondents. And the results will be analyzed and presented using cross tabulation and quadrant analysis.

Quadrant Analysis

Quadrant analysis is a structure consisting of four parts bounded by two perpendicular lines where $\bar{X}$ is the average value of the average performance level score and $\bar{Y}$ is the average of the average importance level score (Supranto , 2004). This analysis is used to measure the level of importance (expectation) and performance evaluation of the variables or attributes studied according to the perceptions of business actors. The results of the average performance score for each policy implementation and the importance level score will be compared using a Cartesian diagram (Figure 3).

Figure-3 : Cartesian Diagram



Each quadrant in the diagram represents a different state. This can be seen from Figure 3. The interpretation of each quadrant is:

1. The first quadrant (top priority) shows policies that are considered important by business actors but in reality existing policies have not been felt by entrepreneurs or their implementation is still deemed inappropriate.
2. Second Quadrant (Maintain achievement), shows policies that are considered important by employers and have been implemented properly by the government, so that employers feel satisfied. The performance of these policies must be maintained by the government.
3. The third quadrant (low priority), indicates that the policy is considered less important or on average it is not expected by

employers, on the other hand its implementation is also felt to be not good.

4. The fourth quadrant (excessive), shows policies that are considered less important by employers but the government has implemented them very well.

ANALYSIS RESULTS AND DISCUSSION

a. Characteristics of the Research Sample

The unit of analysis for this research sample is business actors located on the islands of Java and Bali. The characteristics of the respondents in this study are shown in full in Table 1. When viewed from gender, male respondents dominate more than women where male entrepreneurs are almost six times the number of female entrepreneurs. Furthermore, according to age group, more than half of the entrepreneurs who were respondents were aged 30-39 years or it can be said that they are still in the millennial entrepreneur group. Meanwhile, entrepreneurs in the youth age group (16-29 years) amounted to 23.98 percent. And of the remainder, respondents belonging to the senior age group or generation X and above (40 years and above) were only 22.96 percent. Then, judging from the education level of the respondents, the majority of business actors participating in this research survey were undergraduate graduates.

In addition to the individual characteristics of the respondents, data on the characteristics of the businesses run by the respondents were also obtained. The majority of business fields or 7 out of 10 respondents in this study are business owners in the Tertiary sector.

Meanwhile, the percentage of respondents from the primary and secondary sectors was almost the same, namely around 14 percent. Furthermore, from the business scale category, respondents generally have micro-scale businesses, namely 40.31 percent. Respondents with small and medium scale businesses each account for a quarter of the total sample. Meanwhile, only 9.18 percent of respondents included in the large-scale business category. This proportion adequately describes field conditions where the 2018 data shows that MSMEs dominate up to 99 percent of the Indonesian market (KemenkopUMKM, 2020). MSMEs are not only the backbone of the economy in Indonesia, but also the foundation of the global economy because they create a lot of jobs and income for the population at large (Shafi et al., 2020).

TABEL-1 . Sample Characteristics (Percent)

Characteristics of Business Actors and Businesses Run (Percentage)					
1.	Gender		5.	Business Scale	
	Man	84.69		Micro	40.31
	Woman	15.31		Small	24.49
2.	Age			Middle	26.02
	16 - 29 years	23.98		Great	9.18
	30 - 39 years	53.06			
	40 - 49 years	17.86	6.	IT Utilization and Internet	
	50 years and over	5.10		Yes	85.71
3.	Education level			No	14.29
	Junior high school and below	1.53			
	High	9.69	7.	Carry out marketing online	
	Diploma	4.59			
	S1/S2/S3	84.18		Yes, since before pandemic Covid19	80.36
4.	Business Field			Yes, just taking advantage of the Covid-19 pandemic	10.12
	Primary	14.3			
	Secondary	14.8			
	Tertiary	70.9		No	9.52

As the digital era develops, the role of technology in the business world becomes increasingly greater. This is in line with the results of this study which show that around 85 percent of respondents' businesses utilize information technology and the internet. The recommendation to stay at home has forced business actors to adapt to technological advances, especially digital technology and the internet. This can be seen from table 1 above that there were around 10 percent of business actors in Java-Bali who started using the internet to conduct online marketing when a pandemic occurred. And it turns out that 94.7 percent of business people who use the internet admit that online marketing influences their product sales. This condition indirectly illustrates the importance of entrepreneurs to adapt to advances in technology and the internet in the current era of the industrial revolution 4.0. A similar phenomenon was also carried out by business people in Malaysia where one way to keep business going during the COVID-19 pandemic was by shortening the distribution chain. Distributors can go directly to end consumers by using digital marketing such as Facebook and WhatsApp (Fabeil et al., 2020). A strategy with omni-marketing which suggests distributing goods/services to customers through multiple channels, is considered more profitable than using a single and independent approach/channel (Palmatier, Sivadas, Stern, & El-Ansary, 2020).

a. The Impact of the COVID-19 Pandemic on Business

The COVID-19 pandemic forced the government to create PSBB and Work From Home (WFH) policies or working from home.

However, as a result, economic activities are running slowly, and some business actors have even stopped their business activities. Table 2 shows the impact of the pandemic on business continuity on the islands of Java and Bali. The most felt impact is a decrease in demand which results in a decrease in income. Eight out of ten business actors said there had been a decline in demand for their business.

The scarcity of raw materials is also another impact due to the disruption of the distribution chain during the pandemic and the PSBB was implemented. This is in accordance with the BPS release (2020), that during the first quarter and second quarter, the transportation and warehousing sectors experienced a very sharp decline and even had negative values. The decline in demand and scarcity of raw materials has forced business actors to change working hours and the number of workers. Only 32 percent of businesses are operating as usual and the rest are implementing WFH policies, reducing production capacity, and some are even closing their businesses, namely 11.2 percent. Then more than half of business actors took policies to reduce the number of employees.

The domino effect of the series of slowdowns in economic activity includes changes in income and financial difficulties for business actors. This can be seen from the admission of eight out of ten business actors in Java and Bali who were respondents to this research that their businesses experienced a decline in income during the Covid-19 pandemic. And around 78 percent of business actors also admitted to experiencing financial difficulties to meet employee and other operational expenses.

TABEL-2 . The Impact of COVID-19 through business (Percent)

The Impact of COVID-19 through business (Percent)					
	Raw Material			Changes in	
1.	Scarcity		5.	Operational Hours	
				Operational hours as	
	Yes	55.10		usual	32.1
				WFH for some	
	No	44.90		employees	16.3
				WFH for all	
				employees	4.6
				Operating at reduced	
2.	Change Request			capacity	35.7
	No	7.7		Stop during pandemic	9.2
	Yes, Increased	11.2		Permanently stop	2.0
	Yes, decrease	81.1			
			6.	Income change	
	Financial				
3.	difficulties/operational costs			Yes, Decreased	84.7
	Yes	78.2		Dischanged	5.6
	No	21.8		Yes, Increased	9.7
4.	Changes in Total Workforce				
	No	41.3			
	Yes, Increased	2.0			
	Yes, Decreased	56.6			

The impact of the current economic downturn is not much different from the impact of previous pandemics and epidemics on the economy. Archibong, Annan, and Ekhator-Mobayode (2020) conducted research on quantitative measurements of the effects of the infectious disease epidemic on the economy and human capital. The result was unexpectedly high meningitis rates that significantly reduced economic activity. Then Qiu, Chu, Mao, and Wu (2018) discussed the impact of SARS in 2003 and H7N9 in 2013. SARS and H7N9 both had a negative impact on the economy but the impact of H7N9 was not as serious as the SARS case due to the response given by the government and society in dealing with H7N9 felt more effective. SARS affected the tourism sector and industries related to the tourism sector. Apart from that, this also resulted in a drop in demand because many families reduced their demand for food, clothing and entertainment products.

In the case of influenza, McKibbin and Sidorenko (2006) have estimated the impact of an influenza pandemic on the global economy through four scenarios, namely mild, moderate, severe and ultra. The pandemic apparently caused a decline in the workforce, an increase in mortality and morbidity rates, an increase in the costs of running a business, a reduction in consumption of goods and services on a large scale. Likewise, Jonung and Roeger (2006) found that the 2006 pandemic reduced supply by -1.1 percent of GDP and demand -0.5 percent, with a total decline in GDP of -1.6 percent. However, Garrett's (2007) research shows something different, where the relationship between death rates due to influenza outbreaks and

growth in per capita income is statistically significant and positive. This is because the high mortality rate from this epidemic results in a decrease in labor supply which then increases the marginal product of labor and capital per worker, thereby increasing real wages. This of course has an impact on increasing output per worker which ultimately affects the income they receive.

The crisis felt due to the COVID-19 pandemic is not only felt by business people in Indonesia. Business actors in Malaysia's friendly countries felt the impact directly as a result of the economic paralysis caused by the travel ban policy (Fabeil et al., 2020). Even in China, the service and entertainment industry experienced losses of up to double digits (Turner & Akinremi, 2020). This impact is not only felt directly by micro, small and medium entrepreneurs but also medium scale entrepreneurs. Medium businesses that usually have a monthly turnover of 10,000 US dollars apparently have cash reserves that are only enough to cover business operations for 2 weeks when the pandemic occurs (Bartik et al., 2020).

a. Short-term Optimism

An optimistic view of the business climate is urgently needed by business actors. This is because optimism is a positive force that can motivate innovation (Trevelyan, 2008). Therefore, a positive view that the economy will improve soon is urgently needed by business actors at this time. The hope is that entrepreneurs can see an opportunity from the existing crisis conditions.

TABEL-3. Short-Term Optimism of Business Actors for the Business Climate after the Pandemic

Criteria	All Over	Mikro-Small	Middle-Big
Pessimistic	29,08	26,77	33,33
Neutral/undecided	42,86	46,46	36,23
Optimistic	28,06	26,77	30,43

Table 3 shows the level of optimism among business actors regarding the economy in the short term. Most business actors are pessimistic and doubtful that the economy will improve in the near future. If viewed as a percentage, more business actors on the Micro and Small scale feel pessimistic and doubtful compared to Medium and Large business actors. This is similar to the research by Shafi et al. (2020) where MSMEs in Pakistan feel unprepared and pessimistic due to having low cash reserves. The estimation results from Estrada, Koutronas, and Lee (2020) also support the short-term view of business actors in Indonesia. Based on data from ten major stock markets in the world, the post-COVID-19 recovery phase is estimated to take 9 to 12 months with intermediate variables including the American election, European Economic reconstruction steps and steps to decentralize production from China.

One of the efforts to foster market optimism, especially for business actors, is to increase the confidence of business actors in the performance of government policies. The government has planned and implemented various economic policy packages as a stimulus for post-pandemic economic improvement. So further study is needed to see whether the policies/programs prepared are in accordance with what entrepreneurs need. In addition, whether its application can be felt by all business actors or is it in accordance with established procedures so that the expected results can be maximized.

b. Priority Economic Policy / Stimulus

The next discussion of this paper is trying to analyze programs and policies that are expected to exist and can help business actors as well as assessing their implementation in the field according to the perception of business actors using quadrant analysis with a Cartesian diagram approach. Programs and policies evaluated in this study (attributes) include:

1. Relaxation/postponement of loan payments (installments and interest);
2. Providing business loan interest subsidies;
3. Postponement of tax payments;
4. Reducing tax rates;
5. Business capital assistance;
6. Ease of administration for applying for loans or capital assistance;

7. Reducing electricity bills for businesses (without a minimum usage limit);
8. Opening social restrictions at business locations to increase public consumption again;
9. Elimination of BPJS Employment contributions during the COVID-19 pandemic; And
10. Assistance in accessing digital marketplaces.

Respondents in this study were asked about their perceptions of the level of importance and performance assessment (Importance-Performance) of government programs and policies.

Table 4 shows the average score of the level of importance and performance assessment of the Economic Policy package according to the perceptions of all business actors. Overall, the importance level value is more than 4 (four), which means that all policies are considered important and needed by business actors. However, business capital assistance is the policy that is considered the most important by business actors to reduce the impact of COVID-19 on economic activities. In addition, the policy of reducing tax rates and reducing electricity costs is also very helpful for businesses.

In contrast to the level of importance (expectation), the performance assessment of existing policy packages generally scores below four. This means that the performance of the policy package is considered mediocre or not satisfactory. The policy of relaxing and reducing tax rates as well as opening the PSBB received the highest average score with a value of more than 3, which is close to

satisfaction. Meanwhile, the average score for the lowest performance level is in the administrative ease variable for applying for a loan or venture capital.

TABEL-4. Scores of Importance Level and Policy Performance assessed by all Business Players.

Policy Package	Average Importance Score	Average Performance Score
Relaxation / postponement of loan payments (installments and interest)	4,10	2,94
Providing interest subsidies for business loans	4,15	2,95
Postponement of tax payments	4,25	3,16
Tax rate reduction	4,46	3,21
Business capital assistance	4,55	2,89
Ease of administration for applying for loans or capital assistance	4,38	2,86
Electricity bill relief for businesses (no minimum usage limit)	4,46	2,89
Opening social restrictions at business locations to increase public consumption again	4,08	3,21
Elimination of BPJS Employment contributions during the COVID-19 pandemic	4,02	3,04
Assistance to be able to access the digital marketplace	4,12	3,00

Apart from measuring simultaneously, this research also tries to look at the perception of the level of importance (expectations) and performance assessment of the government's economic stimulus policy package separately according to business scale. The business scale group is divided into two, namely Micro-Small business actors and Medium-Large business actors. The average scores for each group are presented in Table 5 and Table 6. Table 5 shows the assessment scores from Micro-Small business actors, while Table 6 is a summary of the scores from Medium-Large business actors.

In table 5, it can be seen that there are only 2 variables that have an average score of importance below 4. These variables are relaxation/postponement of loan payments (installments and interest) and elimination of BPJS Employment contributions. The variables that get the highest score are Business Capital Assistance, electricity payment relief and reduced tax rates.

