RISK AVERSION AND LABOR BEHAVIOR DETERMINATION FACTORS ON INSURANCE PRODUCTS

Affandi [1]
[1] Universitas Teuku Umar, Email : affandi@utu.ac.id

Abstract

Purpose—The purpose of this article is to try to look at the risk aversion determination factors that encourage the behavior of the educated workforce using or not using insurance products. The indicators used are income, education level, number of Dependents, Gender, employment status, place of residence, generation group, insurance product information

Method—The analysis model used is probit regression. Primary data obtained through a survey of 111 respondents and only 93 educated workers in Aceh Province met the specifications and filled in completely.

Research Results—The results show that only employment status has a positive and significant effect on labor preferences for insurance products, while other factors are not significant.

Limitations — This research is still limited in samples, factors that are used as objects of research and less in-depth about the role of information affecting people's behavior. This is a suggestion for researchers to further conduct more comprehensive research.

Practical Implications—The results of this study can be used as a reference for the government and companies must synergize with each other in planning insurance programs. High-income workers are expected to join insurance programs, mutual care is an important social capital to maintain the economy. The government or insurance company must increase the socialization of information on the importance of insurance programs to deal with the uncertainty of future risks.

INTRODUCTION

The stability of a region's economy is a must that must be maintained by the government. During the Covid pandemic era, the government has an obligation to protect its people from the risks that come from the impact of the Covid pandemic, especially from the workforce. One way the government maintains its workforce to avoid risks that will occur in the future is to register requiring all workers and even all their people to register themselves in insurance products. The goal is to reduce the burden that will be borne by the workforce to the risks that occur in the future. The government has two to make its workforce to register for insurance, namely requiring it to require in labor administration or encourage workers to have the desired insurance according to the needs of their respective workers. Auray et al., (2019) It found that delaying mandating overall income with the aim of paying asuration, could increase the overall job search rate and could lower the unemployment rate in both stationary economies of established conditions. Next Jang et al., (2020) The stated stated that two-dimensional market incompleteness caused by borrowing constraints and the risk of forced unemployment (layoffs) significantly affects consumption, investment, and optimal individual retirement strategies in the future.

Regarding the need to register for insurance in accordance with labor preferences, Pindyck & Rubinfeld, (2013) stated that people differ in their willingness to bear the burden of risk. Some avoid risk, some like risk, and some are risk neutral. A risk-averse individual prefers a given income to earn the same income when at risk (Such a person has a diminishing utility of marginal income). Risk aversion is the most common attitude towards risk. To see that most people avoid risk most of the time, note that most people not only buy life insurance, health insurance, and auto insurance, but also look for jobs with relatively stable wages. Individual risk aversion depends on the nature of the risk and the income of the person, the greater the variability of income, the more people are willing to pay to avoid risky situations. Hairault et al., (2012) stated that taxes on pension funds allow workers who are almost retired to facilitate their consumption during non-employment. The presence of pension insurance premiums makes the workforce that is disrupting can still consume at the same level of utility while working.

During the uncertainty of the Covid pandemic, the government must actually encourage workers to register their people for insurance products, by socializing the benefits obtained in the future. Mitman & Rabinovich, (2021) explained that

the behavior of the seekers depends on choosing the benefits of insurance in the future as well as the future conditions of the labor market. Governments with policy powers can take advantage of intervention by suggesting insurance, can by way of incentivizing or self-initiative so that the labor market recovers from the crisis.. Andersen et al., (2018) applying employment requirements for eligibility to obtain benefits allows for higher levels of benefits and longer duration, and increased labor market performance. As the need for insurance increases due to higher risk aversion, job requirements become more difficult, but conversely as job requirements become easier without environmental insurance becomes more risky.

The willingness of labor to pay for insurance products is also influenced by the information it gets. Some of the workforce has not even been reluctant to join insurance in maintaining its utilities and future incomes that contain elements of uncertainty. Duman, (2010) conducted research in Germany and the USA on the demand for social insurance programs, particularly unemployment insurance, finding that unemployment rates and income are key factors that determine public support for social insurance. This explains that the higher the income than the workforce, the more willing the workforce is to buy insurance products assuming that they see the potential for narrower employment opportunities in the future. The risk opportunities of each workforce depend heavily on their status or job position. In addition, the level of education and skills of the workforce affect the consumption of insurance products. The company will require workers who have a higher level of education and skills to require the use of the required insurance. In order to maintain the assets and profits generated by the workforce.

