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The Effect of Women's Financial Self-Efficacy on Financial Product Ownership

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ABSTRACT

The government is intensively implementing formal and informal education to improve individual financial literacy. This study aims to examine the effect of women's financial self-efficacy on financial product ownership, controlling for contributing to financial literacy, financial risk preferences, and demographic factors. The sample consists of 253 female respondents who live in Surabaya and already have financial products. The data are collected using questionnaires and processed using binary logistic regression. The results show that women's financial self-efficacy significantly affects the choice of financial products in the form of investment, credit cards, and other loans. However, it does not significantly affect the choice of financial products in the form of savings, mortgages, health insurance, and life insurance. This study is expected to provide benefits in developing learning methods to appropriately improve women's financial literacy according to the available financial product choices. Besides, this study is also expected to provide advice to female clients to diversify their investment product portfolios according to their personalities to achieve their financial goals.

ABSTRAK

Pemerintah saat ini tengah gencar melaksanakan edukasi secara formal maupun informal untuk meningkatkan literasi keuangan individu. Penelitian ini bertujuan untuk menguji pengaruh financial self-efficacy wanita terhadap pilihan produk keuangan dengan variabel kontrol contributing to financial literacy, financial risk preference, dan faktor demografi. Sampel diambil secara purposive pada 253 responden wanita yang berdomisili di Surabaya dan sudah memiliki produk keuangan. Pengumpulan data dilakukan dengan menggunakan kuesioner yang disebarluaskan secara online dan offline. Selanjutnya, data diolah menggunakan regresi logistik binari. Hasil analisis menunjukkan bahwa financial self-efficacy, dengan variabel kontrol contributing to financial literacy, financial risk preference, dan faktor demografi, memiliki pengaruh yang signifikan terhadap pilihan produk keuangan berupa investasi, kartu kredit, dan pinjaman lainnya, namun tidak berpengaruh signifikan terhadap produk tabungan, KPR, asuransi kesehatan, dan asuransi jiwa. Penelitian ini diharapkan mampu memberikan manfaat dalam mengembangkan metode pembelajaran untuk meningkatkan literasi keuangan para wanita secara tepat sesuai dengan pilihan produk keuangan yang tersedia. Selain itu, penelitian ini juga diharapkan dapat memberikan saran pada klien wanita untuk melakukan diversifikasi portofolio produk investasi yang sesuai dengan pribadi mereka, sehingga dapat mencapai tujuan keuangannya.

1. INTRODUCTION

Each individual has their preferences in choosing financial products as a means to achieve their personal goals. Reflections of individuals in managing their personal finances can be seen from the financial products they choose, their financial

responsibilities, and their future views (Stolper & Walter, 2017). According to Perry & Morris (2005), budgeting, savings, and expenditure control are indicators of an individual's future vision and financial responsibility to improve their financial condition by selecting financial products that will be

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useful in the future. The financial products include investment, savings, mortgages, credit cards, other loans, health insurance, and life insurance (Ariani et al., 2016; Farrell, Fry, & Risse, 2016).

Long-term investment instruments, such as property, gold, and stocks, are chosen to maintain current income levels or gain future returns. Financial products in the form of savings can provide benefits as an emergency fund in unexpected expenses. Having credit cards and other loans, such as loans to pawnshops, including home loans, will add to the financial burden. On the other hand, home loans have a positive impact because over time, the value of assets purchased through debt will increase. Protection-related financial products, such as health insurance and life insurance, are essential for personal protection from potential losses.

The choice of financial products is influenced by individual financial self-efficacy. Self-efficacy is an individual's belief in completing a given task and overcoming life challenges (Bandura, 2006). Financial self-efficacy is an individual's belief in achieving financial goals through his behavior when choosing investment financial products (Fosnacht & Calderone, 2017). According to Guo et al. (2013), individuals, according to their motivation and capacity, will act rationally according to their competence. Rationally, individuals who want a more decent life will be wise in choosing a financial product of investment as a means of increasing their standard of living from time to time.

Financial problems can occur because of mistakes in managing finances. One of the ways to overcome financial problems is to increase financial literacy. Financial literacy is an individual's ability based on knowledge and cognitive skills to understand the financial sector and overcome financial problems. Contributing to financial literacy can be explained by socialization learning obtained through financial education and financial socialization. According to Gutter, Garrison, & Copur (2010), financial education affects the formation of financial knowledge, attitudes, and behavior. Besides, financial education from parents (parent socialization) is expected to make an excellent contribution to the development of individual education. Parents' role is expected not only to provide a theory but also to provide realistic examples of how to allocate funds wisely by selecting financial products.

The selection of financial products is made according to individual financial risk preferences. Financial risk preference is the tendency for

individuals to choose risky financial products. According to Grable & Lytton (1999) and Bajtelsmit & Bernasek (2001), financial risk preferences affect a person's financial decisions. The courage that each individual has in taking risks is different from one another so that there are various investment products that investors have in allocating their funds (Wen, He, & Chen, 2014). Demographic factors also influence the choice of financial products. First, age affects a person's financial decision making because, with increasing age, one's knowledge and experience will increase, leading to better financial decisions (Korniotis & Kumar, 2011). Second, the higher the level of income earned by individuals, the more likely they are to show more responsible financial behavior (Beverly, Hilgert, & Hogarth, 2003). Third, married women will make financial decisions with their partners (Farrell, Fry, & Risse, 2016; Alwahaibi, 2019).

Based on the 2016 Survey on Financial Inclusion and Access (SOFIA), women are more reliable in managing finances (Maharani, 2017). In contrast, women are generally less self-confident than men, have lower financial literacy levels, and are more conservative in risk-taking. Based on the results of research conducted by Dwyer, Gilkeson, & List (2002) and Charness & Gneezy (2012), women tend to avoid risk in investing compared to men. As a result, women are more likely to suffer losses than men. Women tend to think about future needs, so they will be more careful in using and managing their money (Lim & Teo, 1997).