In the performance assessment perception score, on average the performance of the policy package assessed received a score of 3. The policy with the highest performance score was the policy of reducing tax rates and opening the PSBB. While the lowest score is assessed on the administrative ease variable in applying for a loan or venture capital assistance. This is certainly very unfortunate, considering that business capital assistance is the policy that is considered the most important in helping micro-small business actors according to the perception of these business actors.

TABEL-5. Scores of Importance Level and Policy Performance assessed by Micro-Small Entrepreneurs

Policy Package	Average Importance Score	Average Performance Score
Relaxation / postponement of loan payments (installments and interest)	3,95	2,95
Providing interest subsidies for business loans	4,03	3,02
Postponement of tax payments	4,13	3,13
Tax rate reduction	4,39	3,20
Business capital assistance	4,54	2,99
Ease of administration for applying for loans or capital assistance	4,33	2,91
Electricity bill relief for businesses (no minimum usage limit)	4,47	2,94
Opening social restrictions at business locations to increase public consumption again	4,06	3,17
Elimination of BPJS Employment contributions during the COVID-19 pandemic	3,94	3,00
Assistance to be able to access the digital marketplace	4,20	3,01

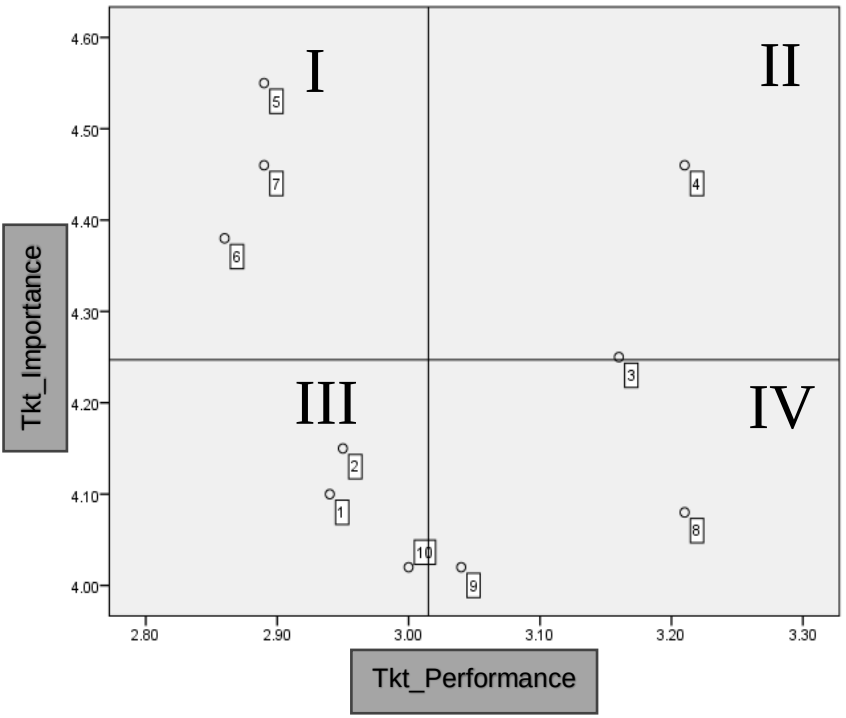
TABEL-6. Scores of Importance Level and Policy Performance of Medium-Large Entrepreneurs

Policy Package	Average Importance Score	Average Performance Score
Relaxation / postponement of loan payments (installments and interest)	4,36	2,93
Providing interest subsidies for business loans	4,36	2,83
Postponement of tax payments	4,46	3,22
Tax rate reduction	4,61	3,23
Business capital assistance	4,58	2,70
Ease of administration for applying for loans or capital assistance	4,46	2,77
Electricity bill relief for businesses (no minimum usage limit)	4,43	2,80
Opening social restrictions at business locations to increase public consumption again	4,13	3,29
Elimination of BPJS Employment contributions during the COVID-19 pandemic	4,17	3,12
Assistance to be able to access the digital marketplace	3,96	2,99

In contrast to the perception scores of Micro-Small business actors, the policy that is considered the most important or can be said to be the most expected by Medium-Large business actors is Reducing Tax Rates. Furthermore, only business capital assistance and administrative facilities for applying for loans or capital assistance. Meanwhile, the assistance program for accessing digital marketplaces is considered the smallest compared to the other nine policies.

Meanwhile, for the perception of policy performance evaluation, clarity of information and implementation of the policy of opening PSBB and reducing tax rates is considered to have the highest performance by this group of entrepreneurs. While the implementation of business capital assistance and administrative ease for applying for loans or capital assistance is also considered not to have performed well by the Medium-Large entrepreneur group.

Figure-4: Quadrant Analysis of Level of Interest and Performance of Government Economic Policy (All Business Actors)



Furthermore, the assessment of the level of importance and performance assessment of the economic Policy Package as a stimulus for business actors is compared using a quadrant analysis through a Cartesian diagram as shown in Figure 4. Quadrant I shows the attributes (economic policy) that are considered important and or expected by business actors but receive unsatisfactory perception or performance assessment. This means that the government must concentrate on optimizing and improving performance on the attributes in this quadrant. Programs and policies spread across this quadrant include business capital assistance, administrative ease for applying for loans or capital assistance, and reduced electricity bills for businesses (without a minimum usage limit). These programs and policies are priorities that must be improved (high priority).

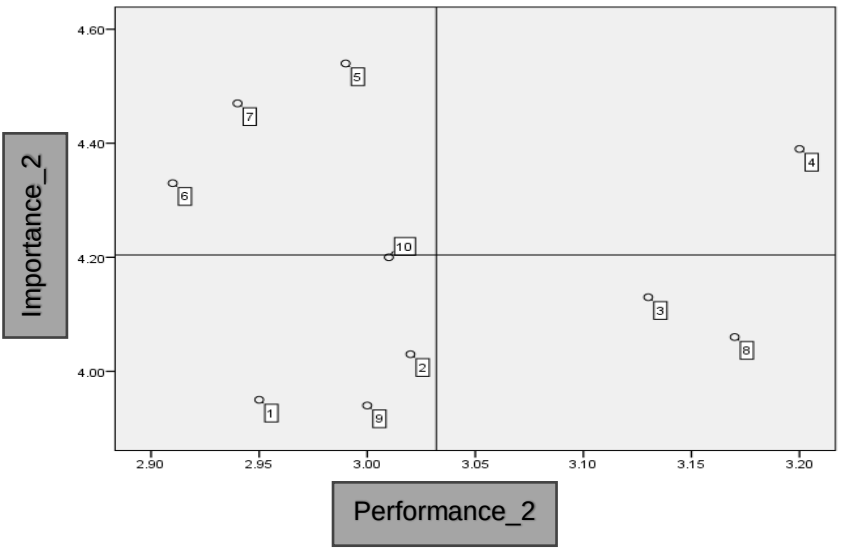
Quadrant II shows the attributes that are considered important and expected by business actors and that receive a good performance assessment. The attributes in this quadrant are supporting factors for business actors' satisfaction with the government's performance in dealing with the impact of the Covid-19 pandemic so that the government must ensure that programs and policies in this quadrant continue to run and maintain the performance achievements that have been achieved. These programs and policies are delaying tax payments and reducing tax rates.

Quadrant III shows the attributes that are considered to have low performance ratings but are also considered important but not as important as the attributes in quadrants I and II by the business actors who are the respondents of this study. These programs and policies

include relaxing/delaying loan payments (installments and interest), providing business loan interest subsidies, and assistance in being able to access digital marketplaces.

Quadrant IV shows the attributes that are considered to have good performance or ratings from business actors but are also not considered too important or not too expected. This means that the government needs to review and or allocate some of the resources related to programs/policies in this quadrant to other programs/policies. These other policies/programs are those that have a higher priority and still need improvement or are looking for new program/policy innovations that are more expected by business actors. Programs and policies that are in this quadrant include opening social restrictions at business locations to increase public consumption again and eliminating BPJS Employment contributions during the COVID-19 pandemic.

Figure-5 : Quadrant Analysis of Importance and Government Economic Policy Performance (Micro-Small Entrepreneurs)

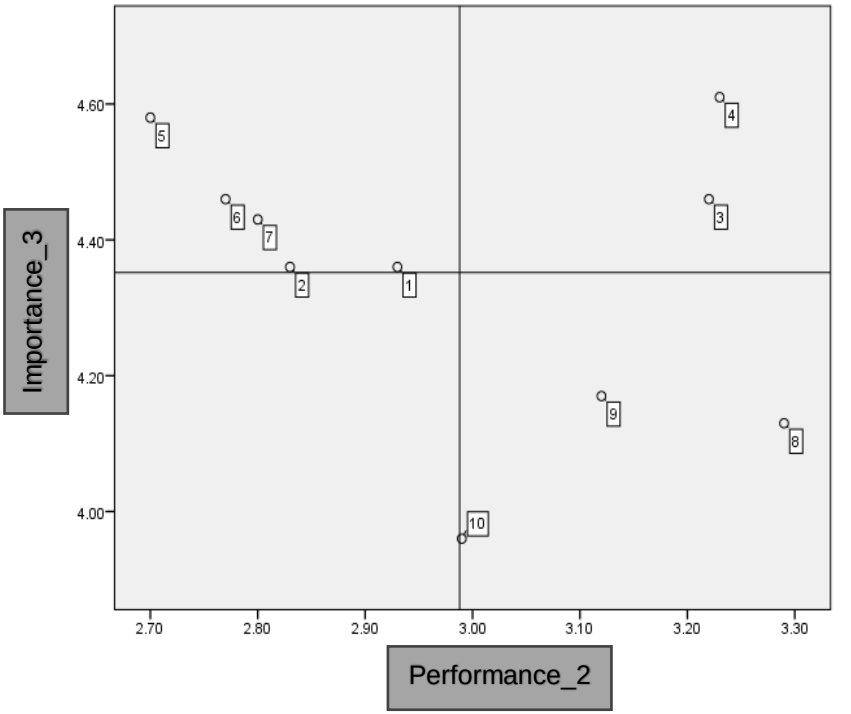


If the quadrant analysis is carried out separately between entrepreneurs on the Micro-Small and Medium-Large business scale, it turns out that the results show different results. Figure 5 is a quadrant analysis of the perceptions of micro-small scale entrepreneurs which shows that there are four policy variables in quadrant I and only 1 variable in quadrant II. According to Micro-Small entrepreneurs, the policy to reduce the tax rate is one of the policies whose importance values are above the average and their performance has also been above the average during the COVID-19 pandemic. Whereas four other policies also have above average interests but their performance is still below average (quadrant 1), namely Business Capital

Assistance, Ease of administration for applying for loans or capital assistance, Reducing electricity bills for businesses (without a minimum usage limit), and Assistance in being able to access the digital marketplace. This result is quite interesting because based on the results of a quadrant analysis for all business actors, the assistance program for accessing digital marketplaces is actually in quadrant 3 where the existence of this program is rated below the average compared to other policies.

The four policies that are in quadrant II must get priority for improvement to support Micro-Small scale businesses because these policies are expected by them but their implementation is still not satisfactory. The policies in quadrant 3 are Relaxation / postponement of loan payments (installments and interest), Providing interest subsidies for business loans, Eliminating BPJS Employment contributions during the COVID-19 pandemic. While the policies in quadrant 4 are delaying tax payments and opening social restrictions at business locations to increase public consumption again.

GAMBAR-6 : Analisis Kuadran Tingkat Kepentingan dan Kinerja Kebijakan Ekonomi Pemerintah (Pengusaha Menengah-Besar)



Medium-large entrepreneurs give a slightly different response from micro-small businesses (see Figure 6). The economic stimulus in Quadrant I consists of 5 policy packages including relaxation/postponement of loan payments (installments and interest), providing business loan interest subsidies, business capital assistance, ease of administration for applying for loans or capital assistance, relief on electricity bills for businesses (without limits minimum usage). Furthermore, there are two policies in quadrant II, namely

delaying tax payments and reducing tax rates. This means that the implementation of tax policy in the field has been assessed as good and in line with what is expected by medium-large business actors. The policies in quadrant IV, namely the opening of the PSBB, elimination of BPJS Labor contributions and assistance in accessing the digital marketplace, are considered to have above average performance but are considered not as important as the policies in quadrants I and II. Conversely, none of the policies received a response in quadrant III.

Providing business capital assistance/loans and ease of administration in applying for assistance is one of the programs that is felt to be important but not all business actors can access it based on the results of the three quadrant analysis. The research results of Bartik et al. (2020) on 5,800 businesses in the world show that there were many mass layoffs and business closures just weeks after the crisis. As a result, many businesses are planning to seek financial assistance. However, unfortunately, many entrepreneurs are hampered by complicated bureaucracy and are often deemed unfit to receive assistance due to administrative requirements. Apart from that, the loans offered should have lower interest rates with longer repayment terms so that repayment affordability is maintained (Shafi et al., 2020).

CONCLUSIONS AND RECOMMENDATIONS

The COVID-19 pandemic that emerged in early 2020 has hampered the Indonesian and world economies. Apart from quick steps in the health sector, economic recovery policies for business people are also very necessary to reduce the impact of this pandemic. This is because business actors are the parties who feel the direct impact of the crisis from the COVID-19 outbreak and this will also indirectly impact the fate of workers.

The impact of the crisis felt by business actors in Indonesia is the same as that felt by business actors in other countries according to the results of previous research. As many as eight out of ten business actors experienced a decrease in demand, a decrease in income which ultimately caused them to experience financial difficulties. Then more than half of the business actors experienced a scarcity of raw materials and a reduction in the number of workers. Eleven percent of entrepreneurs even closed their businesses either permanently or temporarily.

The Indonesian government has taken quick steps by rolling out various economic stimulus packages during the new normal period to revive economic activity. But unfortunately, not all of the existing policy packages are expected and felt by business actors. Based on the results of this research, there are four policies that are highly anticipated and considered beneficial for all business actors, including reducing tax rates, business capital assistance, ease of administration for applying for loans or capital assistance, and reduced electricity bills for businesses (with no minimum usage limit). These four

policies are very relevant to the needs of business actors because the majority of business actors are experiencing financial difficulties as a result of falling demand and hampered supply chains. Therefore, capital assistance combined with reducing operational costs through reducing tax rates and electricity bills is considered to be very helpful for entrepreneurs to quickly recover from this crisis.