In addition to the economic factors that comprise income, there are also socio-cultural factors that influence a person to make decisions. Isengard, (2003) the risk of individuals not having an income is not the same in every young workforce, but rather depends on various socioeconomic and structural factors such as gender, education, nationality and region of residence. Low levels of education make the labor status of an vulnerable individual back to unemployment. When it becomes unemployed the role of insurance greatly benefits the individual. Like Fu & Liu, (2019) states that the unemployed who are less educated are more responsive to the increased benefits of insurance, so the level of education is also one of the factors that affect the use of insurance products, if the workforce knows the benefits obtained when there is a crisis in maintaining the utility of welfare.

In addition Nicholson & Snyder, (2012) also stated that the level of information will sometimes differ among market transaction participants. Thus affecting the behavior of market participants in transacting based on the information obtained. Information is a valuable economic resource. The state preference approach allows decision-making under uncertainty to be approached within the framework of a familiar theory of choice. This approach is very useful for looking at emerging issues in the information economy. Information is valuable because it allows individuals to make better decisions in uncertain situations. Information can be invaluable when individuals have flexibility in their decision-making. So to see information on labor behavior in an effort to buy insurance products can be explained the theory of planned behavior conveyed by Aziz & Chok, (2013) state that there are three main components that influence human attitudes to behave. These components are attitudes, subjective norms, and behavioral control. Planned behavior theory provides guidelines for predicting human social behavior towards a phenomenon. Furthermore, it can be divided over the awareness of the product to be purchased, the product does not conflict with the norms and beliefs, product quality, promotion and product brand.

Empirical evidence examined by Devos & Rahman, (2018) on companies saving money to manage employees' perceptions of the risks of becoming unemployed could result in layoffs, found the results of an economically and statistically significant relationship between decreasing cash holdings and following increased benefits of unemployment insurance or joining insurance. Insurance products have a function to overcome the increase in income in the future so that in the event of a crisis of expenditure on food and non-food is not reduced due to the increased costs of treatment, research conducted in Ghana by Garcia-Mandicó et al., (2021) stated a considerable reduction in medical spending, preventing households from cutting non-food consumption and proving that insurance schemes reduce the likelihood of households experiencing health shocks, so as not to employ children while in school, so health insurance schemes are one way to avoid the risks of expensive health care mechanisms.

The uncertainty factor of the pandemic also caused some losses for individuals or governments in overcoming the impact that occurred. As explained by Gangopadhyaya et al., (2020) research that examines the impact of covid on health insurance coverage sponsored by the Company based on selected characteristics, namely racial groups, age groups, gender, education level, the presence or absence of children in the household and the presence of health

centers (hospitals / health centers) in the area. The results showed that as the COVID-19 recession extended into the summer and millions of adults remained unemployed without a job, the most disadvantaged were concentrated among them the male sex, Hispanic adults, younger adults, and adults who had never been to college. At the federal level, expanded subsidies for market coverage and restoration of funding for capital access and enrollment assistance could help more unemployed adults pay premiums and navigate their coverage options. At the state level, additional Medicaid expansions could prevent adults from falling into the aid gap, where they don't qualify for Medicaid subsidies. The study of the views of the people of Aceh Province on insurance according to Jalaluddin, (2019) states that the people of Aceh respond relatively positively to insurance, only a small percentage requires continuous education according to their character and knowledge, namely the approach of psychological factors, religion, good customs. Insurance institutions are better prepared, more professional and the readiness of digital soft skills and hard skills is adequate. The explanation emphasizes that complete information helps workers in Aceh Province can join insurance products to guard against risks that will occur in the future which is uncertain.

Based on the explanation above raises the research question, namely: "is there a relationship between economic factors, education and willingness to pay based on information about insurance products by labor in times of uncertainty of the Covid pandemic?". The question aims to look at the relationship between economic factors, education and willingness to pay based on information about insurance products by labor in times of uncertainty of the Covid pandemic. Furthermore, this paper is compiled on the part that is methodology and data (part 2), research results (part 3) and discussion (part 4) and continued by conclusions.