This study examines the effect of women's financial self-efficacy on the selection of financial products, using control variables of contributing to financial literacy, financial risk preferences, and demographic factors. It does not discuss financial self-efficacy between genders as in previous studies but discusses more self-efficacy in women. The higher the self-confidence in managing finances, the better the financial planning will be to achieve financial goals.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Financial Literacy

Financial literacy is part of one's mental intelligence, which is related to finding solutions to financial problems (Kiyosaki, 2008). Lusardi & Mitchell (2007) define financial literacy as financial knowledge that a person has to achieve prosperity. According to Xu & Zia (2012), financial literacy includes concepts that start with awareness and financial product knowledge. One of the main objectives of financial

literacy is to equip each individual to make plans for existing financial products, such as retirement or home loan planning and sound financial decision making.

According to Chen & Volpe (1998), financial literacy is an individual's financial understanding of general knowledge about finance, such as savings and loans, investments, and insurance. Financial general knowledge is the basic knowledge of personal finance, which includes some general items in finance, such as basic knowledge of finance, financial planning, the effects of inflation, and asset liquidity. The aspect of savings and loans is an individual's understanding of savings and loans, including interest rates, time value of money, and credit cards. The investment aspect is related to understanding the definition, types, methods, and results of various investments, including investment products and investment risks. The insurance aspect includes basic knowledge of insurance, such as insurance products, insurance benefits, insurance types, and insurance premiums.

Furthermore, Chen & Volpe (1998) state that low levels of financial literacy tend to cause someone to have the wrong opinion, leading to bad decision-making in general education, savings and loans, and investment. In the long term, if the individuals involved are still unable to manage their finances, this will become a problem in their life in society. A person can increase their financial knowledge through formal and informal education to understand various financial products such as investment products, savings, home loans, credit cards, other loans, health insurance, and life insurance (Farrell, Fry, & Risse, 2016).

Self-efficacy, financial literacy, financial socialization

Self-efficacy is an individual's belief in achieving success in a task because he has confidence, optimism, and belief that a person can overcome various life challenges (Bandura, 1977; 2006). Individuals with high levels of self-efficacy have confidence that they can perform well in a given task. Even though a person has a high self-efficacy level, his self-confidence varies depending on the task to be completed (Bandura, 2006). The basis for self-efficacy is the result of an individual's cognitive process in the form of decisions, beliefs, or appreciation regarding the extent to which he estimates his ability to perform specific tasks or actions needed to achieve the desired results (Bandura, 2000). In the financial field, financial self-efficacy is the confidence that a person has in solving

various financial problems with the right solution, using the Financial Self-Efficacy Scale (FSES) test. The FSES scale was developed and validated by Lown (2011) using a general self-efficacy scale developed by Schwarzer and Jerusalem (1995), following Bandura's advice in 2006.

Changes in individual behavior in managing finances to achieve their life goals can be developed through financial education (Seiling & Seiling, 2004). Lyons (2007) states that financial education is needed to start a better financial life. Individuals need knowledge, life skills, and self-development attitudes related to finance (Farrell, Fry, & Risse, 2016). Contributing to financial literacy is a source of financial knowledge that a person acquires through independent learning and others, which leads to socialization learning. Socialization learning is a process within individuals to acquire knowledge, skills, and values to participate in society (Brim, Jr., 1966; McNeal, 1987; Moschis, 1987; Danes, 1994; Gutter, Garrison, & Copur, 2010). Socialization begins in childhood and continues throughout a person's life cycle (McNeal, 1987; Moschis, 1987; Danes, 1994). In other words, socialization learning is someone who learns from others by observing and imitating their behavior, attitudes, and emotional reactions (Bandura, 1977; Gutter, Garrison, & Copur, 2010). There are two sources of socialization learning: financial education and financial socialization.

Financial socialization is a process in which a person acquires and develops values, attitudes, standards, norms, knowledge, and behaviors that contribute to financial skills and understanding (Fox, Bartholomae, & Gutter, 2000). Parents have a more significant influence on the development of their children's knowledge, attitudes, and financial behavior than work experience and higher education (Shim, 2009). Parents' role is to prepare their children to live independently and teach them how to manage finances, not directly (Danes, 1994; Moschis, 1987) but through appropriate behavior (Hayhoe et al., 2000; Joo, Grable, & Bagwell, 2003). Besides, parents can monitor their children's financial behavior, such as providing pocket money, participating in job training, and managing bank accounts, as a form of trust for parents to carry out their children's responsibilities in managing personal finances. Individuals who make financial decisions will weigh the risks and returns. According to their courage, risk preference is an individual tendency to make risky decisions (Weber & Hsee, 1998). Kuzniak et al. (2015) divide risk preferences into four groups: (1) choosing

significant financial risks to get higher returns; (2) choosing average financial risk to get above-average returns; (3) choosing average financial risk to get an average return; (4) unwilling to take financial risks.

Each individual has different behaviors depending on their self-efficacy, even though they have the same abilities (Gist & Mitchell, 1992). Self-efficacy influences a person's choices, goals, problem-solving, and perseverance. Someone with low self-efficacy tends to give up easily when facing difficult challenges. On the other hand, someone with high self-efficacy will be able to change the situation around him, thus encouraging him to be persevering. He will face challenges with competence and exert reasonable effort (Avey, Luthans, & Jensen, 2009). The research results conducted by Farrell, Fry, & Risse (2016) indicate that women have higher financial self-efficacy than men. This indicates that women can manage finances and plan for the future well. They have a greater chance of choosing financial products such as investments, savings, home loans, health insurance, and life insurance. Women are also less likely to choose credit cards and other loans. Financial products such as investments, savings, home loans, and insurance are financial products that will provide benefits in the form of returns to increase the amount of money. Mortgages provide two views. The homeowner benefits from an increase in the value of the home. However, on the other hand, the homeowner suffers a loss from the interest rate paid. In the end, mortgages are still seen as a profitable financial product. Insurance is considered a useful financial product because there is self-protection from potential losses. Conversely, credit cards, and other loans increase the financial burden because the interest on the loan must be paid and is not followed by an increase in the value of the assets purchased.