If the analysis results are separated according to the needs of Micro-Small and Medium-Large business actors, there are interesting facts. Medium-Large Entrepreneurs prioritize assistance in deferring loan installments, subsidizing loan interest, and deferring tax payments apart from the four policies mentioned above. Meanwhile, micro-small entrepreneurs need assistance from the relevant ministries/agencies to be able to access the digital market. An increase in production activity will certainly be in vain if it is not accompanied by an increase in demand for goods and services.

Based on the results of existing studies, the Indonesian government through the relevant Ministries/Agencies is expected to be able to maintain the performance of policies/programs that are already in quadrant II, including postponing payments and reducing tax rates. Apart from that, it is hoped that the results of this study can become material for the government in preparing and evaluating the priority scale of programs and policies that have been and will be implemented in dealing with the impact of the Covid-19 pandemic, especially on business actors. Preparing an appropriate priority scale is expected to increase the effectiveness and efficiency of the

resources used. So that it can provide more optimal results for the recovery of the Indonesian economy.

This research still has limitations both in terms of the number of samples and the variables used. This study can be refined by increasing the sample size so that the analysis carried out can be more detailed according to business field classification. Apart from that, we can also add more specific policy variables and business innovations that have been carried out by business actors during the pandemic so that the analysis provided can be more in-depth.

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FINTECH: DIGITAL FINANCE FOR FINANCIAL INCLUSION AND SUSTAINABILITY GROWTH IN INDONESIA[1]

INTRODUCTION

The Financial Technology (Fintech) industry has accelerated and increased global financial inclusion amid the COVID-19 pandemic. Social distancing policies that apply in almost all countries have enforced individuals and companies to immediately adopt digital finance and fintech in accessing financial services. This has also enhanced the transition from traditional financial services to digital services (Sahay et al. 2020). Based on research data conducted by Fu and Mishra (2020) in 74 countries, the outspread of the pandemic has increased 24 to 32 percent of daily downloads of mobile financial applications. Digital payment has also increased, especially in the fields of retail and recreation, grocery and pharmacy, transit stations,

[1] Ditulis oleh Muhammad Arief Rosyid Hasan, Nugraha Pukuh, dan Hayu Fadlun Widyasthika dimuat dalam Dian Lestari dan Rossanto Dwi Handoyo (ed.), *Resilient & Sustainable Economic Recovery Indonesia G20 Presidency*, Jakarta: Gramedia Pustaka Utama, 2022

and workplaces (Alber and Dabour 2020). Even Sambetbayeva et al. (2020) disclosed that during the pandemic, there was 72 percent of Europeans used fintech. In addition, the shares of a fintech company in the Netherlands, namely Adyen, even experienced an increase in share value by 6.94 percent.

Not only in the Netherlands, the fintech industry globally shows positive growth at a time when most economic sectors are weakening due to the pandemic. Studies conducted by CCAF, World Bank, and World Economic Forum (2020) provide evidence that in terms of globally, the number and volume of fintech transactions increased by thirteen percent in the first quarter and eleven percent in the second quarter of 2020. The increase occurred in all Fintech Verticals except Digital Lending. On the other hand, situations in Indonesia show rather different. OJK (2021) reported that loans distributed by Fintech companies increased by 91.30 percent (YoY) in December 2020. This was supported by the number of borrower entities which increased by more than a hundred percent. Then, based on a survey conducted by AFTECH (2020), there was an increase in the number of fintech companies in Q2 2020 and an increase in digital payment transactions of 93 trillion in January-June 2020. However, according to Zachariadis, Ozcan, and Dinçkol (2020), it is difficult to assess whether pandemics aggregate positively or negatively influence fintech development. Some industries, including fintech, will be very vulnerable to a lack of capital because investors are decommissioning their assets so they have to add production costs. In addition, according to the VISA report, some of them were reported to experience a

decrease in income from payment transactions due to a decrease in public spending during the pandemic. However, on the other hand, some fintech companies remain firm and even facilitating credit claims from businesses and financial assistance to individuals because financial institutions like banks tighten loan rules in pandemic times. They can reach customers who lack collateral when they want to borrow.

Ownership of mobile phones and the internet is one of the driving factors for the use of fintech services. Access to digital technology has an impact on a wider range of digital financial services due to convenience and convenience factors (Durai, Stella, and Research 2019). Then, the flexibility factor of personal mobile devices also makes the use of these devices to make payments continue to increase (Aziz et al. 2021). Sahay et al. (2020) describe that there are three elements that make the fintech industry continue to develop along with the development of digital technology, namely the generation of big data, advances in computer algorithms, and increased processing power. Besides technological advances, socio-demographic changes also encourage this industry to develop rapidly (Sambetbayeva et al. 2020).

Digital financial services through fintech are considered to be able to increase financial inclusion to complement the weaknesses of traditional financial institutions. According to Yang and Zhang (2020), there are four benefits derived from digital finance, namely increasing the accessibility of financial services, coverage, the efficiency of financial services, and reducing information asymmetry

between banks and companies. The use of digital finance is perceived as more convenient and able to reach the poor and low-income people to save and borrow (Durai, Stella, and Research 2019). Easier access to digital financial products and services is not only felt by the population as individuals but also by Micro, Small, and Medium Enterprises (MSMEs). MSMEs in remote and underdeveloped areas in China can be aided to get funds promptly through online access using digital devices (Yang and Zhang 2020). This is in line with Evans (2018) research where the Internet and mobile phones have indeed been proven to have increased financial inclusion.

The increase in the number of internet users and digital financial service companies through fintech during the pandemic gives hope for an increase in financial inclusion in Indonesia. The Indonesian Internet Service Providers Association (APJII) reports that there is an increase of 25.5 million new internet users for the 2019-Q2 2020 period. So that the number of people who have been accessed has reached 73.7 percent or around 200 million Indonesians. Then, out of 73.7 percent of the population who access the internet, on average there is 12.64 percent use the internet to access banking services and online transactions such as online shopping, online trading, and online transportation (APJII 2020). Therefore, based on existing conditions and data, this study tries to explore 2 things, namely (i) How is the current condition of traditional and digital financial inclusion in Indonesia and (ii) What are the socio-economic and demographic determinants that affect the use of digital financial services (fintech) in Indonesia.

LITERATURE REVIEW

a. *Financial Inclusion*

Sapovadia (2018) revealed that more than a third of the population is not accessible to the formal financial system for various reasons. Whereas various previous studies have proven that the right financial services can promote SME's and improve household welfare. Therefore, it is important for the poor to feel financial inclusion, especially in developing countries where most of them are marginal farmers. These farmers certainly need financial assistance to either invest in their land or expand their business (Datta and Singh 2019).

Financial inclusion is defined as a condition where a person has an account at a formal financial institution that allows them to save, enjoy payment services, make official loans or make insurance contracts (Bruhn and Love 2014). Meanwhile, according to Sarma (2012), financial inclusion is a process that ensures easy access, availability, and use of the formal financial system for all members of economic activity. So, this definition divides financial inclusion into several dimensions, namely accessibility, availability, and use of the formal financial system. Meanwhile in Indonesia, society is said to be financially inclusive if people use financial products and services issued by 6 financial service sectors including banking, insurance, financial institutions, capital markets, pawnshops, and pension funds (OJK 2017).

The calculation of financial inclusion itself has been carried out by institutions and individual researchers using various methods

and variables. Zins and Weill (2016) prove that individual characteristics such as gender, education, age, and ownership of a certain amount of money have a significant relationship with financial inclusion. This is based on the World Bank's Global Findex database of 37 African countries processed using the Probit model. The study conducted by Datta and Singh (2019) showed similar results even though they used a different method, namely Multiple Regression. The results show that the GNI per capita, the population aged 15-64 years, the level of education and income of the population, as well as life expectancy, give a positive and significant sign to the financial inclusion index (FII). This result is also supported by research by Kabakova and Plaksenkov (2018) where financial exclusion occurs when socio-economic factors are absent in the midst of technological and political development. Meanwhile, Bruhn and Love (2014) found that activity in the labor market and income levels, especially for low-income residents, affected financial inclusion.

b. *Fintech for Digital Financial Inclusion*

Many developing countries have started using technology to address the problem of financial exclusion. Digital currency and mobile technology are believed to be able to reach the unbanked population due to the limitations of conventional financial services. Digital financial services can meet the needs of small transactions at affordable costs. In addition, it also makes transactions more accurate and faster (Sapovadia 2018). This has been proven by the studies of Evans (2018) and Senou, Ouattara, and Houensou (2019) which show that the internet and mobile phones have a one-way causal relationship

to financial inclusion or the internet and mobile phones do encourage financial inclusion.

Along with the rapid and massive development of technology, digital financial services continue to innovate to give birth to Fintech companies. Fintech has a very important role in the financial services industry through mobile payments, crowdfunding, lending, insurance, etc (Jiang, Cara, and Dimitrova 2021). Even Bharadwaj and Suri (2020) revealed that digital financial services are the key to financial inclusion. Digital financial services have helped SME's by overcoming business capital liquidity problems, especially during the pandemic (Yang and Zhang 2020). Fintech companies can provide emergency and fast loans that conventional financial institutions usually cannot afford (Sinha, Pandey, and Madan 2018). As for individuals, digital financial services through fintech are an attractive option, especially during the pandemic because of their convenience. In addition to preventing the spread of the virus, health experts recommend minimizing the use of cash to make mobile e-wallet the right choice for use today (Alwi 2021).

Financial technology (fintech) is defined as an individual/company that provides new financial services through modern technological innovations with computer programs and algorithms. This company emerged in the service sector which played a role in completing the bank's functions for its customers (Ozili 2018). AFTECH (2020) also states the same thing where Fintech is an industry consisting of companies that use technology to create more efficient financial services.

Many countries have indeed benefited from Digital Financial Services to advance financial inclusion in their countries. However, some countries do not get the same response after implementing digital financial services policies. This is due to low digital financial literacy, risk, and market trust in digital financial services (Claessens and Rojas-Suárez 2020). In addition, a stronger influence of digital finance on financial inclusion will only occur if digital companies can invite the poor or low-income, marginalized, and underserved people to open bank accounts and digital financial services (Ozili 2018).

c. *Determinants of Digital Financial Inclusion*

Measurement of national financial inclusion in general still focuses on traditional financial services (Shen, Hu, and Hueng 2018). Even if there is a study on digital financial inclusion, it is usually related to the supply side. There are still few who associate it with the demand side, especially households. Whereas according to Bank Indonesia (2016), digital financial inclusion is a condition of access and use of digital financial services by the population who cannot access conventional financial services (Unbanked). This concept is in line with that expressed by CGAP (2015).

Kalckreuth and Schmidt (2020) have conducted a study on the use of fintech among households through online credit platform services. The results found that only half of the household population was aware of this service and of this half, only 12 percent had access to this service. Factors of age, income, gender, wealth, social conditions, and financial networks have an influence on access to

digital finance in addition to the digitization factor. Sahay et al. (2020) also researched the determinants of the use of fintech services by using a set of X variables which include the value of GDP per capita, internet use, legal rights, financial service development as seen from the aspect of depth, access and efficiency then geographical and potential of the banking sector. The results are GDP per capita, internet users, digital credit information, the Depth aspect of the development of financial institutions, the Bank's performance affecting the growth of fintech services.

DATA AND RESEARCH METHODS

a. Data

This study uses primary data in the form of a survey conducted online in June 2021. The responses obtained were 1,316 people from all parts of Indonesia who could access the internet. The topics asked in the questionnaire include (i) socioeconomic information, (ii) access to conventional banking, and (iii) access to the use of financial technology (fintech).

The data collected from this survey were analyzed using descriptive analysis and quantitative analysis. At the quantitative analysis stage, the Digital Financial Inclusion Index value was first calculated which was adopted from the IMF calculation method by Khera et al. (2021) and modified based on the existing literature to suit the objectives of this study. Furthermore, the data is analyzed

using Logistics Regression Analysis to see what factors influence the use of digital finance through fintech.

b. Digital Inclusion Financial Index

The measurement of the Digital Inclusion Financial Index conducted in this study uses financial inclusion variables that have been used by the IMF and several other studies including the Global Findex by the World Bank and methods from the Financial Services Authority or OJK (2017). The concept of financial inclusion that will be used follows the definition from OJK where the financial inclusion index is the percentage of the number of people who use financial products and services.

Digital financial inclusion is measured through 2 main variables, namely access, and usage. Variable access is measured by individuals who have fintech accounts, while variable usage uses indicators in the form of payment activities via the internet, receiving wages, and various financial transactions using mobile phones. Likewise, traditional financial inclusion measures, using similar variables as listed in table 1.

Table 1. Selected Variables for Financial Inclusion Indices

Traditional Financial Inclusion Index	Digital Financial Inclusion Index
Access	**Access**
% Of adults with a financial institution account	% Of adults with a financial technology account
Usage	**Usage**
% Of adults who save at a financial institution	% Adults who use fintech to save
% Of adults who borrow at a financial institution	% Adults who use fintech to borrow
% Of adults who use a financial institution for utility	% Adults who use fintech to make utility payments

Source : Demirguc-Kunt et al. (2018) and Sahay et al. (2020)

c. Logistics Regression Analysis

Along with calculating the value of financial inclusion, the next stage of analysis is to identify what factors affect digital financial inclusion in individuals. Previous research generally uses multiple linear regression or probit to identify factors that influence financial inclusion in a region (Akileng, Lawino, and Nzibonera 2018, Alwi 2021, Chu 2018, David, Oluseyi, and Emmanuel 2018, Laut and

Hutajulu 2019, Sahay et al. 2020, Zins and Weill 2016). However, the method that will be used in this study is Logistic Regression.