RESEARCH METHODS

This study examined the relationship between economic factors, education and willingness to pay based on information about insurance products by the workforce in times of uncertainty of the Covid pandemic. The scope of this study looked at the educated workforce in Aceh Province. The analysis model used is probit regression, because according to Duman, (2010) bound variables have ordinal values. In addition, Wulandari, (2010) probit regression analysis is an analysis used to see the relationship between qualitative dependent variables and

independent variables that are qualitative quantitative. The probit model uses the Normal Cumulative Distribution Function (CDF) to describe the function of the equation. Furthermore, the maximum likelihood method is one of the parameter assessment methods that can be used to estimate the parameters of a model known for its distribution. The maximum likelihood method is a method that maximizes the likelihood function. Before testing the relationship between variables, the Goodness of Fit Evaluation for Binary Specification Test is carried out on the model formed (Hosmer-Lemeshow Tests) and Expectation-Prediction Evaluation for Binary Specification to see the accuracy of the predictor variable in the model in the form. Statistical testing is performed to determine whether the independent variables contained in the model have a real (significant) relationship with the dependent variable. This test is carried out in the form of partial tests and simultaneous tests.

The data source in this study is the primary data obtained from a survey through google form of 111 respondents and only 93 educated workers in Aceh Province who meet the specifications and fill in completely. (The respondents were divided into two types of categories, namely 46 people had joined insurance products and 47 people never joined insurance products. The sampling technique used is non probability sampling with incidental sampling, which is a technique of determining samples based on chance of meeting with researchers can be used as a sample, when viewed by people who happen to be encountered it is suitable as a data source (Sugiyono, 2017). Dependent and independent variables are based on direct questions about preferences about insurance. Risk aversion can be represented by joining or not the workforce in insurance products. so that the dependent variable is that the labor that joins the insurance is given a value of 1, while the workforce who do not join the insurance product is given a value of 0. Independent Variables consist of income level, level of education, and Information that affects behavior is awareness of the product to be purchased, the product does not conflict with norms and beliefs, product quality, promotion and product brand. There are several control variables used, namely gender, location of residence, and employment status. Gender elements are also included in the analysis, According to Duman, (2010) women workers may demand more protection than men, because women's positions are generally more vulnerable in the labor market. Employment status also makes the need for insurance products also different.

RESULTS AND DISCUSSION
Descriptive of Educated Labor towards Insurance in Aceh Province

In the first step, descriptive analysis was carried out to find out the characteristics of the educated workforce for insurance products in Aceh Province who were respondents in this study. Respondents in this study were categorized for two types, namely workers who had used insurance products and workers who had never used insurance products. The following table describes the respondents of this study:

Table 1. Number of Labor Respondents to Insurance Products

Category	Number of Respondents	Percentage
Not Joining	47	50,54
Joining	46	49,46
Total	93	100

Source: Respondent Data, 2021

Respondents of the educated workforce who did not join amounted to 50.54 or as many as 47 respondents, while the educated workforce who joined amounted to 49.46 or as many as 46 respondents. Before conducting a probit regression analysis to find out the behavioral factors of educated labor using insurance products in avoiding risk, a feasibility test was conducted with Hosmer Lemeshow test to find out whether the model chosen in this study was appropriate. Based on the results of the Hosmer Lemeshow test found the following results:

Table 2. *Goodness-of-Fit Evaluation test (Andrews and Hosmer-Lemeshow Tests)*

	Quantile of Risk		Dep=0		Dep=1		Total	H-L
	Low	High	Actual	Expect	Actual	Expect	Obs	Value
1	0.0070	0.0578	9	8.70502	0	0.29498	9	0.30498
2	0.0583	0.1274	8	8.18239	1	0.81761	9	0.04475
3	0.1367	0.2847	7	7.17227	2	1.82773	9	0.02037
4	0.2850	0.4683	7	6.08040	3	3.91960	10	0.35483
5	0.4871	0.5802	2	4.14855	7	4.85145	9	2.06427
6	0.5825	0.6435	4	3.50485	5	5.49515	9	0.11457
7	0.6455	0.6787	3	3.39605	7	6.60395	10	0.06994