H₁: Financial self-efficacy has a significant effect on the selection of financial products

Financial literacy affects individual financial behavior, such as managing or allocating finances appropriately (Robb & James, 2009; Wardani & Lutfi, 2017). In adolescence, if women are socialized about financial knowledge, they will be encouraged to become individuals responsible for managing their bank accounts. As a result, in adulthood, investment products are the choice of women. On the other hand, if they have negative financial management experiences from childhood to adolescence, the loan product is chosen to achieve

their life goals (Farrell, Fry, & Risse, 2016). Individuals who choose financial products depend on their courage, thus forming financial risk preferences for them to decide which financial product they will choose (Aini & Lutfi, 2019; Grable, 2000). Women who are willing to take risks are more likely to choose investment products or credit cards.

Conversely, women who tend to avoid risk will choose savings products. The reluctance in choosing financial risks also affects individuals who choose health insurance. In the early stages of adulthood, women tend to choose savings and mortgages to buy a house (Farrell, Fry, & Risse, 2016). Judging from demographic factors, income affects individual activities. The higher the income earned, the more likely it is to choose financial products such as credit cards, mortgages when first proposed, and investment products (Hogarth & O'Donnell, 2000; Lutfi, 2011). Schooley & Worden (1999) stated that marital status affects financial products' choice to support the future. Married people will tend to choose low-risk investments because they prioritize household needs (Ranganathan, 2006). Married women will make investment decisions together with their partners.

Furthermore, married women with high income tend to choose health insurance (Farrell, Fry, & Risse, 2016). With increasing age, individuals give preference to investments with low financial risk. This is because old investors do not have an adequate recovery period from possible losses due to risky investments (Grable & Lytton, 1998; Jianakoplos & Bernasek, 2006; Alwahaibi, 2019). Reluctance to take risks occurs in individuals aged 65 years and over (Harrison, Lau, & Rutström, 2007).

H₂: Financial self-efficacy has a significant effect on selecting financial products, with control variables of contributing to financial literacy, financial risk preference, and demographic factors.

3. RESEARCH METHOD

This research is explanatory research regarding financial products that are of great interest to women. This research population is women who live in Surabaya, while the research sample is women who have worked and have their income. Data collection is carried out through questionnaires, which are distributed offline and online. The data is then processed using SPSS for Windows. The model used is a binary probe, based on latent variables that cannot be observed directly by someone who has a particular financial product

but is estimated as a probability with a value between zero and one.

Furthermore, the psychological test for Financial Self-Efficacy uses the Financial Self-Efficacy Scale (FSES) developed from Lown (2011). Respondents are asked to respond to six statements based on a Likert scale, from very inaccurate to very accurate. Each question's response is graded from 1 to 4, with the highest score given for the highest level of financial literacy. The scores for each participant for the six items are added together to give a total score from a minimum of 6 to a maximum of 24. This sum is the individual score in FSES. Furthermore, other variables related to personal background and socio-demographic characteristics are selected as models for the control variables. These variables are chosen to isolate the relationship between financial self-efficacy and observed behavior, apart from other misleading factors.

The uses of control variables are as follows. First, the lifelong financial literacy rate of women includes the general level of education (where they can develop the basic literacy and numeracy skills needed to acquire financial knowledge and develop financial literacy); participation in financial training (training designed to facilitate financial literacy development); aspects that could affect their future financial literacy (how positively they value their childhood experiences with money; and, as teenagers, if they receive money from their parents, if they make money by working, and if they have responsibilities to manage a bank account). Individual experiences about money management can shape their adult life's financial literacy, especially through the socialization process (Gutter, Garrison, & Copur, 2010; Lee & Mortimer, 2009). The second is risk preference. It is the willingness of

individuals to take risks if they have cash for investment, with the options of 'not willing to bear the risk', 'willing to bear the average risks for average returns', 'willing to bear above-average risks for above-average returns', and 'willing to bear big risks for large returns' (West & Worthington, 2014). Third, the type of financial product a person has depends on the demographic and socio-economic factors that reflect their life stage (Hogarth & O'Donnell, 2000; Worthington, 2009). The measurement of these variables is done using a Likert scale and dummy variables. The data is then processed using logistic regression because the variable for selecting financial products as the dependent variable is binary. The equation model used is:

$$\ln \frac{P_i}{(1-P_i)} = \alpha + \beta_{FSE}FSE + \beta_{FCLd}CFL + \beta_{FRP}FRP + \beta_{FDd}FD + e \quad (1)$$

Note:

\ln : Financial Product
 FSE : Financial Self-Efficacy
 CFL : Contributing to Financial Literacy
 FRP : Financial Risk Preference
 FD : Financial Demography

4. DATA ANALYSIS AND DISCUSSION

The data to be analyzed were obtained from 253 female respondents who lived in Surabaya and already had a source of income. Ten out of 263 data could not be processed because they did not meet the sample requirements. Data collection was done by distributing online questionnaires in 2019. The description of the respondents can be seen in Table 1.