The use of the logistic regression model aims to find the value of the possibility of a digital financial inclusion condition in individuals, based on the independent variables that influence it (Nugroho and Purwanti 2018). In addition, this method is also used for binary dependent variables (Real et al. 2006).

The logistic regression model is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots\ldots + \beta_n X_n \quad (1)$$

With the value of Y that is $Y = \ln\left(\frac{P}{1-P}\right)$ (2)

So that the linear form of logistics regression function is as follows:

$$\ln\left(\frac{P}{1-P}\right) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots\ldots + \beta_n X_n \quad (3)$$

And the Logistics Regression Model used in this study:

$Fintech\ Usage = \ln\left(\frac{P}{1-P}\right)$ = α+ β_1 Zone + β_2 Sex + β_3 Age + β_4 Education + β_5 Work + β_6 Living alone + β_7 Commuters + β_8 Per Capita Expenditures

Where: P = Value of an individual's opportunity to experience digital financial inclusion

(1-P) = Value of the opportunity for an individual not to experience digital financial inclusion

β1-n = regression coefficient

FINDING AND DISCUSSION

a. Sample Characteristics

The research sample in this study was residents aged 16 years and over and able to fill out online and independent questionnaires. In general, they come from the islands of Java & Bali, and Sumatra. Then if it is differentiated by gender, there are more male respondents than female respondents. This can be seen in detail in Table 2.

Table 2. Sample Characteristics

Characteristics of Respondents (Percent)			
1.	**Zone**	**5.**	**Work**
	Sumatera 35,26		Yes 80,70
	Jawa dan Bali 47,19		Not 19,30
	Kalimantan 9,95		
	Sulawesi 5,40	**6.**	**Commuters**
	Others 2,20		Yes 20,21
			Not 79,79
2.	**Sex**		
	Male 53,19	**7.**	**Living alone**
	Female 46,81		Yes 18,31
			Not 81,69
3.	**Age (years)**		
	under 25 14,06	**8.**	**Expenditure per capita per month (000 Rp)**
	25 – 40 63,60		under 1.000,- 24,39
	over 40 22,34		1.000 – 2.999 34,65
			3.000 – 4.999 21,81
4.	**Education**		5.000 – 10.000 12,99
	under tertiary level 21,50		over 10.000 6,16
	tertiary level 78,50		

Source : Data Calculation Result

From an age aspect, the respondents in this study were dominated by millennials compared to Generation X and Generation Z, which reached 64 percent. Meanwhile, from the education aspect, in general, the respondents who filled out the research questionnaire were educated above high school. Then most of them are not commuters and live with their family or other relatives every day.

b. Financial Inclusion

The financial system is declared inclusive if all levels of society can access and use financial services. The results of data processing show that the value of financial inclusion, in general, has reached 95 percent. However, there is still a financial exclusion of around 5 percent, which means that out of 100 people aged 16 years and over, there are still 5 people who do not access conventional financial services.

Financial exclusion occurs when individuals do not have access to financial products and services (Connolly 2012). People who are unable to access banking services are usually a minority and vulnerable group. Datta and Singh (2019) explains that the poor and weaker classes of people often have difficulty opening accounts due to distance factors, difficult bureaucracy, poor financial literacy, insufficient funds for open a savings account and do not have sufficient collateral when applying for a loan.

Tabel 3. Financial Inclusion and Financial Exclusion

Bank Account	Fintech Account	
	Yes	Not
Yes	70,36	24,77
Not	1,82	3,04

Source : Data Calculation Result

Based on Table 3, it can be seen that the role of digital finance through fintech in reducing financial exclusion for the unbanked population. The percentage of respondents who do not have a bank account but have a fintech account is 2 percent of the total number of individuals. If calculated further, there is evidence that fintech can embrace 37.5 percent of individuals who do not access banks. This shows that digital finance has played a role in increasing financial inclusion in Indonesia.

The presence of fintech has changed the way financial services are provided to users. Fintech develops digital financial tools that can be accessed via mobile phones or computer (Datta and Singh 2019) . Fintech financial services are able to reach the vulnerable layers of the population, with lower costs and a faster and easier loan disbursement process (Sinha, Pandey, and Madan 2018, Yang and Zhang 2020).

There are various factors that influence financial inclusion. While Datta and Singh's research (2019) looks at financial inclusion factors through geographical aspects and the facilities provided by banks, Zins and Weill (2016) research focuses more on aspects of individual abilities and characteristics. The results show that gender, age, income, income level, and education of the population are proven to affect financial inclusion.

Similar to previous studies, the condition of Indonesia's financial inclusion is also influenced by almost the same factors. The achievements of traditional financial inclusion, in general, can be seen in Table 4. When viewed by region, it turns out that Java & Bali and

Sulawesi have the lowest access and use compared to other regions. This is quite interesting, considering that Java Island has better facilities and infrastructure than other regions. There are many banking facilities, but if the distance is far from where the residents live, they certainly will not be able to reach groups that are limited by geographical factors (Zins and Weill 2016).

Table 4. Traditional Financial Inclusion

Access and Usage Bank Account (Inklusi Keuangan Tradisional)					
1.	**Zone**		**4.**	**Education**	
	Sumatera	97,8%		under tertiary level	88,7%
	Jawa dan Bali	93,2%		tertiary level	96,9%
	Kalimantan	96,9%			
	Sulawesi	90,1%	**5.**	**Work**	
	Others	96,6%		Yes	96,2%
				Not	90,6%
2.	**Sex**				
	Male	95,6%	**6.**	**Per Capita Expenditures (000 Rp)**	
	Female	94,6%		under 1.000,-	90,7%
				1.000 – 2.999	94,1%
3.	**Age (years)**			3.000 – 4.999	98,6%
	under 25	88,6%		5.000 – 10.000	98,8%
	25 – 40	96,5%		over 10.000	98,8%
	over 40	95,2%			

Source : Data Calculation Result

Furthermore, from the aspect of gender, it is found that there is no difference between male and female residents in the use of bank financial services. This is quite a relief because women and men have equal opportunities to access financial services. In contrast to Indonesia, conditions on the African continent show the opposite. The existence of cultural factors makes gender discrimination still occur in the access to financial services. Women are more difficult to access loans than men because they are considered vulnerable people (Aterido, Beck, and Lacovone 2016, Zins and Weill 2016)

The age factor shows a difference in the percentage of bank account users. In general, bank account users are residents aged 25 years and over. The percentage of the population aged 25 years and under who use a bank account is less than the age group above. Education also shows similar evidence. The lower a person's education level, the less access to banking services. The percentage of the population with a secondary level of education is lower than the population with a tertiary level of education.

The income variable which is approached with the expenditure data per capita shows the difference between income groups. The highest financial inclusion occurs in the population group with the per capita expenditure of 10 million and above. Then the lower the individual's income, the fewer people use banking services. Meanwhile, when viewed from daily activities, financial inclusion is more common in people who work than people who do not work.

Table 5. Digital Financial Inclusion

Access and Usage Fintech Account (Digital Financial Inclusion)					
1.	**Zone**		**4.**	**Education**	
	Sumatera	69,4%		under tertiary level	39,6%
	Jawa dan Bali	73,6%		tertiary level	81,1%
	Kalimantan	80,2%			
	Sulawesi	76,1%	**5.**	**Work**	
	Others	41,4%		Yes	75,0%
				Not	60,6%
2.	**Sex**				
	Male	71,0%	**6.**	**Per Capita Expenditures (000 Rp)**	
	Female	73,5%		under 1.000,-	53,3%
				1.000 - 2.999	73,7%
3.	**Age (years)**			3.000 - 4.999	79,1%
	under 25	84,3%		5.000 - 10.000	84,2%
	25 - 40	79,2%		over 10.000	88,9%
	over 40	44,6%			

Source : Data Calculation Result

The role of digital financial services for financial inclusion in Indonesia is inevitable. Table 5 shows in detail the use of digital financial services through fintech according to the socio-economic conditions of the population. Based on geographical conditions, fintech services are widely accessed by residents on the islands of Java, Kalimantan, and Sulawesi, ranging from 73 to 80 percent. While other islands (others) only around 40 percent. This is under APJII

(2020) data which shows that the islands of Java & Bali have the highest contribution to internet penetration, followed by Sumatra, Kalimantan, and Sulawesi.

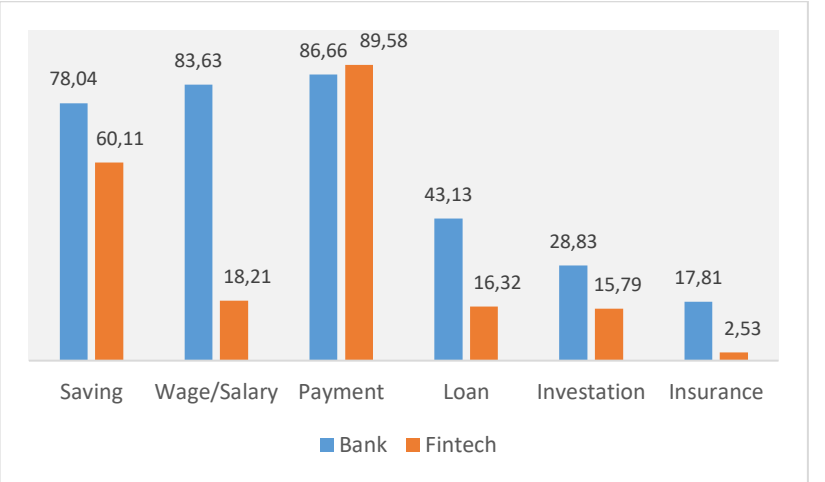
Previous conventional financial inclusion data show that the island of Sulawesi has the lowest financial inclusion value compared to other regions. However, Sulawesi is one of the islands with the highest digital financial inclusion. The role of fintech and internet service support is thought to be able to embrace potential users who are not served by banks.

If digital financial inclusion is seen by gender, it turns out that there is no significant difference between male and female residents for the use of digital finance. The digital financial inclusion of male and female residents has the same value, which is around 70 percent. Then financial inclusion data by population age group shows that users of fintech financial services are generally people under 40 years of age. The younger the age group of the population, the greater the percentage using fintech. This is in contrast to users of bank account services. Internet access and mobile phones are more in the population under 40 years of age compared to the age group above, making the opportunities for using digital financial services in this age group to be greater.

Conspicuous differences also occur in financial inclusion by education level. Financial inclusion in the population group with an education level below the tertiary level is only 40 percent. Meanwhile, digital financial inclusion in the population with a tertiary level has doubled, which is 80 percent. The income level variable also shows

the same thing. The income level of the population which is approximated by the expenditure per capita per month shows that the greater the level of expenditure of the population, the greater the digital financial inclusion. The percentage of the population with a per capita expenditure of more than 10 million a month, who access digital financial services through fintech is almost double that of the population group with an income below 1 million per capita per month. Meanwhile, in terms of employment, the working population has a higher digital financial inclusion than the non-working population.

Digital finance through fintech provides the same types of services as conventional financial services, ranging from saving, lending to access to the capital market and insurance. Figure 1 shows that in general the percentage of all types of traditional financial services is higher than digital financial services except Payment Services. Residents when making payments use fintech applications more than traditional financial services.



Source : Data Calculation Result

Figure 1. Access to Banks and Fintech by Type of Use

Conditions that are not too much difference between the use of fintech and conventional finance are in saving and investing activities. The percentage of the population who saves in banks is 78 percent, while the population who saves through fintech applications is 60 percent. Then the percentage of the population accessing the capital market using a bank account is 28 percent and 15 percent using fintech.

Financial services have used face-to-face and online methods. However, there are still residents who do not access both types of services. There are various reasons individuals are not willing to access the existing financial system. This is recorded in Table 6.

Table 6. Reasons for individuals Not Accessing Traditional Financial Services

Variable	Percent
Reason for belief / religion	5,0
Expensive fees (administration and others)	5,0
Feeling not/not yet Need	17.5
There are already family members who use	25,0
No (difficult) access to bank	2,5
Don't have enough money to use	40,0
Don't/don't understand how to make/use	5,0

Source : Data Calculation Result

The main reason for individuals who are included in financial exclusion for not accessing bank financial services is because they do not have enough money to create and use a bank account. In fact, almost half of the total samples included in the financial exclusion. The next reason is that they think that other family members have bank accounts so they feel they don't need them. This is in line with the evidence presented by Allen et al. (2016) and Zins and Weill (2016). Lack of money is the reason individuals choose not to create a bank account. However, religious reasons and the presence of family members who have accounts are unimportant factors for vulnerable groups.

Table 7. Reasons for individuals Not Using Fintech

Variable	Percent
Feeling No/don't need	25,0
There is already a family member who has an account	2,5
Do not have (difficult) access to fintech facilities and products	2,5
Don't have enough money to use	22,5
Does not have facilities to utilize fintech products (smartphones, internet)	10,0
Don't/don't understand how to use	35,0
Don't / don't believe it (safety reasons)	2,5

Source : Data Calculation Result

Residents who are included as financial exclusions, apart from not accessing conventional financial services, also do not access digital financial services through fintech applications. In contrast to the results presented in table 6, table 7 shows that the main reason this group does not access fintech services is that they do not understand how to use fintech financial applications. The next reason is that they feel they don't need and don't have the money to access fintech services. This is an opportunity to increase financial inclusion through digital financial services. If 35 percent of individuals who are included as financial exclusion understand how to use fintech services, of course, there will be additional financial inclusion from 35 percent of these individuals through digital financial services.

A more in-depth analysis is carried out to see what factors influence the use of fintech and the tendency to use fintech according to the type of population group. The logistic regression method was chosen to be used because this study wanted to see the trend of using digital financial services through fintech. The results show that the variables of the region, age, education, employment status, and expenditure per capita per month have a significant effect on digital financial inclusion in individuals for a significance level of 0.05. While the living alone variable has a significant effect on the significance level of 0.10. The variables of gender and commuters do not have a significant effect on digital financial inclusion.