8	0.6808	0.7430	2	2.68803	7	6.31197	9 0.25111
9	0.7597	0.8256	4	1.84580	5	7.15420	9 3.16278
10	0.8317	0.8891	1	1.41736	9	8.58264	10 0.14319
		Total	47	47.1407	46	45.8593	93 6.53080

H-L Statistic	6.5308	Prob. Chi-Sq(8)	0.5880
Andrews Statistic	14.5236	Prob. Chi-Sq(10)	0.1504

Sumber : Eviews &, 2021

Based on the results of the Hosmer Lemeshow test found prob numbers. Chi-Sq(8) of 0.5880 is greater than the α value of $0.58 > 0.05$, so there is no difference between the prediction of the probit regression model and the observation data. This means that the model is able to be accepted because the model is in accordance with the results of its observations. Furthermore, the Expectation-Prediction Evaluation Test is carried out in the following table:

Table 3. *Uji Expectation-Prediction Evaluation*

	Estimated Equation			Constant Probability		
	Dep=0	Dep=1	Total	Dep=0	Dep=1	Total
P(Dep=1)<=C	32	6	38	47	46	93
P(Dep=1)>C	15	40	55	0	0	0
Total	47	46	93	47	46	93
Correct	32	40	72	47	0	47
% Correct	68.09	86.96	77.42	100.00	0.00	50.54
% Incorrect	31.91	13.04	22.58	0.00	100.00	49.46
Total Gain*	-31.91	86.96	26.88			
Percent Gain**	NA	86.96	54.35			

	Estimated Equation			Constant Probability		
	Dep=0	Dep=1	Total	Dep=0	Dep=1	Total

E(# of Dep=0)	31.01	16.13	47.14	23.75	23.25		47.00
E(# of Dep=1)	15.99	29.87	45.86	23.25	22.75		46.00
Total	47.00	46.00	93.00	47.00	46.00		93.00
Correct	31.01	29.87	60.87	23.75	22.75		46.51
% Correct	65.97	64.93	65.45	50.54	49.46		50.01
% Incorrect	34.03	35.07	34.55	49.46	50.54		49.99
Total Gain*	15.43	15.46	15.45				
Percent Gain**	31.20	30.60	30.90				

Sumber : Eviews 7, 2021

Based on the results of the Expectation Prediction Evaluation test, the total estimated equation correct was 77.42 percent and incorrect was 22.58 percent. Based on the calculations obtained showed that the probit regression model has the ability to correctly classify observations at 77.42%. This shows that the probit regression model formed is very good. Next perform a probit regression analysis with the aim of seeing the influence of each free variable on the response variable. The results of the regression can be seen in Table 4 below.

Table 4. Regression Method Results: ML - Binary Probit

Dependent Variabel: Bergabung Atau tidak pada Produk Asuransi

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-3.796832	1.557475	-2.437813	0.0148
Pendapatan	-0.003262	0.156209	-0.020884	0.9833
Tingkat Pendidikan	0.118019	0.196845	0.599554	0.5488
Jumlah Tanggungan	0.046126	0.133764	0.344833	0.7302
Jenis Kelamin	0.285071	0.380947	0.748322	0.4543
Pekerjaan	0.432793	0.181001	2.391112	0.0168
Lokasi Tempat Tinggal	0.483192	0.337441	1.431931	0.1522

Generasi	0.064599	0.416729	0.155014	0.8768
Informasi Produk Asuransi	0.010600	0.008455	1.253570	0.2100

McFadden R-squared	0.256617	Mean dependent var	0.494624
S.D. dependent var	0.502681	S.E. of regression	0.438648
Akaike info criterion	1.224010	Sum squared resid	16.16264
Schwarz criterion	1.469100	Log likelihood	-47.91644
Hannan-Quinn criter.	1.322970	Deviance	95.83289
Restr. deviance	128.9146	Restr. log likelihood	-64.45731
LR statistic	33.08174	Avg. log likelihood	-0.515231
Prob(LR statistic)	0.000060		

Obs with Dep=0	47	Total obs	93
Obs with Dep=1	46		

Sumber : Eviews, 2021

Based on the above results, the first step is to partially test the parameters with the prob < α value, namely Prob < 0.05. In table 4. Only variable types of work significantly influence an individual educated workforce to join an insurance product due to the value of the prob. 0.01 < 0.05. While the variable income, education level, number of dependents, gender, location of residence, generation group and insurance product information partially do not significantly affect dependent variables. The next step is to test the parameters simultaneously, namely by comparing the Prob value (LR Statistic) with the value of α. If the Prob (LR Statistic) value < 0.05, then the independent variable is significant to the dependent variable. In this model, a Prob (LR Statistic) value of 0.00 was found, when compared to the value of α was 0.00 < 0.05, so independent variables significantly affected dependent variables in this research model.