Table 1. Summary of Respondents' Descriptive Statistics

Variable	Mean	Std. Dev.	Min.	Max.
Financial Product (Dependent Variable)				
Investment	0.5455	0.49892	0	1
Savings	0.9012	0.29900	0	1
Mortgages	0.2372	0.42618	0	1
Credit Cards	0.4032	0.49151	0	1
Other Loans	0.1107	0.31435	0	1
Health Insurance	0.7273	0.44624	0	1
Life Insurance	0.5178	0.50067	0	1

Variable	Mean	Std. Dev.	Min.	Max.
Financial Self-Efficacy (Independent Variable)				
Financial Self-Efficacy Scale (FSES)	16.249	31.9431	6	24
Contributing to Financial Literacy (Control Variable)				
Financial Education				
General Education (0=No; 1=Yes)	0.8063	0.39596	0	1
Internships or Occupational Training (0=No; 1=Yes)	0.5296	0.50011	0	1
Undergraduate Education (0=No; 1=Yes)	0.5455	0.49892	0	1
Post Graduate Education (0=No; 1=Yes)	0.0870	0.28233	0	1
Financial Education Courses (0=No; 1=Yes)	0.1937	0.39596	0	1
Financial Socialization				
Received money from parents as a teenager (0=No; 1=Yes)	0.8735	0.33305	0	1
Had income by working as a teenager (0=No; 1=Yes)	0.5692	0.49617	0	1
Responsible for managing a bank account as a teenager (0=No; 1=Yes)	0.6324	0.48310	0	1
Positive experience in financial management as a child ^a	4.2332	0.97027	1	5
Financial Risk Preference				
Willingness to bear financial risk ^b	2.2964	0.80860	1	4
Demographical Factors				
Age (Base group: 15-24 years old)				
25-34 years old	0.2885	0.45398	0	1
35-44 years old	0.0949	0.29360	0	1
45-54 years old	0.1660	0.37283	0	1
≥ 55 years old	0.0395	0.19523	0	1
Income (Base group: ≤ IDR 3,583,322)				
IDR 3,583,323 – IDR 5,000,000	0.2174	0.41329	0	1
IDR 5,000,001 – IDR 10,000,000	0.2490	0.43330	0	1
IDR 10,000,001 – IDR 15,000,000	0.0791	0.27035	0	1
> IDR 15,000,000	0.1462	0.35405	0	1
Marital Status (0=Unmarried;1=Married)	0.4190	0.49437	0	1

Note: Statistics descriptive (n=253)

a: 1=Very Negative; 2=Negative; 3=Neutral; 4=Positive; 5=Very Positive

b: 1 = Unwilling to bear financial risk; 2 = Willing to bear average risk; 3 = Willing to bear above-average risk; 4 = Willing to bear high risk

Table 1 shows that the dependent variable of financial products, with code 1, means that the respondent chooses a financial product of Investment, Savings, Home loans, Credit Cards, Other loans, Health Insurance, and Life Insurance. In contrast, code 0 means that none is chosen. The financial product of saving is the most preferred by women (90.12%), and other loans are the least (11.07%). Life insurance is less preferred than health insurance. The variable contributing to financial literacy consists of financial education and financial socialization. Financial education is measured using general education, which shows the highest mean, indicating that 80.63% of women gain financial knowledge through general education. Only 8.7% of women have financial knowledge through Post

Graduate education. Financial socialization indicates that 87.35% of women receive money from their parents as teenagers and have a positive experience managing money at a young age. Furthermore, financial risk preference shows that most women are less likely to take a risk, which is measured using the Likert scale. Demographic data consisting of age, income, and respondents' marital status use a dummy variable, in which the majority of women (28.85%) are in the age group from 25 to 34 years old. 24.9% of women have an income from IDR 5,000,000 to IDR 10,000,000, and 41.9% are already married. The variable of financial self-efficacy is measured using the Likert scale, with a minimum value of 6 and the maximum value of 24, as described in Table 2.

Table 2. Financial Self-Efficacy Scale

Item	Very True	True	Untrue	Very Untrue	Mean
I can hardly control my monthly expense if there is an unexpected expenditure	17.8	49.0	30.0	3.2	2.186
I experience difficulties reaching my financial goal	14.6	39.6	39.1	6.7	2.379
I tend to take debt if there is an unexpected expenditure	4.3	12.7	38.3	44.7	3.233
I have trouble finding a solution when facing a financial problem	5.1	12.7	57.7	24.5	3.016
I lack confidence in managing my personal finances	8.7	17.8	46.2	27.3	2.921
I worry about not having enough funds when I retire	16.6	32.0	34.8	16.6	2.514

Table 2 shows that women tend to have difficulties maintaining spending and worry about not having enough funds at retirement. However, they do not find it difficult to find a solution because they are confident and avoid debt if there is an

unexpected expense. The result of the observation of the financial self-efficacy scale (FSES) in women can be seen in Figure 1, which shows the frequency of the distribution of the total value of each FSES indicator.

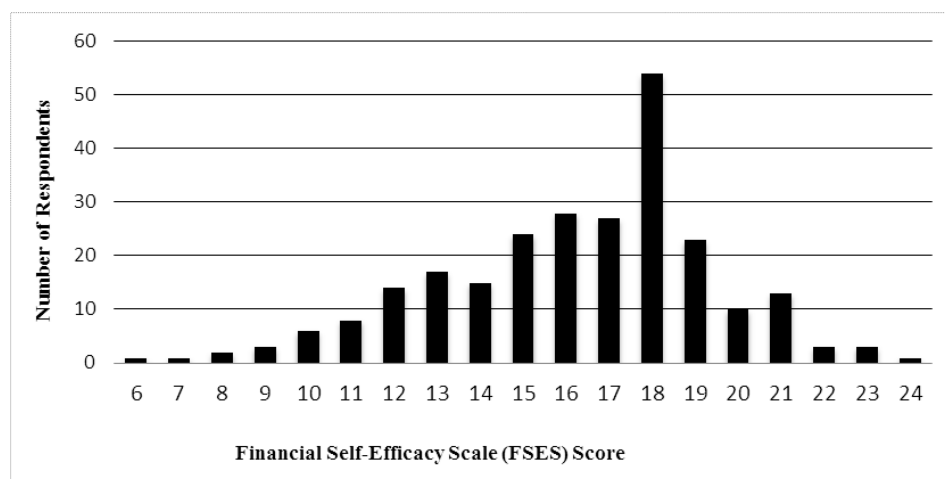


Figure 1. Total Observation of FSES

Most women have an FSES value of 18, or in the range of 15-19. This indicates that most women have relatively high confidence in financial management. Furthermore, the validity test on question items of financial self-efficacy shows a Pearson Correlation

value in the range of $0.511 - 0.746 > 0.124$, so six indicators of the variable financial self-efficacy are considered valid. The variable of financial self-efficacy is also considered reliable as its Cronbach Alpha value is $0.754 > 0.6$