The tendency of people living outside Java & Bali to experience digital financial inclusion is 0.6 times that of residents outside Java & Bali. This shows that residents in Java and Bali tend to use fintech services compared to residents outside Java and Bali. This result is not surprising given the better internet network facilities in Java and Bali.

Tabel 8. Hasil Analisis Regresi Logistik

Variables	B	Wald	Exp(B)	Sig.	
Zone(1)	-,494	10,562	,610	,001	*
Sex(1)	,066	,187	1,069	,665	
Age		114,707		,000	*
Age(1)	-,978	14,486	,376	,000	*
Age(2)	-2,551	82,916	,078	,000	*
Education(1)	1,534	80,378	4,635	,000	*
Work(1)	-,461	5,973	,631	,015	*
living_alone(1)	-,392	3,204	,676	,073	**
commuters(1)	-,042	,046	,959	,831	
expenditures_percapita		41,661		,000	*
expenditures_percapita(1)	,533	8,422	1,703	,004	*
expenditures_percapita(2)	,967	19,617	2,629	,000	*
expenditures_percapita(3)	1,317	23,382	3,733	,000	*
expenditures_percapita(4)	1,869	21,464	6,485	,000	*
Constant	1,188	10,510	3,281	,001	

** Sig at $p \leq 0,05$ and ** Sig at $p \leq 0,10$*

Differences in tendencies also occur from the aspect of age. The tendency of the population aged 25-40 years in accessing digital finance is 0.376 times compared to the population aged 25 years and under. And the trend value is getting smaller for the population group aged 40 years and over, which is only 0.078 times. Young people under 25 years of age have the highest tendency to use fintech services compared to residents of the above age group.

The educational factor has a different influence with age where the higher a person's education, the higher his tendency to use fintech services. Residents with tertiary education have a tendency of 4 times compared to residents with secondary education levels and below. Furthermore, residents who do not work have a 0.631 times chance compared to people who work to access digital financial services. Meanwhile, residents who live alone have a higher tendency to access fintech than residents who live with their families.

The level of expenditure per capita per month shows a similar effect to education where the higher the level of expenditure, the higher the tendency of individuals to use fintech. People with spending levels above 10 million per month have a tendency of six times compared to residents with spending levels of 1 million per month per person. The value tends to decrease along with the decrease in the level of population expenditure.

Amoah, Korle, and Asiama (2020) state that the number of young people, education, and income are factors that have a significant effect on the use of mobile money in Ghana. Interesting evidence from their research is that mobile money users are generally low- and middle-income groups. This shows that fintech services are more affordable for the lower-class population. Even the results of a study from Sahay et al. (2020) reveal that fintech is able to bridge the gender gap in financial inclusion in most countries including during the COVID-19 pandemic.

Apart from being able to increase financial inclusion, fintech providers are also proven to be able to create economic growth by

increasing transaction volume through fintech services (Ozili 2018). Even in times of crisis, it has been proven that fintech continues to grow and even increases in several countries (Alber and Dabour 2020, Fu and Mishra 2020, Sahay et al. 2020, Sambetbayeva et al. 2020). Seeing this positive opportunity, policymakers should be able to identify and remove barriers to individual access to digital finance and determine tariffs that do not burden consumers to access digital financial services (Naumenkova, Mishchenko, and Dorofeiev 2019). In addition, it also prepares regulations that apply to all fintech providers by not forgetting data protection policies and consumer rights in a fast and appropriate way considering the fintech companies that continue to emerge (Ozili 2018).

CONCLUSION

Digital financial services through fintech exist to complement the shortcomings of conventional financial services that have not been able to reach all levels of society. Even when the economy is weakened by the pandemic, fintech services continue to grow positively and even increase at this time. This study aims to look at the role of fintech in Indonesia and what determinants affect the use of fintech. The results show that fintech in Indonesia is able to reach groups that are not served by banking financial services. This shows that fintech is a tool to increase financial inclusion while creating

economic growth because of its ability to survive in the midst of a pandemic.

The cost factor and the lack of money are the main reasons for the unbankable group, unable to access banking facilities. This group prefers to use fintech because fintech is considered more practical and easier than using traditional financial services. In addition, further analysis shows that socio-economic factors affect the use of digital financial services. These factors include geographical conditions, age, education, income level, working status, and living alone. An interesting finding from this study is that the use of traditional financial services and fintech is almost the same for the population aged 25 years and under.

This condition indicates that in the next few years fintech services will receive the same portion as traditional financial services or maybe larger. This is in line with the development of digital technology which continues to progress and is even able to disrupt most of the patterns of human life. In addition, it is the population aged 25 years and under who will play more roles in the economic system in the next few years. Policymakers should be able to make regulations that support the existence of fintech but without ignoring protection

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OUT-OF-POCKET PAYMENT FOR PREVENTIVE AND CURATIVE HEALTH CARE IN INDONESIA[2]

BACKGROUND

One form of social security provided by the state for all Indonesian people is through the National Health Insurance (NHI) program. Through the NHI program, it is hoped that it can fulfill all basic health needs and provide protection for all Indonesian people from economic problems resulting from health care costs, which can lead to poverty. The National Health Insurance Program (NHI) is expected to reduce the risk of the community having to bear health costs incurred out of pocket (OOP).

From a financial aspect, OOP costs incurred by households to receive health services can create a heavy economic burden and result

[2] Arief Rosyid Hasan, Adang Bachtiar, Cicilya Candi, Syarif Rahman Hasibuan, The 9th International Conference on Public HealthSolo, Indonesia, November 23-24, 2022, https://doi.org/10.26911/FP.ICPH.09.2022.10

in a financial disaster. This occurs because the high costs incurred will have a negative impact on the household's financial management system. In the NHI prog-ram, there is a mutual cooperation payment mechanism that can be shared jointly by fellow NHI participants so that it is more likely that all people will have no difficulty receiving qualityhealth services. Financial threats in the household that have a negative impact on economic poverty can be caused by large expenditures in termsof health financing due to poor health conditions and diseases in the household (Tarigan, 2017).

Based on WHO National Health Account data, household spending statistics for health costs in Indonesia arestill high, namely 35 percent. The OOPfigure, or household spending on health care in Indonesia, is still quite high compared to other countries, namely Thailand, Malaysia, and Fiji, which have an OOP of 28 percent. Other countries, such as Chile, Costa Rica, China, and Cuba, have OOP values lower than Indonesia, which has a value of 23% (WHO, 2017).Withthe existence of NHI, it is hoped that the number of OOP, or expenses fromone's own pocket, can be reduced below 20 percent of total health spending (Prakarsa, 2018).

In terms of OOP in Indonesia, many health services paid for by households are still paid for by the public,including NHI health insurance participants. OOP household expenses from NHI participants are still very large, with very high costs for health services. In general, NHI patients whoincur OOP or additional costs that exceed the responsibility of the NHI health insurance are the result of NHIparticipants' wishes in terms of increasing treatment

classes (curative), as well as the reason for additional costs that are not guaranteed in the NHIhealth insurance, such as some healthor preventive screening (Dewi et al., 2015). This study aims to analyze the level of OOP in Indonesia based on curative and preventive OOP spending.

RESEARCH METHOD

Aggregate household and population data are grouped into 10 deciles. Deci-les are groups of tenths, so the entire household is divided into 10 deciles. Decile 1 is a household in the lowest 10% group, Decile 2 is a household in the lowest 10–20% group, Decile 3 is a household in the lowest 20-30% group; and so on up to Decile 10, which is a household in the 10% group with the highest level of welfare.

OOP analysis to see OOP in cura-tive and preventive services as well as the amount, average, and percentage of OOP to expenditure per month. A correlation analysis was performed to see the relationship between total expenditure and OOP.

RESULTS

The sample used to see OOP's picture of health services comes from 2016- 2020 data, which are grouped into groups called deciles. Deciles are groups of tenths, so the entire household is divided into 10 deciles.

The grouping of households ba- sed on the unified database is as follows: Decile 1 is a household in the lowest 10% group, Decile

2 is a house- hold in the lowest 10–20% group, De- cile 3 is a household in the lowest 20–30% group; and so on up to Decile 10, which is a household in the 10% group with the highest level of welfare. The number of samples can be seen in the following table.

Based on the table of number and percentage of samples, it can be seen that the average sample from 2016–2020 came mostly from the 5thdecile group, namely, 10.39%, whilethe least was from the 10th decile group, namely, 8.62%. It can also be seenthat in deciles 1-4, which contain 40% of households with the lowest welfare rating, there has been an increase in 2020 compared to 2016. In 2019, the percentage of households. samples in deciles 1.2 and 4 was the highest compared to 2016-2019. It can be seen in table 1 and table 2.

Table 3. The Average OOP for Monthly Health Services Based on Decile2016-2020

Decile	Total expenses per month		OOP average for curative services per month		OOP average for preventive services per month		OOP Average		Percentage of OOP to monthly expenses
	a		b		c		d	(b+c)	f (e/a)x100%
	Rp	%	Rp	%	Rp	%	Rp	Rp	%
1	945.374	64.92	11.458	20.18	3.561	14.90	2.630	17.649	1.87
2	1.562.007	63.60	18.035	16.13	4.574	20.26	5.745	28.355	1.82
3	1.992.503	65.06	24.140	15.01	5.570	19.92	7.392	37.102	1.86
4	2.406.311	66.44	31.076	14.64	6.846	18.93	8.853	46.776	1.94
5	2.855.900	68.50	39.426	13.97	8.039	17.53	10.089	57.553	2.02
6	3.373.425	70.11	50.844	13.69	9.930	16.20	11.750	72.523	2.15
7	4.025.944	71.46	64.748	13.40	12.142	15.14	13.716	90.607	2.25
8	4.933.464	73.37	88.472	12.84	15.487	13.79	16.623	120.581	2.44
9	6.451.164	74.51	128.575	12.67	21.856	12.82	22.119	172.550	2.67
10	12.720.253	76.76	318.017	11.55	47.853	11.69	48.435	414.305	3.26

Table 1. Number of Samples of Dated Houses by Decile, 2016-2020

Decile	The number of households in the sample					Sample average	The number of households in the population				
	2016	2017	2018	2019	2020		2016	2017	2018	2019	2020
1	28.191	28.362	28.735	31.305	33.113	29.941	6.821.059	6.931.302	7.010.293	7.144.103	7.279.311
2	28.460	29.810	30.396	32.546	34.462	31.135	6.820.952	6.931.140	7.010.365	7.143.724	7.279.597
3	28.458	30.167	30.531	32.577	34.242	31.195	6.821.214	6.931.193	7.010.246	7.143.738	7.278.913
4	29.794	30.745	30.786	32.611	35.235	31.834	6.820.925	6.931.966	7.010.361	7.144.015	7.279.200
5	29.665	30.589	30.940	32.864	35.317	**31.875**	6.820.878	6.930.390	7.010.105	7.144.321	7.279.606
6	30.595	30.737	30.546	32.527	34.774	31.836	6.821.274	6.931.070	7.010.175	7.143.756	7.279.028
7	30.465	30.986	29.896	32.510	34.273	31.626	6.820.727	6.931.535	7.010.169	7.143.213	7.278.978
8	30.374	30.054	29.345	31.760	33.082	30.923	6.821.122	6.930.774	7.010.158	7.143.963	7.279.454
9	29.166	29.544	28.538	30.548	31.873	29.934	6.820.865	6.931.550	7.010.288	7.143.706	7.279.111
10	26.246	26.282	25.442	26.424	27.858	**26.450**	6.820.935	6.930.797	7.010.034	7.143.749	7.279.087
Total	**291.414**	**297.276**	**295.155**	**315.672**	**334.229**	**306.749**	**68.209.951**	**69.311.717**	**70.102.194**	**71.438.288**	**72.792.285**

Based on Table 3, an overview of the average OOP for health services per month based on decile 2016-2020, it can be seen that the highest percentage of OOP for health services comes from decile 10, namely 3.26% of total expenditure, while the lowest OOP comes from decile 2, namely 1.82%. of total spending. It can also be seen thatthe monthly OOP for curative servicesis greater than that for preventive services. All decile groups, except for decile 1, have a higher average OOP per month for preventive services than forcurative services.

Through table 3 it can be seen that the average percentage of OOP forcurative services is higher at higherdeciles, and smaller at decile 1, which is higher than decile 2. It can be seen that curative OOP at decile 2 repre- sents 63.6% of the total OOP health and then increases to the highest 10thdecile, namely 76.76%. Meanwhile, OOP for preventive services is higher at lower deciles. This is acceptable in OOP for preventive services in decile 1,which is typically lower than decile 2.Itis visible in decile 1 OOP for drugs(20.18% of total OOP for health) and then drops to decile 10, which is the lowest, at 11.55%. Meanwhile, OOP for preventive services is in decile 2, namely 20.26%, and then decreases in higher deciles to the lowest average OOP in decile 10, namely 11.69%. De- tails of OOP expenses per month eachyear can be seen in table 4.