Furthermore, in forming and interpreting from the estimation results of the probit regression model by using the regression coefficient values as follows:

$$\acute{Y} = -\,3.796832 - 0.003262\,(X_1) + 0.118019\,(X_2) + 0.046126\,(X_3) + 0.285071\,(X_4) + 0.432793\,(X_5) + 0.483192\,(X_6) + 0.064599\,(X_7) + 0.010600\,(X_8)$$

From the above model can be calculated the predicted value of the probability of each variable, by looking at table Z, the value of Z at the level of α of 0.05 seen from 2 sides found a value of Z of 1.96, so that the probability value of the respoden that falls into the category of joining or not in the insurance product is 1 - 1.96 = -0.96 or the probability is 96 percent. The interpretation of independent variables to dependent variables is as follows:

1. Income variables; When the workforce experiences an increase in income, labor opportunities do not join the insurance product with a probability of 96 percent, but statically partial is insignificant.
2. Education level variables; When the workforce experiences an increase in the level of education, the employment opportunity to join the insurance product with a probability of 96 percent, but statistically partial is not significant.
3. Gender variable; Male workers are more likely to join insurance products with a probability of 96 percent, but statistically insignificant.
4. Job Status Variable; when the workforce experiences improved employment status better then the employment opportunity joins the insurance product with a probability of 96 percent, statistically partial significant.
5. Variable location of residence; When the urban workforce then the employment opportunity joins the insurance product with a probability of 96 percent compared to those living in rural areas, but statistically partial is not significant.
6. Generation Group Variables; When the workforce came from the millennial class, namely in 1981-1996, the employment opportunity to join insurance products with a probability of 96 percent compared to Gen X and Gen Z, but statistically partial is not significant.
7. Variable insurance product information; When the workforce experiences an increase in insurance product information and its benefits, the employment opportunity joins the insurance product with a probability of 96 percent, but statistically partial is not significant.

The next stage looks at the McFadden R-squared value of 0.256617 which illustrates that the estimated model can explain the response to the workforce has used insurance products or not used by 25.66 percent. The

amount of 74.34 percent can be explained by other factors that are not included in the research model.

The data showed that there is only one significant variable that affects the educated workforce to be able to use insurance products, namely employment status. Educated workers who work in the government category of ASN (PNS and first aid) mostly use insurance products because the workforce is required by the government to use bpjs health insurance whose premiums are directly deducted from payday. The government's goal is to require all its workforce to use the insurance, so that the workforce can be protected from future risks. Li & Tian, (2020) To achieve universal health insurance coverage, many developing countries have established segmented health insurance systems, which contain separate programs for workers with formal jobs and residents without formal employment. A potential concern with segmented systems is that the establishment of non-employment-based insurance programs could lead to disincentives for companies to provide health insurance benefits to workers. As a result, the implementation of the URBMI program in China reduced the health insurance program offer from job-based companies by a statistically significant 0.94-1.29 percentage points. This crowd-out effect is stronger among domestic private companies, start-ups, and individual-owned companies. So in the face of these conditions, the government and private companies must agree to form an integrated program so that all educated workers can enjoy insurance programs to guard against the risks that will occur in the future.

Income factors seen from the coefficient show a negative value, which means that workers who have higher incomes tend to prefer to reduce the cost of paying fewer premiums or in other words prefer not to use insurance products, because the assumption is that their wealth can cover the risks that will occur in the future, but statistically insignificant. The findings are also similar to Duman's research, (2010) which stated that high-income workers favor lower transfer rates, but statisti data is not significant. The role of the government is to promote its labor insurance products from unemployment through subsidies. Altonji et al., (2020) Governments in canada and usa provide unemployment insurance benefits, by providing weekly payments of $600 during the covid pandemic. The results showed workers who received insurance premium subsidy benefits received unemployment insurance benefits and had returned to their jobs at the same utility rate before being unemployed.