Table 3. Validity and Reliability Tests for the Variable of Financial Self-Efficacy

Statement	Validity (Pearson Correlation)	Reliability (Cronbach Alpha)
I can hardly control my monthly expense if there is an unexpected expenditure	0.565**	0.754
I experience difficulties reaching my financial goal	0.590**	
I tend to take debt if there is an unexpected expenditure	0.511**	
I have trouble finding a solution when facing a financial problem	0.746**	
I lack confidence in managing my personal finances	0.684**	
I worry about not having enough funds when I retire	0.712**	

Note: **significant at $\alpha = 0.05$

Table 4. Logistics Regression Output Without Control Variable

Variable	Financial Product						
	Investment	Saving	Mortgage	Credit Card	Other Loans	Health Insurance	Life Insurance
Financial Self-Efficacy							
Financial Self-Efficacy Scale (FSES)	0.043** (0.082)	0.230 (0.076)	0.072* (0.088)	0.618 (-0.020)	0.260 (-0.069)	0.004*** (0.129)	0.003*** (0.125)
Nagelkerke R Square	0.022	0.012	0.020	0.001	0.010	0.048	0.049
Sig. Hosmer Test and Lemeshow	0.586	0.741	0.078	0.101	0.136	0.699	0.330
Overall Percentage Matriks Classification	57.7	90.1	76.3	59.7	88.9	72.7	59.3

Note: Regression coefficient in brackets

*Significant at 10%

** Significant at 5%

*** Significant at 1%

Table 4 shows that financial self-efficacy has a significant positive effect on selecting financial products of investment, mortgages, health insurance, and life insurance, but financial self-efficacy has no significant effect on the financial products of savings, credit cards, and other loans. Nagelkerke R Square value shows that financial products of health insurance and life insurance can be explained by financial self-efficacy by 4.9% and 4.8%, respectively. However, credit cards cannot be explained by financial self-efficacy as the Nagelkerke R square is

only 0.01%. The Hosmer and Lemeshow tests show the Chi-Square significance value of each financial products of investment, savings, mortgages, credit cards, other loans, health insurance, and life insurance that is greater than 0.05, so any logistical regression equation that does not include a control variable is eligible for use. The overall percentage of each financial product has a value ranging from 57.7% to 90.1%, so the logistical regression model has reflected the actual condition according to that percentage.

The second logistics regression analysis to test the effect of financial self-efficacy on selecting financial products with control variables of contributing to financial literacy, financial risk preference, and demographics is shown in Table 5.

Table 5. Logistics Regression Output with Control Variable

Variable	Financial Product						
	Investment	Savings	Mort-gage	Credit Cards	Other Loans	Health Insurance	Life Insurance
Financial Self-Efficacy							
Financial Self-Effi- cacy Scale (FSES)	0.096* (0.086)	0.973 (-0.003)	0.259 (-0.124)	0.022** (-0.128)	0.012*** (-0.271)	0.449 (0.042)	0.934 (0.004)
Contributing to Financial Literacy							
Financial Education							
General Education	0.941 (-0.031)	0.175 (-1.308)	0.060* (1.261)	0.396 (0.368)	0.634 (-0.418)	0.767 (-0.135)	0.422 (-0.363)
Internships or occu- pational training	0.154 (0.515)	0.554 (-0.364)	0.686 (-0.277)	0.224 (0.484)	0.004*** (2.624)	0.498 (-0.258)	0.344 (0.364)
Undergraduate Ed- ucation	0.006*** (1.114)	0.645 (0.279)	0.273 (-0.763)	0.070*** (-0.710)	0.006*** (-2.209)	0.294 (0.433)	0.167 (-0.552)
Post Graduate Edu- cation	0.183 (-0.773)	0.538 (0.715)	0.107 (1.976)	0.049** (1.211)	0.998 (-20.433)	0.669 (-0.254)	0.390 (0.529)
Financial Education Courses	0.545 (0.258)	0.383 (0.616)	0.604 (-0.483)	0.042** (-1.067)	0.102 (1.521)	0.350 (-0.392)	0.063* (-0.872)
Financial Socialization							
Received money from parents as a teenager	0.930 (-0.045)	0.131 (1.296)	0.328 (0.948)	0.153 (-0.777)	0.801 (-0.258)	0.999 (0.001)	0.694 (0.217)
Had income by working as a teen- ager	0.14 (-0.503)	0.412 (0.459)	0.081* (-1.156)	0.830 (-0.079)	0.502 (0.564)	0.911 (-0.040)	0.955 (0.020)
Responsible for managing a bank account as a teen- ager	0.877 (0.057)	0.256 (0.648)	0.002*** (2.181)	0.536 (0.251)	0.059* (-1.895)	0.562 (0.216)	0.804 (0.097)
Positive experience in financial man- agement as a child	0.471 (0.117)	0.071* (0.503)	0.814 (0.061)	0.625 (0.087)	0.714 (-0.084)	0.478 (0.119)	0.005*** (0.507)
Financial Risk Preference							
Willingness to take financial risks	0.002*** (0.643)	0.856 (-0.062)	0.176 (-0.632)	0.125 (0.334)	0.115 (-0.749)	0.122 (0.330)	0.776 (0.060)

Table 5. Logistics Regression Output With Control Variable (continued)