Table 4. OOP Per month Per Year Based on Decile

Decile	Average monthly expenses	Monthly expenses for curative (Rp)	Monthly expenses for preventive services	Total OOP spending on health services per month (Rp)	Percentage of OOP to health services per month
			2016		
1	777.333	9.738	1.676	14.468	1.86%
2	1.303.981	14.110	3.289	21.296	1.63%
3	1.670.413	20.371	4.260	29.525	1.77%
4	2.024.105	25.435	5.046	36.282	1,79%
5	2.408.447	31.966	5.802	44.860	1.86%
6	2.859.727	41.397	6.820	56.422	1.97%
7	3.441.651	52.192	8.311	71.516	2.08%
8	4.258.409	70.752	10.371	94.468	2.22%
9	5.607.212	103.374	13.690	136.409	2.43%
10	11.425.280	275.608	32.234	352.975	3.09%
Total	**3.577.640**	**64.494**	**9.150**	**85.822**	**2.40%**
			2017		
1	867.904	10.133,08	2.166,71	16.059.48	1.85%
2	1.450.783	17.292,86	4.837,90	27.146.98	1.87%
3	1.862.587	21.449,64	6.216,60	33.707.75	1.81%
4	2.256.577	28.935,89	7.554,57	43.881.98	1.94%
5	2.681.400	37.464,22	8.586,90	54.618.21	2.04%
6	3.168.143	46.476,50	9.886,11	67.204.41	2.12%

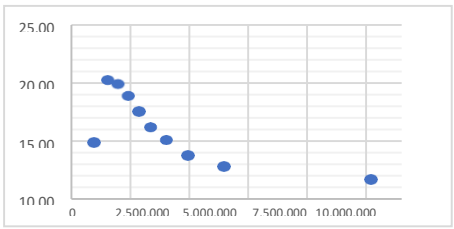
Decile	Average monthly expenses	Monthly expenses for curative (Rp)	Monthly expenses for preventive services	Total OOP spending on health services per month (Rp)	Percentage of OOP to health services per month
7	3.794.993	58.630,60	11.920,46	83.539.44	2.20%
8	4.660.968	80.910,09	14.728,46	112.695.40	2.42%
9	6.123.802	118.694,40	20.791,76	164.730.30	2.69%
10	12.177.194	307.449,30	54.240,73	413.722.00	3.40%
Total	**3.904.388**	**72.742**	**14.093**	**101.729**	**2.61%**
			2018		
1	960.569	11.746	2.875	17.994	1.87%
2	1.593.024	18.941	6.087	29.327	1.84%
3	2.037.415	25.797	7.958	39.175	1.92%
4	2.463.997	32.384	9.385	48.348	1.96%
5	2.930.578	41.985	10.537	60.340	2.06%
6	3.468.692	55.098	12.582	77.385	2.23%
7	4.138.721	70.523	14.232	96.506	2.33%
8	5.072.964	98.627	17.088	130.313	2.57%
9	6.641.258	136.090	22.185	177.764	2.68%
10	13.086.187	346.380	46.693	440.119	3.36%
Total	**4.239.308**	**83.756**	**14.962**	**111.726**	**2.64%**
			2019		
1	1.035.353	12.386	3.225	19.371	1.87%
2	1.689.627	19.947	7.513	32.243	1.91%
3	2.143.775	25.736	9.371	40.743	1.90%
4	2.580.609	33.006	11.187	51.350	1.99%
5	3.056.137	42.154	12.766	62.818	2.06%
6	3.599.259	55.156	15.037	80.367	2.23%
7	4.277.356	73.461	16.954	103.078	2.41%
8	5.218.354	93.958	19.820	129.685	2.49%
9	6.781.399	142.639	25.586	190.849	2.81%
10	13.219.222	318.887	49.383	415.262	3.14%
Total	**4.360.078**	**81.732**	**17.084**	**112.576**	**2.58%**
			2020		
1	1.085.711	13.289	3.206	20.353	1.87%
2	1.772.622	19.885	7.000	31.761	1.79%
3	2.248.326	27.345	9.153	42.359	1.88%
4	2.706.267	35.620	11.095	54.017	2.00%
5	3.202.940	43.560	12.752	65.130	2.03%
6	3.771.303	56.091	14.426	81.239	2.15%
7	4.476.999	68.935	17.164	98.395	2.20%
8	5.456.626	98.110	21.106	135.744	2.49%
9	7.102.150	142.078	28.340	192.996	2.72%
10	13.693.382	341.761	59.626	449.449	3.28%
Total	**4.551.602**	**84.667**	**18.387**	**117.143**	**2.57%**

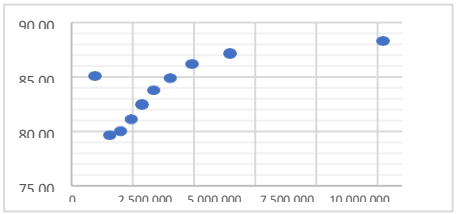
Table 5. Pearson Correlation test

Variables	Correlation Coefficient (r)	p
Persentase OOP Kuratif	0.749	0.013
Persentase OOP Preventif	-0.749	0.013

The results of the Pearson correlation test show that total household expenditure has a strong positive correlationwith curative OOP (r= 0.749; p= 0.013) but a strong negative correlation with preventive OOP (r= -0.749; p= 0.013). This means that the higher the total household expenditure permonth, the OOP for curative services per month will be higher. Meanwhile, with higher household expenditure in all sectors per month, the OOP for preventive services per month will be lower.

The scatter diagram between the average monthly household expenditure for all sectors and the OOP for health services can be seen in Figure 1.





(a)

(b)

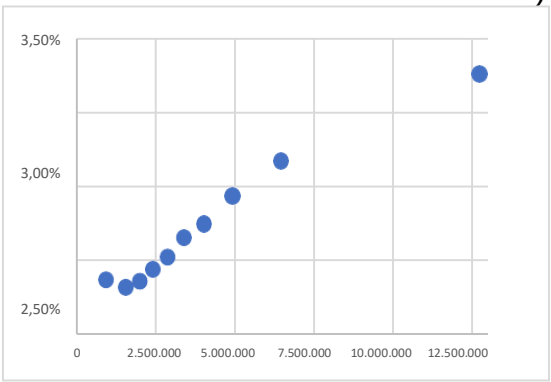


Figure 1. OOP Average Spread Chart (a) Curative, (b) Preventive with Average Total OOP Health Per Month and (c) average total spending on health with the total spendingon all sectors per month

DISCUSSION

Households in the 10th decile are the group with the highest average income and economic status, having a higher OOP percentage than other deciles. This increase can occur because these households have a higher preference for private facilities or medicines that are usually not covered by national health insurance, such as the JKN program in Indonesia (Maulana et al.,2022).

This is supported by research byAl-Hanawi et al. (2021), which explains that OOP will increase in highdecile samples even though they already have health insurance. In simple terms, health insurance, whichis social in nature, supports the reduction of health OOP for lower deciles, while health OOP for higher deciles will remain high despite having healthinsurance.

This study did not see OOP diffe-rences between samples with or with- out health insurance. However, in a study conducted by Tarigan and Suryati (2017), it was found that the OOP was lower in both low and high decile samples that had health insurance compared to low and high decile samples that did not have health insurance. Even though the value is small, having health insurance provides protection against health OOP inboth low and high decile samples in inpatient services.

The results of this study were also supported by the findings of Woldemichael et al. (2016), which explained that in people with high wealth who had health insurance, the OOP of drugs decreased, but there wasan increase in the OOP of outpatient services such as consultations, laboratory examinations, and other medical

examination services. The increase in the OOP of outpatient services in groups with high welfare who have health insurance can be due to visits tomore health service providers.

The group knew that to maintaingood health, they could visit more frequently at low or no cost for the range of services required. This is usedby health service providers to provide care that, although necessary to maintain health, is not covered by insurance (Al-Hanawi et al., 2021). According to Couturier et al. (2022), the group having health insurance would remove the main barriers to obtaining health services but would result in additional voluntary OOP from patients. On the other hand, although hospitalization was much more frequent in the insured group in all deciles, the OOP in this group was lower than in the uninsured group (Counturier etal., 2022).

OOP in groups with high average income and economic status, has a higher percentage than OOP in groupswith low income and economic status. This increase may occur because these households have a higher preference for private facilities or medicines that are not normally covered by national health insurance.

The number of out-of-pocketexpenses for curative services is higherthan for preventive services. This needs to get attention from the government in health promotion and prevention efforts in efforts to controlhealth financing and strengthen health insurance in Indonesia to reduce OOP.

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THE POTENTIAL OF PRIVATE HEALTH INSURANCE OWNERSHIP BASED ON THE 2018-2020 NATIONAL SOCIO-ECONOMIC SURVEY DATA[3]

INTRODUCTION

The Out Of Pocket [OOP] figure in Indonesia still above 30% of the total health expenditure in 2021. The high of society's OOP in health financing can exacerbate the burden of disease on individuals due to delayed or missing care, a burden on personal finances, and lead to an increased likelihood of financial disaster, impoverishment, and deteriorating social determinants of health. The consequences experienced by the community are greater vulnerability to poverty and wider inequality in health[1]. Private insurance is important in reducing OOP in health financing[2]. Several studies found that private insurance as additional insurance had a significant effect on reducing the burden of OOP payments[3,4,5,6,7].

[3] Ditulis oleh Muhammad Arief Rosyid Hasan, Adang Bachtiar, dan Cicilya Candi dimuat dalam *Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal),* 2022, 17 (4): 289-286

Although NHI has been introduced in 2014, public interest in NHI services tends to be low because the service system is still considered unsatisfactory[8]. People from the middle to upper economic status prefers OOP rather than using NHI. The small number of private health insurance providers in Indonesia is one of the causes. Private health insurance progress has been very slow in Indonesia.[9] Private insurance companies must develop products that are people need and know who to target.

The purpose of this study is to be a foundation to strengthen private insurance in Indonesia, specifically to look at the characteristics of private health insurance users and analyze its determinants so that private companies can know their marketing target and it is hoped that private insurance companies will be interested in making health insurance services that are expected to be able to strengthening private insurance ownership in Indonesia. In addition, the results of this study are expected to be considered by the government to develop additional health insurance programs for NHI participants.

METHOD

In this study, secondary data analysis of the National Socio-Economic Survey in 2018, 2019, and 2020 was carried out. The data in this study was used at the head of household level as the unit of research analysis. The univariate analysis conducted to see the characteristics of the head of the household, and multivariate analysis to see its relationship to private insurance ownership.

Univariate analysis in this study consisted of descriptive respondents to the variables in the study. The univariate analysis conducted to see characteristics of 70,102,253 head of households. The variables studied consisted of age (the unit in years); sex, divided into two categories, male and female; educational background, categorized into five: uneducated, elementary school/equivalent, junior high school/equivalent, senior high schools/ equivalent, and higher education; per capita expenditure (expenses per household per month), unit is in rupiah. Household head occupation, divided into unemployed, informal, and formal. Employment sectors are categorized into extractives, manufacturing, and services; marital status is divided into single and married, residence were classified as urban and rural areas; the number of household members; the number of household children under five; ownership of NHI is categorized as a household that is not a is classified into non-private member households and private member households. Insurance ownership status is categorized into four: without health insurance, NHI only, only private insurance, and ownership of both NHI and private insurance. The table of variables and its operational definition is shown in table 1.

Table 1. Variables and Operational Definitions

Variable	Operational Definition	Unit/scale	Value Range
Age	Head of Household age	years	Numeric (15-97 years old)
Sex			
male	Head of household sex is male	Nominal	1 if the head of the household is male 0 if the head of the household is female
female	Head of household sex is female Female is base variable	Nominal	1 if the head of the household is female 0 if the head of the household is male
Education			
Uneducated	The head of household never get an education or graduate from school. Uneducated as base variable	ordinal	1 if the head of household never get an education or graduate from school. 0 if other conditions (graduating elementary school, graduating from junior high school, graduating from high school, graduating from college)
elementary	The highest education of the household head is graduated from elementary school	ordinal	1 if the household head only graduated from elementary school 0 if other conditions (not going to school, graduating from junior high school, graduating from high school, graduating from college)
Junior high school	The highest education of the household head is graduated from junior high school	ordinal	1 if the household head only has graduated from junior high school 0 if other conditions (not going to school, graduating from elementary school, graduating from high school, graduating from college)

Senior high school	The highest education of the household head is graduated from senior high school	ordinal	1 if the head of the household has only graduated from senior high school 0 if other conditions (not going to school, graduating from elementary school, graduating from junior high school, graduating from college)
College	The highest educational of household head is a university degree	ordinal	1 if the head of the household has a university degree 0 if other conditions (not going to school, graduating from elementary school, graduating from junior high school, graduating from senior high school)
Occupation			
Unemployed	The household head has no job Unemployed as the base variable	Ordinal	1 if the head of household has no job 0 if other condition (informal worker or formal worker)
Informal	The household head is a blue-collar worker	Ordinal	1 if the head of household is an informal worker 0 if other condition (has no job or a formal worker)
Formal	The household head is a white-collar worker	Ordinal	1 if the head of household is a formal worker 0 if other condition (has no job or an informal worker)
Type of Occupation			
Extractive	head of household works in the extractive sector	nominal	1 if the head of household works in the extractive sector (agriculture,

			plantation, fishery, forestry, mining) 0 if other conditions (not working, working in the manufacturing sector, working in the service sector)
Manufacture	head of household works in the manufacturing sector	nominal	1 if the head of household works in the manufacturing sector (manufacturing, utilities, construction) 0 other conditions (not working, working in the extractive sector, working in the service sector)
service	the head of the household works in the service sector	nominal	1 if the head of the household works in the service sector (trade, services, communications, finance) 0 other conditions (not working, working in the extractive sector, working in the manufacturing sector)
Marital status			
single	The head of household is never been married or divorce Single is base variable	nominal	1 if the head of household is single 0 if head of household is married
married	The head of household is married	nominal	1 if the head of household is married 0 if head of household is single
Residence Location			
rural	location of household residence in rural area	Nominal	1 if the household lives in a rural area 0 if the household lives in an urban area

urban	location of household residence in urban	Nominal	1 if the household lives in an urban area 0 if the household lives in a rural area
Family member			
Number of family	number of household members	Numeric	(total of family members)
toddlers	Number of children under five in the household	Nominal	1 if there are toddlers (age 0-59 months) in the household 0 if there are no children under five in the household
National Health Insurance (NHI) ownership	household head membership status of national health insurance	Ordinal	1 household head is member of NHI 0 household head is not member of NHI
Private insurance ownership	household head membership status of private insurance	Ordinal	1 household head is member of private insurance 0 household head is not member of private insurance
Insurance ownership status	household head membership status of any kind of insurance	Nominal	1 no health insurance 2 NHI 3 Private insurance 4 both NHI and private insurance

The multivariate analysis follows logistic regression analysis to determine variables that were significant and had an influence on the variable of private insurance ownership. The logistic regression equation obtained used to estimate the probability of private insurance ownership. Variables selected by binary logistic analysis in advance

of logistic regression analysis. It was used to select the correlated variable to the dependent variable (private insurance ownership) with significant level of 5%. Selected variables then analysed using logistic regression analysis. The coefficient in this analysis indicates the magnitude of the probability of a category and positive value indicates that the probability of a category is greater than the comparison category (variable that divine as a base). On the other hand, a negative coefficient means that the probability of the category is smaller than the comparison category. The results of the exponential to the estimated value of the regression coefficient (βi) obtained the value of the odds ratio with significancy level at 5%.