At the level of education, it was found that workers who have higher education tend to be more willing to use insurance products because the risks that will be faced will greatly affect productivity. Risks faced such as layoffs or retirement, when it occurs in the period of finding a new job, the workforce can have income from the employment insurance claims fund or pension fund paid premiums while working. The findings are also similar to Duman's research, (2010) states that skill specificity has positive signs indicating that those with more specific skills are asking for greater unemployment insurance. However, the coefficient is not statistically significant.

The number of dependents shows that the more responsibilities in a family, the tendency of the head of the family will register family members to insurance, especially health insurance. In addition to the health of family members becomes the main in the family because when uncertainty occurs especially the same pandemic, all family members have the potential to get disease, if they do not join the family head insurance product will have difficulty paying the cost of coronation if the majority of family members are affected by the disease. So the more dependents, the more likely the workforce is to register themselves or their dependents to insurance products. Similarly, Bardóczy's research, (2020) states that social policies that provide more insurance to married households (have dependents) than single (have no dependents). Married couples have more options than singles to maintain health insurance coverage, collect social security benefits, and optimize savings for retirement.

The male workforce tends to choose to join insurance products, because the majority of those who are the backbone of the family are men. When the male workforce cannot work then there is no income to meet the needs of the family, then to maintain the risk while working, the male workforce registers themselves into insurance products, so that when there is a risk impact still have income from insurance to meet the needs of the family. This result is the same as Ellieroth, (2019) men have a probability of losing their jobs so they are willing to pay premiums for insurance, but married women show a labor supply response just in case in response to the threat of higher job losses experienced by their husbands in recession so that there is a need for a spouse's insurance offer.

Urban is the center of activities and activities of working people, so that labor mobility is higher in the city than in rural areas. The risk of working in urban areas is also higher than in rural areas, so it is logical that urban workers are more attractive to join in insurance products than rural areas. In addition to risk factors,

the city workforce is more likely to use insurance products also caused by facilities, facilities and infrastructure that are more supportive than rural areas. This result is the same as He et al., (2020) It was found that urban Chinese were more motivated to contribute to social health insurance due to several effects i.e. resource effects, interpretive effects, and individual learning effects all seemed to form a motivation to contribute to social health insurance. Research in Senegal by Bousmah et al., (2021) about the role of geographical factors and individual risk preferences in the absorption of health insurance by rural residents. The results showed that geographic distance prevented individuals from accessing information about health insurance schemes, and prevented those from signing up, because of the additional distance they had to travel to benefit from covered health services.

Millennials have more insurance products than Gen X and Gen Z, because millennial genes are classified as productive workers compared to Gen X who have entered retirement and Gen Z is still fresh graduates in the world of work. The results from Hedin et al., (2020) explain that millennials are the generation that makes insurance claims besides being followed by Gen X, Gen Z and Then Gen Baby Boomer. The findings in insurance product information explain that the more information obtained by the workforce, the greater the opportunity for the workforce to use insurance products, as stated Nicholson & Snyder, (2012) imperfect information or asymmetric information and moral hazard cause potential aversion selection or labor whose potential to join insurance has not joined. In addition Lin et al., (2017) that people with high financial literacy are more likely to buy life insurance as well as consult with financial advisors and deliberations with family members and friends both have a positive relationship with life insurance demand. Participant characteristics, such as age, gender, marital status, employment status, and personal income, were also major factors influencing life insurance demand. Bousmah et al., (2021) that health insurance awareness is a prerequisite for effective enrollment in community-based health insurance schemes. Next Lee, (2012) Stated that self-assessed health status increases consumers buying insurance products in Korea, resulting in adverse selection in private insurance companies and it harms the company. Korean private insurers may need to disclose loss ratios to increase transparency and strengthen potential consumer confidence in the private health insurance market. So to encourage the workforce to use insurance products, starting with increasing information and socializing the benefits of insurance programs for the future,

because by having perfect information can change labor behavior to care more about conditions in the future. Corcos et al., (2020) Recent developments about insurance reveal a shift towards consumer behavior insurance. decisions remain rational but within a broader frame of reference or information that takes into account the role of reluctance to lose, ambiguity, framing, reference points, and emotions in individual decisions.