Variable	Financial Product						
	Investment	Savings	Home Loans	Credit Cards	Other Loans	Health Insurance	Life Insurance
Demographical Factor							
Age (Base group: 15-24 years old)							
25-34 years old	0.259 (0.562)	0.884 (0.104)	0.453 (0.993)	0.262 (0.553)	0.289 (1.120)	0.898 (0.066)	0.186 (-0.680)
35-44 years old	0.569 (-0.398)	0.701 (0.548)	0.010*** (3.818)	0.080* (1.238)	0.630 (0.705)	0.074* (1.459)	0.179 (1.018)
45-54 years old	0.237 (-0.906)	0.997 (17.486)	0.540 (0.849)	0.330 (0.699)	0.896 (-0.165)	0.380 (0.687)	0.110 (1.260)
≥ 55 years old	0.999 (-22.518)	0.270 (-1.847)	0.098* (2.907)	0.110 (1.736)	0.002*** (7.420)	0.999 (20.347)	0.999 (21.114)
Income (Base group: ≤ IDR 3.583.322)							
IDR 3,583,323 –	0.562	0.570	0.996	0.000***	0.030***	0.204	0.021**
IDR 5,000,000	(-0.241)	(-0.324)	(18.671)	(2.059)	(2.524)	(0.527)	(0.985)
IDR 5,000,001 –	0.505	0.253	0.996	0.001***	0.560	0.111	0.000***
IDR 10,000,000	(0.340)	(1.009)	(19.582)	(1.957)	(0.739)	(0.847)	(2.199)
IDR 10,000,001 –	0.508	0.998	0.995	0.000***	0.001***	0.998	0.000***
IDR 15,000,000	(0.470)	(18.044)	(20.745)	(2.960)	(5.862)	(20.765)	(2.928)
> IDR15,000,000	0.025** (1.594)	0.997 (17.950)	0.995 (22.216)	0.001*** (2.529)	0.000*** (7.021)	0.035** (1.553)	0.000*** (3.305)
Marital Status	0.124 (0.814)	0.368 (0.854)	0.002*** (2.967)	0.455 (0.395)	0.059* (-2.148)	0.321 (-0.542)	0.098* (-0.940)
Constant	0.001 (-4.183)	0.579 (-1.051)	0.995 (-23.338)	0.306 (-1.385)	0.459 (1.719)	0.206 (-1.649)	0.013 (-3.220)
No. of observation	253						
Nagelkerke R Square	0.324	0.275	0.704	0.408	0.514	0.249	0.429
Sig. Hosmer Test and Lemeshow	0.051	0.925	0.286	0.113	0.877	0.522	0.331
Overall Percentage Matriks Classification	69.6	89.7	89.3	73.9	91.3	73.5	72.7

Note: Regression coefficient in brackets

*Significant at 10%

** Significant at 5%

*** Significant at 1%

Nagelkerke R square value in Table 5 consisting of 32.4% for investment, 27.5% for savings, 70.4% for home loans, 40.8% for credit cards, 51.4% for other loans, 24.9% for health insurance, and 42.9% for health insurance can be explained by the variable of financial self-efficacy and control variables of contributing to financial literacy, financial risk preference, and demographical factors. Hosmer and Lemeshow tests show a significant Chi-Square value of each financial product, such as investment, savings, home loans, credit cards, other loans, health insurance, and life insurance greater than 0.05; any logistical regression equation that includes a control variable is eligible for use. The overall percentage of each product has a value ranging from 69.6% to 91.3%, so the logistical regression model with control variables has reflected percentages according to each of the outputs.

This study proves that women capable of managing their finances and future planning tend to choose financial products that give financial security and provide benefit in the future by investing in stocks or property products and owning savings and insurances. However, women who strive for their future tend to choose the accumulation of obligations such as loans and credit cards. Farrell, Fry, & Risse (2016) also prove that women tend to choose the products of investment, mortgages, and insurances to get future benefits. According to Chowdhry & Dholakia (2019), an individual's financial literacy level positively correlates with savings and investments, but it does not consistently predict financial satisfaction or spending behavior. However, financial literacy consistently has a positive effect on an individual's financial self-awareness of savings and investments using various investment and credit tools. The product of a home loan is considered a debt activity with a positive purpose. Assets currently owned are acquired through debt (mortgage), but the asset's value will increase higher than the interest paid on the loan in the future. Insurance products are one method of protection concerning physical and mental health. The selection of these products is related to women's confidence in managing their personal finances for a better future.

On the other hand, financial self-efficacy has no significant effect on selecting financial products such as savings, credit cards, and other loans. Experience of saving does not influence women to have savings because saving is not an investment activity. On the other hand, savings are a collection of funds taken at certain times for everyday life using a debit card and used as an emergency fund. When there is an unexpected expenditure, they tend not to choose debt

to pay for the expenditure, although they find it difficult to control it. Therefore, they tend not to control their spending, but the upside is that the act of borrowing does not become a financial solution. According to Perry & Morris (2005), budgeting, saving, and controlling expenses are responsible for financial behavior. These actions encourage women's self-efficacy for their future interests.

The use of control variables contributing to financial literacy, financial risk preference, and demographic factors in financial self-efficacy is found to have no significant effect on the choice of financial products of savings, mortgages, health insurance, and life insurance. Health insurance and life insurance products are chosen because they are needed as a protection product by women who are mostly still young and not yet married. In contrast, financial self-efficacy and control variables significantly impact the choice of financial products of investment, credit cards, and other loans. With an average income of more than IDR 15,000,000 per month, women have the potential to set aside some of their income for investment activities. Education obtained in university, internship, or financial education courses also plays a role in instructing women to avoid the use of credit cards and other loans as they negatively impact if they are used excessively.

Credit cards should be used as alternative funding in case of an emergency. The knowledge that banks' credit interest is greater than savings interest also directs women to be more careful in using credit cards and other loans. Positive experiences in managing money as a child, such as using savings for day-to-day operations and practical payment tools, lead to the choice of savings but are not influenced by the confidence and ability to manage money. The mortgage is not the choice of financial product for women because the decision of mortgage for the purchase of a house depends more on the family's decision and is a joint decision. Therefore, individuals' types of financial products are related to demographic and socio-economic conditions concerning the life cycle (Hogarth & O'Donnell, 2000; Worthington, 2009).