RESULTS

Univariate analysis in this study consisted of descriptive respondents to the variables in the study. The characteristics of households shown on Table 2. Based on sex, the three years were dominated by the largest number, namely the male sex. Based on head of the household's type of work, the three years were dominated by the type of work in the informal sector. The household heads' occupation, dominated by the service sector. The marital status of household head distribution from 2018-2020 were dominated by married status. Based on the location of the household's residence, from 2018-2020 were dominated by urban residence.

The number of household members was dominated by an average value of four members. The distribution of the ownership of the NHI was dominated by the members of the NHI. The private

insurance ownership distribution was dominance with household status without private insurance. The status of insurance ownership distribution was dominated by the only NHI ownership.

Table 2. Characteristics Based on Number of the Household Heads and Members in 2018, 2019, and 2020

Variable	Category	2018			2019			2020		
		n	Mean/Median	%	n	Mean/Median	%	n	Mean/Median	%
Age (years)		70,101,253	48.09/47		71,437,667	48.38/48		72,791,519	48.72/48	
Sex of household's head	Male	59,466,983		84.83	60,394,034		84.54	61,278,834		84.18
	Female	10,634,270		15.17	11,043,633		15.46	11,512,685		15.82
Education	Uneducated	3,596,168		5.13	3,322,611		4.65	3,108,850		4.27
	Elementary school	31,047,973		44.29	31,133,056		43.58	30,679,215		42.15
	Junior high school	11,388,111		16.25	11,915,752		16.68	11,643,284		16.00
	Senior high school	17,480,847		24.94	17,831,343		24.96	19,833,711		27.25
	Higher education	6,588,154		9.40	7,234,905		10.13	7,526,459		10.34
Occupation	Unemployed	9,216,811		13.15	9,235,641		12.93	15,992,886		21.97
	Informal	34,651,721		49.43	34,900,111		48.85	28,336,169		38.93
	Formal	26,232,721		37.42	27,301,915		38.22	28,462,464		39.10
Type of occupation	Extractive	21,983,372		36.11	21,653,901		34.81	21,869,141		34.67
	Manufacturing	7,121,559		11.70	7,357,645		11.83	7,482,068		11.86
	Service	31,779,511		52.20	22,190,480		53.36	33,729,040		53.47
Marital status of household's head	Single	13,667,696		19.50	14,655,780		20.52	15,332,509		21.06
	Married	56,433,557		80.50	56,781,887		79.48	57,459,010		78.94
Number of family members		70,101,253	3.77 of 4		71,437,667	3.74/4		72,791,519	3.71	4
Number of children under live in the household		70,101,253	0.34		71,437,667	0.33		72,791,519	0.31	0
NHI ownership	Head of household is not a member of NHI	25,114,341		35.83	26,856,398		37.59	22,032,519		30.27
	Head of household is a member of NHI	44,986,912		64.17	44,581,269	62.41		50,759,000		69.73
Private health insurance ownership	Household does not have private health insurance	66,837,063		95.34	68,381,939	95.72		69,908,963		96.04
	Household has private health insurance	3,264,190		4.66	3,055,728		4.28	2,882,556		3.96
Insurance ownership	No health insurance	22,716,338		32.41	24,690,896		34.56	19,984,421		27.45
	NHI	44,120,725		62.94	43,691,043		61.16	49,924,542		68.59
	Private health insurance	2,398,003		3.42	2,165,502		3.03	2,048,098		2.81
	NHI and private health insurance	866,187		1.24	890,226		1.25	834,458		1.15
Area of household residence	Rural	31,747,219		45.29	31,414,505		43.97	32,019,313		43.99
	Urban	38,354,034		54.71	40,023,162		56.03	40,772,206		56.01

Note: NHI = National Health Insurance

Table 3. Logistics Regression Analysis Results

Logistic regression of private health insurance ownership		2018		2019		2020		all	
		Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Age (years)		0.0338	0.0007	0.0305	0.0007	0.0145	0.0007	0.0203	0.0004
Age_sq (years^2)		-0.00058	7.33E-06	-0.00049	6.90E-06	-0.00045	7.51E-06	-0.00045	4.15E-06
Sex	Base: Female								
	Male	0.2330	0.0041	0.1114	0.0038	0.2589	0.0042	0.2037	0.0023
Education	Base: Uneducated								
	Graduated from elementary school or equivalent	0.4248	0.0126	0.6899	0.0154	0.1327	0.0167	0.4468	0.0084
	Graduated from junior high school/equivalent	0.3848	0.0130	0.7977	0.0157	0.4374	0.0169	0.5540	0.0086
	Graduated from senior high school/equivalent	0.9508	0.0126	1.2873	0.0154	0.8647	0.0166	1.0497	0.0084
	Graduated from university or equivalent	1.2775	0.0128	1.5881	0.0155	1.4064	0.0167	1.4437	0.0085
Economic status	Per capita expenditure (ln)	1.3292	0.0018	1.3400	0.0018	1.3950	0.0019	1.3458	0.0011
Employment status	Base: Unemployed								
	Extractive sector	0.4759	0.0055	0.4531	0.0055	0.8249	0.0061	0.5691	0.0033
	Manufacturing sector	1.0486	0.0051	0.9925	0.0049	1.2925	0.0056	1.0997	0.0030
	Service sector	-0.0040	0.0047	0.0739	0.0045	0.2780	0.0052	0.1051	0.0028
Marital status	Base: Single								
	Married	0.6430	0.0064	0.4608	0.0057	0.7653	0.0058	0.6771	0,0034
Number of family members	Base: Household members ≤4								
	Household members > 4	0.2644	0.0028	0.1985	0.0029	0.3084	0.0028	0.2839	0.0016
Number of children under five years old	Base: No children under five in the household								
	At least 1 child under five in the household	0.2620	0.0028	0.2637	0.0029	-0.0620	0.0026	0.1192	0.0015
Area of residence	Base: Rural area (village)								
	Urban	0.5448	0.0033	0.6835	0.0035	0.4499	0.0035	0.5636	0.0020

Note: All variables are significant with a p-value<0.001

The logistic regression equation obtained, used to estimate the opportunity for private insurance ownership for NHI members with certain characteristics according to the variables above. The coefficient sign indicates the magnitude of the probability of a category, whereas a positive sign indicates the probability of a category is greater than the comparison category. On the other hand, a negative coefficient sign means that the probability of the category is smaller than the comparison category. Base variable use as comparation variable.

The equation above shows the intercept value = -25.4885, this means that when all independent variables are 0, namely the ownership of additional private insurance for NHI members, namely women who live in the village, uneducated people, do not work, have never been married, family members less than four, and don't have children under five. The accuracy of the logistic regression model in predicting empirical data is seen in the classification table output, which is shown in the overall percentage value of 18 percent, meaning that the variation in the rate of additional private insurance ownership among NHI members is only 18 percent determined by the overall predictor. This means that 82% of the additional private insurance ownership rate in NHI member households is determined by factors other than the analyzed predictors. From table 3, the odds ratio value is indicated by the magnitude of the Exp(B) named coefficient value that it can be explained as below:

Age

The older the household heads tend to have private insurance coverage until 0.145 times less. The decline in health quality is getting lower with age.

Sex

Male household head participants tend to have private insurance coverage 2.3 times greater than female participants in 2018; 1.1 times bigger than the female in 2019; 2.6 times greater than females in 2020. It shows that male household heads tend to have insurance coverage. On the whole, male private insurance ownership is 2.03 times greater than the female.

Education Level

In 2018, the uneducated heads of households, the participants of household heads with elementary school education tended for private insurance coverage to be 4.2 times greater; participants of household heads with a junior high school education tend for private insurance coverage to be 3.8 times greater; participants of household heads with senior high school education tend to have private insurance coverage to be 9.5 times greater. On the whole, participants of household heads with higher education tend to have private insurance coverage 1.3 times greater than participants of uneducated household heads.

In 2019, participants of household heads with elementary school education tend to have private insurance coverage to be 6.9 times greater; participants of household heads with a junior high school education tend to have private insurance coverage to be 7.9

times greater; participants of household heads who have a senior high school education tend to have private insurance coverage to be 1.3 times greater than those of the uneducated household heads. Participants of household heads with higher education tend to have private insurance coverage 1.6 times greater than participants of uneducated household heads.

In 2020, participants of household heads with elementary school education tend to have private insurance coverage to be 1.3 times greater than those of uneducated household heads. Participants of household heads who have a junior high school education tend to have private insurance coverage to be 4.4 times greater; participants of household heads with senior high school education tend to have private insurance coverage to be 0.8647 times greater; participants of household heads with higher education tend to have private insurance coverage 1.4 times greater than the uneducated household heads.

By three years analysis, participants of household heads with elementary school education tend to have private insurance coverage to be 1.3 times greater than those of the uneducated household heads. Participants of household heads who have a junior high school education tend to have private insurance coverage to be 4.4 times greater. Participants of household heads with senior high school education tend to have private insurance coverage to be 8.6 times greater. Participants of household heads with higher education tend to have private insurance coverage 1.4 times greater than participants of the uneducated household heads.

Economic Status

In 2018 the household head participants tend to have private insurance coverage to be 1.3 times greater related to per capita expenditure. In 2019, participants of household heads related to per capita expenditure tend to have private insurance coverage to be 1.3400 times greater. In 2018 the household head participants related to per capita expenditure tend to have private insurance coverage to be 1.3450 times greater. In 2018, 2019, and 2020, household head participants related to per capita expenditure tend to have private insurance coverage to be 1.3 times greater.

Occupation

In 2018 the household head participants in the agriculture/mining sector tend to have private insurance coverage to be 4.8 times greater than those who are unemployed. Participants of household heads in the manufacturing sector tend to have private insurance coverage 1.05 times greater than those who are unemployed. Participants of household heads in the service sector tend to have private insurance coverage -0.0040 times less than those who are unemployed. In 2019, household head participants in the agriculture/mining sector tend to have private insurance coverage to be 4.5 times greater than those who are unemployed. Participants of household heads in the manufacturing sector tend to have private insurance coverage 9.9 times greater than those who are unemployed. Participants of household heads in the service sector tend to have private insurance coverage to be 0.7 times less than those who are unemployed. In 2020, household heads in the agriculture/mining

sector tend to have private insurance coverage to be 8.2 times greater than those who are unemployed. Participants of household heads in the manufacturing sector tend to have private insurance coverage 1.3 times greater than those who are unemployed. Participants of household heads in the service sector tend to have private insurance coverage to be 2.8 times greater than those who are unemployed. In 2018, 2019, and 2020, household heads in the agriculture/mining sector tend to have private insurance coverage to be 5.7 times greater than those who are unemployed. Participants of household heads in the Manufacturing Sector tend to have private insurance coverage 1.1 times greater than those who are unemployed. Participants of household heads in the Service Sector tend to have private insurance coverage 1.05 times greater than those who are unemployed. Thus, the results of this study indicate that the tendency of working status greatly affects the private insurance guarantee compared to those who are unemployed.

Marital Status

In 2018, the household head with single status tend to have private insurance coverage to be 6.4 times greater. In 2019, household head participants with married status tend to have private insurance coverage to be 4.6 times greater than those who are single. In 2020, household head participants with married status tend to have private insurance coverage to be 7.6 times greater than those who are single. In 2018, 2019, and 2020, participants of the household head with married status tend to have private insurance coverage to be 6.7 times greater than those who have never been married.

Status in the household

In 2018, the household head participants with more than four members of family tend to have private insurance coverage to be 2.6 times greater than the number of family members less than four members of family. In 2019, the participants of the household head with family members more than four (>4) tend to have private insurance coverage to be 1.9 times greater than the household participants with family members less than four (<4). In 2020, household head participants with family members >4 tend to have private insurance coverage to be 3.08 times greater than the household participants with family members <4. In 2018, 2019, and 2020, the household head participants with family members >4 tend to have private insurance coverage to be 2.8 times greater than the household with family members <4. Thus, the results of this study indicate that the tendency of the head of the household to have <4 family members is smaller in terms of private insurance ownership.

In 2018, for the household head participant with one toddler, tend to have private insurance coverage was 2.6 times greater than that of not having a toddler. In 2019, for household head participants with one child under five, the tendency for private insurance coverage was 2.6 times greater than that of not having a child under five. In 2020, for household head participants with one child under five, the tendency for private insurance coverage is -0.6 times smaller than that without having a toddler. In 2018, 2019, and 2020, for household head participants with one child under five, the tendency for private

insurance coverage was 1.2 times greater than that without having a toddler.

Residence

In 2018, household heads living in urban locations tend to have private insurance coverage to be 5.4 times greater than those living in rural locations. In 2019, household heads living in urban locations tend to have private insurance coverage to be 6.8 times greater than those living in rural locations. In 2020, household heads living in urban locations tend to have private insurance coverage to be 4.5 times greater than those living in rural locations. In 2018, 2019, and 2020, household heads living in urban locations tend to have private insurance coverage to be 5.6 times greater than those living in rural locations.