CONCLUSIONS

Based on the results of the study developed a probit econometric model to consider the factors that explain the demand for insurance products. The employment status factor becomes a significant factor for the educated workforce using insurance products. The potential risk of each workforce depends largely on the status of the job.

Income has a negative value that explains that the higher the income opportunity to join insurance products is lower, while the level of education, number of dependents, gender, location of residence, birth generation, and insurance product information have positive values but the 7 factors are not statistically significant.

The recommendations for this study are as follows:

1. The government and private companies must agree to form an integrated program so that all educated workers can enjoy insurance programs to guard against risks that will occur in the future.

2. Workers who have high incomes are expected to join the insurance program, because by joining a high-income workforce will help the government or private companies help the low-income workforce. Caring for each other is an important social capital to maintain the economy.

3. The government or insurance company must increase the socialization of information on the importance of insurance programs to deal with uncertainty of future risks.

4. This research is still limited in samples, factors that are used as research objects and less in-depth about the role of information affecting people's behavior. This is a suggestion for researchers to further conduct more comprehensive research.

REFERENCES

Altonji, J., Contractor, Z., Finamor, L., Haygood, R., Lindenlaub, I., Meghir, C., O'dea, C., Scott, D., Wang, L., & Washington, E. (2020). Employment Effects of Unemployment Insurance Generosity During the Pandemic. *Yale University*, *July*, 1–24. https://tobin.yale.edu/sites/default/files/files/C-19 Articles/CARES-UI_identification_vF(1). pdf%0Ahttps://tobin.yale.edu/ sites/default/files/files/C-19 Articles/CARES- UI_identification_vF(1) .pdf%0Ahttps://news.yale.edu/2020/07/27/yale-study-finds-expande

Andersen, T. M., Kristoffersen, M. S., & Svarer, M. (2018). Benefit reentitlement conditions in unemployment insurance schemes. *Labour Economics*, *52*, 27–39. https://doi.org/10.1016/j.labeco.2018.03.001

Auray, S., Fuller, D. L., & Lkhagvasuren, D. (2019). Unemployment insurance take-up rates in an equilibrium search model. *European Economic Review*, *112*, 1–31. https://doi.org/10.1016/j.euroecorev.2018.11.005

Aziz, Y. A., & Chok, N. V. (2013). The Role of Halal Awareness, Halal Certification, and Marketing Components in Determining Halal Purchase Intention Among Non-Muslims in Malaysia: A Structural Equation Modeling Approach. *Journal of International Food and Agribusiness Marketing*, *25*(1), 1–23. https://doi.org/10.1080/08974438.2013.723997

Bardóczy, B. (2020). Spousal Insurance and the Amplification of Business Cycles. *Working Paper*, *May*, 1–46.

Bousmah, M. al Q., Boyer, S., Lalou, R., & Ventelou, B. (2021). Reassessing the demand for community-based health insurance in rural Senegal: Geographic distance and awareness. *SSM - Population Health*, *16*(November). https://doi.org/10.1016/j.ssmph.2021.100974

Corcos, A., Montmarquette, C., & Pannequin, F. (2020). How the demand for insurance became behavioral. *Journal of Economic Behavior and*

Organization, *180*(xxxx), 590–595. https://doi.org/10.1016/j.jebo.2020.09.001

Devos, E., & Rahman, S. (2018). Labor unemployment insurance and firm cash holdings. *Journal of Corporate Finance*, *49*, 15–31. https://doi.org/10.1016/j.jcorpfin.2017.12.019

Duman, A. (2010). Risks in the labor market and social insurance preferences: Germany and the USA. *International Journal of Social Economics*, *37*(2), 150–164. https://doi.org/10.1108/03068291011007264

Ellieroth, K. (2019). *Spousal Insurance, Precautionary Labor Supply, and the Business Cycle-A Quantitative Analysis*. 1–33.