Chowdhry & Dholakia (2019) state that financial literacy is important in determining investments, savings, and other long-term financial decisions but does not play a role in determining spending patterns, financial satisfaction, or budgeting behavior. In contrast, an individual's awareness of personal finances plays an important role in short-term and long-term financial decision-making and behavior. Furthermore, improving financial literacy in society is very important to provide for the future,

although financial literacy is insufficient to improve individuals' financial ability (Schuchardt et al., 2009). The support of parents, friends, and schools contributes greatly to the development of financial literacy.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

Financial self-efficacy has a significant effect on selecting financial products of investments, mortgages, health insurance, and life insurance. However, it has no significant effect on selecting financial products of savings, credit cards, and other loans. Furthermore, financial self-efficacy significantly affects selecting financial products of investments, credit cards, and other loans with control variables contributing to financial literacy, financial risk preference, and demographic factors (age, income, marital status). However, financial self-efficacy has no significant effect on selecting financial products of mortgage, health insurance, and life insurance with the control variables of contributing to financial literacy, financial risk preference, and demographic factors (age, income, marital status). It is recommended that future studies add variables such as socio-demographics so that the ability to explain the social background of respondents to the decision of choice is wider. Besides, it is also recommended that future studies expand to gender-based research to provide insights related to self-efficacy in both men and women, thus affecting the choice of financial products. This research is expected to contribute to women in increasing financial self-efficacy through understanding financial products. Various financial products can be used through portfolio diversification to achieve future financial objectives, keeping in mind the risks and returns. Financial practitioners can also contribute by increasing financial literacy in women to actively invest in financial markets.

REFERENCES

- Ainia, N. S. N., & Lutfi, L. (2019). The influence of risk perception, risk tolerance, overconfidence, and loss aversion towards investment decision making. *Journal of Economics, Business, & Accountancy Ventura*, 21(3), 401-413.
- Alwahaibi, S. S. (2019). Is demographic information influence risk tolerance/aversion in investment decision? Evidences from literature review. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(1), 111-122.
- Ariani, S., Rahmah, P. A. A. A., Putri, Y. R., Rohmah, M., Budiningrum, A., & Lutfi, L. (2016). Pengaruh literasi keuangan, locus of control, dan etnis terhadap pengambilan keputusan investasi. *Journal of Business and Banking*, 5(2), 257-270.
- Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Physiological capital: A positive resource for combating employee stress and turnover. *Human Resources Management*, 48(5), 667-693.
- Bajtelsmit, V. L., & Bernasek, A. (2001). *Risk preferences and the investment decisions of older Americans*. Political Science (pp. 1-53). AARP The Public Policy Institute.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (2000). *Cultivate self efficacy for personal and organizational effectiveness: Handbook of organization behavior*. Oxford, UK: Blackwell.
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1(2), 164-180.
- Beverly, S., Hilgert, M. A., & Hogarth, J. M. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, 89, 309-322.
- Brim, Jr., O. G. (1966). *Socialization through the life cycle*. In O. G. Brim, Jr., & S. Wheeler, Socialization after childhood. New York: Wiley.
- Charness, G. & Gneezy, U. (2012). Strong evidence for gender differences in risk taking. *Journal of Economic Behavior and Organization*, 83(1), 50-58.
- Chen, H. & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107-128.
- Chowdhry, N. & Dholakia, U. M. (2019). Know thyself financially: How financial self-awareness can benefit consumers and financial advisors. *Financial Planning Review*, 3(1), 1-14.
- Danes, S. M. (1994). Parental perceptions of children's financial socialization. *Financial Counseling and Planning*, 5, 127-149.
- Dwyer, P. D., Gilkeson, J. H., & List, J. A. (2002). Gender differences in revealed risk-taking: Evidence from mutual fund investors. *Economic Letters*, 76(2), 151-158.
- Farrell, L., Fry, T., & Risse, L. (2016). The significance of financial self-efficacy in explaining women's personal finance behaviour. *Journal of Economic Psychology*, 54, 85-99.
- Fosnacht, K. & Calderone, S. M. (2017). Undergraduate financial stress, financial self-efficacy, and major choice: A multi-institutional study. *Journal of Financial Therapy*, 8(1), 106-123.