DISCUSSION

This study implied that the older a person is, the tendency to have health insurance more than the younger. This result was in line with a study conducted by Shao, *et al* (2022). [10] The older someone, the more they will be aware of health insurance.[10,11] People in the age groups of 40–44 years and 45–49 years had 11% and 8% higher likelihood of having a plan respectively.[10]

Participants of household heads with higher education tend to have private insurance coverage 1.4 times greater than participants of uneducated household heads. It showed that education plays an important role, it can enlighten individuals about the importance of health insurance coverage.[13] Education also helps individuals make

informed choices about health issues, including purchasing health insurance to avoid huge health expenses when they were ill. People with higher education have a higher view of the need to have health insurance to deal with unexpected health problems, while people with low education are not aware of the level of threat caused by unforeseen health problems.[10,12]

Household head participants with higher economic status (seen from the level of expenditure) tend to have private insurance coverage to be 1.3 times greater. Thus, the results of this study indicate that the tendency of per capita spending is very influential in having Private Insurance Guarantees. Income is an important determinant of both the demand for health services and the decision to have health insurance.[7] Some studies stated that the important factors affecting general insurance was income.[10,12,15]

Based on the occupation, the tendency of working status greatly affects the private insurance guarantee compared to those who are unemployed. Participation in the formal sector health insurance was dominated by workers in the public sector (government employees and armed forces) while health insurance participation in the informal sector was dominated by farmers, and fishermen, and the like.[16,17]

In matter of marital status the tendency for people who are single are smaller in terms of private insurance ownership. The status of living together is likely to be greater than that of those who are divorced/dead.[16] Married women are more likely to have private coverage than unmarried women in almost all income groups.[10,11]

Household head participants with one child under five have the tendency for private insurance coverage was 1.2 times greater than that without having one. Thus, the results of this study indicate that the tendency of the head of the household to not have one child under five is smaller in terms of private insurance ownership. Research in Bangladesh found that parents may have less capacity to pay premium health insurance than other family members.[16] Health insurance schemes sometimes view a woman as a wife or mother rather than as an individual or worker even though the individual's right to social insurance is very important. If women's access to social insurance or health insurance comes through their husbands, this can protect the family but not women's autonomy, and neither can children[7].

The households who had been staying in urban locations tend to have private insurance coverage greater than those living in rural locations. Thus, the residential locations in the village is smaller in terms of private insurance ownership. The reason informal sector workers in rural areas have a lower chance of having health insurance compared to those living in urban areas is that in general health insurance companies are mostly found in urban areas and these companies have adjusted the health insurance of their products with the urban people.[17] The difficulty of access and the high cost of transportation also make health insurance less valuable because it is difficult to use, so informal sector workers in the village do not feel the need to have health insurance.[18]

CONCLUSION

There was a relationship between age, sex, education level, economic status, occupation, marital status, status in the household, and place of residence with the private ownership status. Meanwhile, the private insurance ownership distribution was dominance with household status without private insurance. The government should understand this situation and find the best solution to strengthen health insurance ecosystem in Indonesia. This can be used as information and evaluation to formulate a strategy for strengthening private insurance. The health economic sector should use this information to expand the target market for private insurance.

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ABOUT THE AUTHOR

M. Arief Rosyid Hasan, was born on 4th September 1986, in Ujung Pandang, South Sulawesi. He is an Independent Commissioner of Bank Syariah Indonesia (BSI), General Chair of the Islamic Student Association Executive Board (PB HMI, 2003-2005), and Member of the Youth Services Working Group, Indonesian Ministry of Youth and Sports (Pokja Pelayanan Kepemudaan, Kemenpora RI, since 2019).

Arief is one of the "70 Influential Figures in Indonesia" (70 Tokoh Berpengaruh di Indonesia) according to *Men's Obsession* (2015). His consistency in developing the sharia economic ecosystem was included in the "25 Young Figures of Initiative" (25 Tokoh Muda Inisiatif *Republika*, 2020). Celebrating the Best Sharia Economic Activist Award (Tokoh Penggiat Ekonomi Syariah Terbaik) from Bank Indonesia (2021). Become "10 Inspirational Young Leaders in the Business, Economics and Entrepreneurship Category" (10 Pemimpin Muda Inspiratif Kategori Bisnis, Ekonomi, dan Kewirausahaan) according to TOYP JCI Indonesia (2022). Economic Driver and MSME version of *Kabar Makassar* Award (Penggerak Ekonomi dan UMKM versi Kabar Makassar Award, 2023).

Graduated bachelor's degree (drg.) from the Faculty of Dentistry, Hasanuddin University (2010), master's degree (M.KM, 2014) and obtained a Doctorate in Public Health Sciences, University of Indonesia (20 July 2022). Defended a dissertation entitled "Formulation of Additional Health Insurance Policy for National Health Insurance Participants" (Rumusan Kebijakan Asuransi Kesehatan Tambahan Peserta Jaminan Kesehatan Nasional) with "cum laude" predicate.

Youth activist figure, mosque organizer and sharia economy. Active in a number of organizations: Chair of the Islamic Economic Development Council KAHMI National Assembly (MN KAHMI), Chair of the Youth Committee for the Sharia Economic Community (PP MES), Deputy Secretary General of BPP HIPMI, Deputy Head of the Islamic Economics Agency of KADIN, Management of the Institute for Disaster Management and Climate Change-*Nahdlatul Ulama* Executive Board (LPBI-PBNU), Supervisory Board of the National Presidium of Indonesian Football Supporters (PN-SSI).

Become the initiator of collaboration for young activists: Merial Institute, Suropati Syndicate, Aktivis Milenial, Menteng Muslim Center, Merial Health, Indonesian Islamic Youth Economic Forum (ISYEF), Millennial Fest, Muktamar Pemuda Islam (Islamic Youth Conference), Rabu Hijrah, Millennial Spokesperson (Jubir Millennial) TKN Jokowi-Ma'ruf Amin, KitaSatu, Milenial Ketuk Pintu (Millennials Knocking on Doors), and Milenial Lintas Rumah Ibadah (Millennials Crossing Houses of Worship).

BNPB Covid-19 Task Force Volunteers (Relawan Gugus Tugas Covid-19 BNPB) and consolidating youth from across organizations through the Bangkit dari Masjid (the Rise from Mosque Movement), Kurir Kebaikan (Kindness Couriers), Relawan Milenial (Millennial Volunteers), Volunteer Promotor Covid-19, and Nakke Peduli Covid (Nakke Cares for Covid).

Established a Millennial Activist Association and knit Islamic youth knots in an effort to encourage the revival of the sharia economy and finance through Rabu Hijrah (Hijrah Wednesday), Bangkit dari Masjid (Rise from the Mosque), Muktamar Pemuda Islam (Islamic Youth Conference), Koperasi Organisasi Pemuda Islam (Organizational Cooperatives Islamic Youth), Masyarakat Ekonomi Syariah (Sharia Economic Society) dan Inisiatif Ekonomi Masjid (Mosque Economic Initiative).

Since he was a student, Arief has been active in writing in a number of mass media, journals and writing books. The publication of his work as a writer, contributor, and editor has reached 29 books from 2019-2022.

During 2013-2016 published 6 books. His first book *7 Plantform HMI for the People* (*7 Plantform HMI untuk Rakyat*, 2013). Arranged as a strategic framework as a candidate for Chairman of PB HMI in the 28th Congress in Jakarta in 2013.

Elected as General Chairperson of PB HMI for the 2013-2015 period, published two of his books *Believe in Democracy Until* (*Yakin Demokrasi Sampai*, 2013), *HMI for the People: Building Villages,*

Building the Nation (*HMI untuk Rakyat: Membangun Desa, Membangun Bangsa,* 2014).

Welcoming HMI's 68th Anniversary in 2015, published 2 books *Recapturing Optimism; HMI and the Future of Indonesia* (*Merebut Optimisme; HMI dan Masa Depan Indonesia)* and *Picking a Small Note on the Founding of the Nation* (*Memetik Keteladanan Catatan Kecil Tentang Pendiri Bangsa*). This last book comes from Arief's comments when he attended the School of Thought for the Founders of the Nation organized by the Megawati Institute (June-December 2011).

Choosing the Future; Understanding HMI in the Middle of Change (*Memilih Masa Depan; Memaknai HMI di Tengah Perubahan,* 2016). Being the closing period of his leadership at PB HMI and a gift "to live a new life".

In 2017-2018, 2 books were published. *The Winding Road to the National Health Insurance Policy* (*Jalan Liku Kebijakan Jaminan Kesehatan Nasional,* 2017) is his thesis at the University of Indonesia.

Then the idea was to write a book with young leaders about the inspiration of Vice President Jusuf Kalla in Mr. JK and Young People's book (*Pak JK dan Anak Muda,* 2018).

In 2019, 6 books were published. Three books on the progress of making mosques prosperous and driving the mosque's economy. *Pak JK's books: Back to the Mosque* (*Pak JK: Kembali ke Masjid*), *Millennial Mosque: Millennial Generation Prospering* and *Prospering the Mosque* (*Masjid Milenial: Generasi Milenial Memakmurkan dan Dimakmurkan Masjid*), *and Pak Syaf: Four Faces*

of Police Commissioner General (Purn.) Syafruddin (*Pak Syaf: Empat Wajah Komisaris Jenderal Polisi (Purn.) Syafruddin*).

Followed by two books that record his efforts to encourage youth mainstreaming, namely *Serving the Generation: Millennial Collaboration Earns the Bonuses of Demography* (*Melayani Generasi: Kolaborasi Milenial Memetik Bonus Demografi*) and *Identity: Youth Serving the People and the Nation* (*Identitas Kita: Pemuda Pengabdi Umat dan Bangsa*).

Becoming the Spokesperson for TKN Jokowi-Ma'ruf Amin, Arief gathered researchers and published the book *Indonesia Post Java: Results of the Jokowi Research Symposium 1, 2, and 3* (*Indonesia Pasca Jawa: Hasil-hasil Simposium Peneliti Jokowi*, 2019).

In 2020, published 4 books. Starting with reviewing the work of the Minister of BUMN, namely *Akhlak BUMN: Erick Thohir's Leadership Message* (*Akhlak BUMN: Pesan Kepemimpinan Erick Thohir*).

When the Covid-19 pandemic hit Indonesia and the world, Arief consolidated youth across organizations to play an active role and make concrete contributions. His work is recorded in two books *Millennial Volunteers Against Corona* (*Relawan Milenial Lawan Corona*) and *Economic Awakening of the Ummah: Youth as the Key* (*Kebangkitan Ekonomi Umat: Pemuda Sebagai Kunci*).

Plus with *Millennials Leading the Way; Arief Rosyid in the Eyes of Friends of Struggle* (*Milenial Memimpin; Arief Rosyid di Mata Sahabat Perjuangan,* 2020) written by his friends.

In 2021, 7 books will be published. The inspiration of a number of figures came to Arief's attention, namely Erick Thohir, Bahlil Lahadalia, and M. Lutfi. Through the book *Rise Together; Erick Thohir's Inspirational Sketches,* (*Bangkit Bersama; Sketsa Inspirasi Erick Thohir*)*; Millennials & Women; Sharing Vision with Erick Thohir* (*Milenial & Perempuan; Berbagi Visi dengan Erick Thohir*), *M. Lutfi:* and *Message for Millennials* (*M. Lutfi: Pesan untuk Milenial*), *Fighting the Ghost of the Tie: Inspiration from Bahlil Lahadalia* (*Melawan Hantu Berdasi: Inspirasi Bahlil Lahadalia*).

With love and respect for Mulyadi P. Tamsir, General Chair of PB HMI (2015-2017), who was involved in a plane crash, Arief initiated the writing and became the editor of the book *Hugged by the Sky, Memories of the Late. Mulyadi P. Tamsir* (*Dipeluk Langit, Kenangan Alm. Mulyadi P. Tamsir*).

Arief added two more works, namely *Economic Ijtihad for National Progress* (*Ijtihad Ekonomi untuk Kemajuan Bangsa*), from discussions held by the KAHMI National Assembly.

Followed by *Coffee Morning: Planting Kindness Since the Morning* (*Coffe Morning: Menanam Kebaikan Sejak Pagi*), which comes from a Newsletter which has been published regularly via the website www.ariefrosyid.id since May 2021.

In 2022, Arief will publish 4 books. *Mosque Economic Initiative* (*Inisiatif Ekonomi Masjid*), *Embracing the Nation* (*Merangkul Bangsa*), *Commitment to Sharia Economy*, and *Mosque & Community Economy* (*Masjid & Ekonomi Umat*). The four of them

reviewed the development of sharia economics in Indonesia, mosque economic initiatives, mosque youth, and the Islamic ecosystem.

In September 2023, his work will increase, namely Spiritual Ecology: Caring for the Universe, Reforming the Earth (*Ekologi Spiritual: Merawat Jagat, Mereformasi Bumi*), *Economic Stimulus and Health Security*, *Commitment to Benefits (Komitmen Kemaslahatan)*, and *Coffee Morning 3: Keep Doing, Keep Helping* (*Coffee Morning 3: Terus Berbuat, Terus Bermanfaat*).

Published simultaneously with his biography, M. Arief Rosyid Hasan; Commitment to Caring for Kindness (*M. Arief Rosyid Hasan; Komitmen Merawat Kebaikan*)

Buku jejak langkah menapak perjalanan Arief Rosyid sebagai aktivis selama hampir 20 tahun. Buku yang memperlihatkan sisi personal dari kehidupan Arief Rosyid, jatuh bangun, kegagalan, dan perjuangan apa yang dilaluinya hingga menjadi salah satu tokoh pemuda di Indonesia. Dalam buku ini, rentetan kisah masa kecil, remaja, dan dewasa akan memperlihatkan bagaiaman seorang aktivisme bertahan dari gerakan akar rumput lalu bergerak senyap hingga menginisiasi berbagai gerakan kepemudaan tingkat nasional.

Dr. drg. M. Arief Rosyid Hasan, M.KM. adalah Komisaris Independen Bank Syariah Indonesia (BSI). Ketua Umum PB HMI (2013-2015). "70 Tokoh Berpengaruh di Indonesia" versi Men's Obsession (2015). Tokoh aktivis pemuda, penggerak masjid, dan ekonomi syariah. Masuk dalam "25 Tokoh Muda Inisiatif Republika" (2020). Tokoh Penggiat Ekonomi Syariah Terbaik versi Bank Indonesia (2021). "10 Pemimpin Muda Inspiratif Kategori Bisnis, Ekonomi, dan Kewirausahaan" versi TOYP JCI Indonesia (2022). Penggerak Ekonomi dan UMKM versi Kabar Makassar Award (2023).

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