Fu, W., & Liu, F. (2019). Unemployment insurance and cigarette smoking. *Journal of Health Economics*, *63*, 34–51. https://doi.org/10.1016/j.jhealeco.2018.10.004

Gangopadhyaya, A., Karpman, M., & Aarons, J. (2020). As the COVID-19 Recession Extended into the Summer of 2020, More Than 3 Million Adults Lost Employer-Sponsored Health Insurance Coverage and 2 Million Became Uninsured; Evidence from the Household Pulse Survey , April 23–July 21, 2020. *Urban Institute*, 1–12. https://www.urban.org/sites/default/files/publication/102852/as-the-covid-19-recession-extended-into-the-summer-of-2020-more-than-3-million-adults-lost-employer-sponsored-health-insurance-coverage-and-2-million-became-uninsured.pdf

Garcia-Mandicó, S., Reichert, A., & Strupat, C. (2021). The Social Value of Health Insurance: Results from Ghana. *Journal of Public Economics*, *194*. https://doi.org/10.1016/j.jpubeco.2020.104314

Hairault, J. O., Langot, F., Ménard, S., & Sopraseuth, T. (2012). Optimal unemployment insurance for older workers. *Journal of Public Economics*, *96*(5–6), 509–519. https://doi.org/10.1016/j.jpubeco.2012.02.002

He, A. J., Ratigan, K., & Qian, J. (2020). Attitudinal Feedback towards Sub-national Social Policy: A Comparison of Popular Support for Social Health Insurance in Urban China. *Journal of Comparative Policy Analysis: Research and Practice*, *00*(00), 1–22. https://doi.org/10.1080/13876988.2020.1780126

Hedin, T. J., Schnorr, G., & Wachter, T. Von. (2020). *An Analysis of Unemployment Insurance Claims in California During the COVID-19 Pandemic*. *April*, 1–18.

Isengard, B. (2003). Youth unemployment: Individual risk factors and institutional determinants. A case study of Germany and the United Kingdom. *Journal of Youth Studies*, *6*(4), 357–376. https://doi.org/10.1080 /1367626032000162096

Jalaluddin. (2019). Respon Masyarakat Aceh Terhadap Wakaf Asuransi Jiwa Syariah. *EKOBIS: JURNAL EKONOMI DAN BISNIS SYARIAH*, *3*(1), 40–54.

Jang, B. G., Park, S., & Zhao, H. (2020). Optimal retirement with borrowing constraints and forced unemployment risk. *Insurance: Mathematics and Economics*, *94*, 25–39. https://doi.org/10.1016/j.insmatheco.2020.06.002

Lee, Y. W. (2012). Asymmetric information and the demand for private health insurance in Korea. *Economics Letters*, *116*(3), 284–287. https://doi.org/10.1016/j.econlet.2012.03.021

Li, X., & Tian, L. (2020). The effect of non-employment-based health insurance program on firm's offering of health insurance: Evidence from the social health insurance system in China. *Journal of Comparative Economics*, *48*(4), 997–1010. https://doi.org/10.1016/j.jce.2020.05.005

Lin, C., Hsiao, Y. J., & Yeh, C. Y. (2017). Financial literacy, financial advisors, and information sources on demand for life insurance. *Pacific Basin Finance Journal*, *43*, 218–237. https://doi.org/10.1016/j.pacfin.2017.04.002

Mitman, K., & Rabinovich, S. (2021). Whether, when and how to extend unemployment benefits: Theory and application to COVID-19. *Journal of*

Public   Economics,   *200*,   104447.
https://doi.org/10.1016/j.jpubeco.2021.104447

Nicholson, W., & Snyder, C. (2012). *Microeconomic Theory: Basic Principles and Extensions* (Eleventh E). South-Western Cengage Learning.

Pindyck, R. S., & Rubinfeld, D. L. (2013). *Microeconomics* (8Th ed.). Pearson Education, Inc.

Sugiyono. (2017). *Metode Penelitian Kuantitatif Kualitatif dan R & D*. Alfabeta Bandung.

Wulandari, E. (2010). FAKTOR-FAKTOR YANG MEMPENGARUHI JUMLAH PENDERITA Estimasi Parameter Regresi Probit dengan Metode Maximum Likelihood. *Matematika, Jurusan Pengetahuan, Ilmu Surabaya, Negeri*, 1–6.