- Fox, J. J., Bartholomae, S., & Gutter, M. S. (2000). What do we know about socialization? *Consumer Interest Annual*, 46, p. 217.
- Gist, M. E. & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17(2), 183-211.
- Grable, J. E. (2000). Financial risk tolerance and additional factors that affect risk taking in everyday money matters. *Journal of Business and Psychology*, 14(4), 625-630.
- Grable, J. E., & Lytton, R. H. (1998). Investor risk tolerance: Testing the efficacy of demographics as differentiating and classifying factors. *Financial Counseling and Planning*, 9(1), 61-73.
- Grable, J., & Lytton, R. H. (1999). Financial risk tolerance revisited: the development of a risk assessment instrument. *Financial Services Review*, 8(3), 163-181.
- Guo, L., Stone, D., Bryant, S., Wier, B., Nikitkov, A., Ren, C., . . . Zhang, L. (2013). Are consumers' financial needs and values common across cultures? Evidence from six countries. *International Journal of Consumer Studies*, 37, 675, 37(6), 675-688.
- Gutter, M. S., Garrison, S. T., & Copur, Z. (2010). Social learning opportunities and the financial behaviors of college students. *Family and Consumer Sciences Research Journal*, 38(4), 387-404.
- Harrison, G. W., Lau, M. I., & Rutström, E. E. (2007). Estimating risk attitudes in Denmark: A field experiment. *The Scandinavian Journal of Economics*, 109(2), 341-368.
- Hayhoe, C. R., Leach, L. J., Turner, P. R., Bruin, M. J., & Lawrence, F. C. (2000). Differences in spending habits and credits card use of college students. *The Journal of Consumer Affairs*, 34(1), 113-133.
- Hogarth, J. & O'Donnell, K. (2000). If you build it, will they come? A simulation of financial product holdings among low-to-moderate income households. *Journal of Consumer Policy*, 23(4), 409-444.
- Jianakoplos, N. A., & Bernasek, A. (2006). Financial risk taking by age and birth cohort. *Southern Economic Journal*, 72(4), 981-1001.
- Joo, S.-H., Grable, J., & Bagwell, D. C. (2003). Credit card attitudes and behaviors of college students. *College Student Journal*, 37(3), 405-419.
- Kiyosaki, R. T. (2008). *Increase Your Financial IQ: Get Smarter with Your Money*. Boston: Business Plus.
- Korniotis, G. M., & Kumar, A. (2011). Do older investors make better investment decisions? *The Review of Economics and Statistics*, 93(1), 244-265.
- Kuzniak, S., Rabbani, A., Heo, W., Ruiz-Menjivar, J., & Grable, J. E. (2015). The Grable and Lytton risk-tolerance scale: A 15-year retrospective. *Financial Services Review*, 24(2), 177-192.
- Lee, J. C., & Mortimer, J. T. (2009). Family socialization, economic self-efficacy, and the attainment of financial independence in early adulthood. *Longit Life Course Study*, 1(1), 45-62.
- Lim, V. K. & Teo, T. S. (1997). Sex, money and financial hardship: An empirical study of attitudes towards money among undergraduates in Singapore. *Journal of Economic Psychology*, 18(4), 369-386.
- Lown, J. (2011). Development and validation of a financial self-efficacy scale. *Journal of Financial Counseling and Planning*, 22(2), 54-63.
- Lusardi, A. & Mitchell, O. S. (2007). Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of Monetary Economics*, 54, 205-224.
- Lutfi, L. (2011). The relationship between demographic factors and investment decision in Surabaya. *Journal of Economics, Business, & Accountancy Ventura*, 13(3), 213-224.
- Lyons, A. C. (2007). Credit practices and financial education needs of Midwest College students. Networks Financial Institute Working Paper No. 2007-WP-23. Indiana State University.
- Maharani, E. (2017). Survei: Perempuan lebih aktif menabung daripada pria. Jakarta. Retrieved May 2020, from <https://republika.co.id/berita/ekonomi/makro/17/05/22/oqcj4w335-survei-perempuan-lebih-aktif-menabung-daripada-pria>
- McNeal, J. U. (1987). *Children as consumers: Insights and implications*. Lexington, Mass: Lexington Books.
- Moschis, G. P. (1987). *Consumer socialization: A life cycle perspective*. Lexington, Mass: Lexington
- Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behaviour. *The Journal of Consumer Affairs*, 39(2), 299-313.
- Ranganathan, K. (2006). A study of fund selection behavior of individual investor towards mutual funds. *Indian Institute of Capital Markets 9th Capital Markets Conference Paper*, 1-21.
- Robb, C. A. & James, R. N. (2009). Associations between individual characteristics and financial knowledge among college students. *Journal of Personal Finance*, 8, 170-184.

- Schooley, D. K. & Worden, D. D. (1999). Investor's asset allocations versus life-cycle funds. *Financial Analysts Journal*, 55(5), 37-43.
- Schuchardt, J., Hanna, S. D., Hira, T. K., Lyons, A. C., Palmer, L., & Xiao, J. J. (2009). Financial literacy and education research priorities. *Journal of Financial Counseling and Planning*, 20(1), 84-95.
- Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. *Measures in health psychology: A user's portfolio. Causal and control beliefs*, 1(1), 35-37.
- Seiling, S. S. & Seiling, S. (2004). Moving into action: Application of the transtheoretical model of behavior change to financial education. *Financial Counseling and Planning*, 15(1), 41-52.
- Shim, S. (2009, April). Cultivating positive financial attitudes and behaviours for healthy adulthood. Arizona pathways to life success for university students, pp. 1-30. Retrieved from https://static1.squarespace.com/static/597b61a959cc68be42d2ee8c/t/599cc278be42d6b72a1fa9df/1503445625411/wave1_report.pdf
- Stolper, O. A. & Walter, A. (2017). Financial literacy, financial advice, and financial behavior. *Journal of Business Economics*, 87, 581-643.
- Wardani, A. K. & Lutfi, L. (2017). Pengaruh literasi keuangan, experienced regret, risk tolerance, dan motivasi pada keputusan investasi keluarga dalam perspektif masyarakat Bali. *Journal of Business and Banking*, 6(2), 195-214.
- Weber, E. U. & Hsee, C. K. (1998). Cross-cultural differences in risk perception, but cross-cultural similarities in attitudes towards perceived risk. *Management Science*, 44(9), 1205-1217.
- Wen, F., He, Z., & Chen, X. (2014). Investors' risk preference characteristics and conditional skewness. *Mathematical Problems in Engineering*, 2014, 1-14.
- West, T. & Worthington, A. C. (2014). Personal attributes and financial risk-taking in Australia. *JASSA The Finsia Journal of Applied Finance*, 1, 24-31.
- Wong, A., & Carducci, B. J. (1991). Sensation seeking and financial risk taking in everyday money matters. *Journal of Business and Psychology*, 5(4), 525-530.
- Worthington, A. C. (2009). Household asset portfolio diversification: Evidence from the household, income and labour dynamics in Australia (HILDA) survey. *Household, Income and Labour Dynamics in Australia (HILDA) Survey Research Conference*, (pp. 1-20). Melbourne.
- Xu, L. & Zia, B. (2012). Financial Literacy around the world: An overview of the evidence with practical suggestions for the way forward. *Policy Research Working Paper*; No. 6107 (pp. 1-56). Washington, DC: The World Bank.