self-efficacy

by Anastasia Melicha

Submission date: 02-Aug-2020 02:58PM (UTC+0700)
Submission ID: 1364937124
File name: ventura-melicha.doc (319.5K)
Word count: 7651
Character count: 44784

Journal of Economics, Business, and Accountancy Ventura Vol. XX, No. XX, August – November 20XX, pages XXX

Financial Self-Efficacy in Women on Financial Product Selection

Njo Anastasia[1], Mellicha Jeni Lestaritio[2]

[1,2] *Finance Program, Petra Christian University, Siwalankerto 121-131, Surabaya, 60236, East Java, Indonesia*

A R T I C L E I N F O

Article history:
Received
Revised
Accepted

JEL Classification:

Key words:
Financial self-efficacy, contributing to financial literacy, financial risk preference, demographic factors, financial products.

DOI:
10.14414/jebav.

A B S T R A C T

The government is intensively implementing formal and informal education to improve individual financial literacy. Furthermore, each individual needs confidence and risk considerations when making investment product decisions according to his ability in the financial sector. This study aims to examine the effect of women's financial self-efficacy on financial product choices with control variables of contributing to financial literacy, financial risk preferences, and demographic factors. The sample was taken purposively on 253 female respondents who live in Surabaya and already have financial products. Data collection used questionnaires distributed online and offline, then the data is processed using binary logistic regression. The results of the analysis show that financial self-efficacy with control variables contributing to financial literacy, financial risk preference, and demographic factors have a significant influence on the choice of the financial product in the form of investments, credit cards, and other loans, but not significantly to savings, mortgages, health insurance, and life insurance. This research provides benefits in developing methods to increase financial literacy in women according to the choice of financial products available.

A B S T R A K

Pemerintah gencar melaksanakan edukasi secara formal maupun informal untuk meningkatkan literasi keuangan individu. Selanjutnya, setiap individu membutuhkan keyakinan dan pertimbangan resiko saat pengambilan keputusan produk investasi sesuai literasi keuangannya. Penelitian ini bertujuan 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 menggunakan kuesioner yang disebarkan secara online dan offline, kemudian data diolah menggunakan regresi logistik binari. Hasil analisis menunjukkan 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 signifikan terhadap produk tabungan, KPR, asuransi kesehatan, dan asuransi jiwa. Penelitian ini memberikan manfaat dalam mengembangkan metode untuk meningkatkan literasi keuangan secara tepat pada wanita sesuai pilihan produk keuangan yang tersedia.

1. INTRODUCTION

Each individual has their own preferences in the selection of financial products as a tool to achieve their personal goals. Individual reflections on managing their personal finances can be seen in the selected financial products, how their financial responsibilities are, as well as their outlook on the future (Stolper & Walter, 2017). Perry & Morris (2005) state that budgeting, saving, and spending control are individuals' indicators of a vision for the future and financial responsibility to improve their financial conditions, by selecting financial products that will be useful in the future. Financial products include investments, savings, mortgages, credit cards, other loans, health insurance, and life insurance (Farrell, Fry, & Risse, 2016).

** Corresponding author, email address: [1] Njo Anastasia_anas@petra.ac.id*

Author 1: It should reflect …

Long-term investment instruments include asset, gold, and stocks chosen to maintain current income levels or gain profits in the future. Savings financial products can provide benefits as an emergency fund in case of unexpected expenditures. Meanwhile, having credit cards and other loans such as debt to pawnshops will increase financial burden, so is the case for mortgages or homeownership credit (KPR). But on the other hand, the mortgage has a positive impact, because over time the value of assets purchased through debt will increase. As for protection-related financial products include health insurance and life insurance. This product is important as personal protection from potential possible losses.

The selection of financial products is influenced by individual financial self-efficacy. Self-efficacy is the individual's belief in completing a given task, broadly understood is the individual's belief in overcoming life's challenges (Bandura, 2006). Financial self-efficacy is an individual's belief in his or her ability to achieve financial goals through his or her behavior when choosing investment financial products (Fosnacht & Calderone, 2017). According to Guo, Stone, Bryant, Wier, Nikitkov (2013), individuals according to their motivation and capacity will determine competent and rational actions. Rationally, individuals who want a more decent life will be wise in choosing investment financial products as a means to improve their standard of living over time.

Financial problems can occur due to errors in managing finances. One way to overcome this by improving financial literacy is the ability of individuals according to their knowledge and cognitive skills to understand the financial sector and deal with their financial problems. Contributing to financial literacy can be explained by socialization learning obtained through financial education and financial socialization. Gutter, Garrison, & Copur (2010) state that financial education influences the formation of financial knowledge, attitudes, and behaviors. Also, financial education from parents (parental socialization) is expected to be able to contribute well to the development of individual education. Not only is to provide theory, but the role of parents also expected to provide a realistic example of how to allocate funds wisely through the selection of financial products.

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

The Survey on Financial Inclusive and Access (2017) states that the results of initiation between Indonesia, Australia, and Switzerland are women considered more reliable in managing finances (Maharani, 2017). In contrast, women are generally less confident than men, have lower levels of financial literacy, and are more conservative in risk-taking. Consequently, women are more likely to suffer losses than men (Hackett & Betz, 1981; Wong & Carducci, 1991; Powell & Ansic, 1997; Dwyer, Gilkeson, & List, 2002; Charness & Gneezy, 2012). Therefore, this study is specifically for women, because many things are not realized by the society that women have made a significant contribution to the household, especially in the financial management of the family. Women tend to think about future needs, so they will be more careful in using and managing the money they have (Lim & Teo, 1997).

The purpose of this study is to test the influence of women's financial self-efficacy when selecting financial products as well as the influence of control variables contributing to financial literacy, financial risk preference, and demographic factors related to the choice of financial products. This article is divided into several sections, the first part explaining the background of this research; part two describes the literature review and research methods; further related to the results of data processing and conclusions. This research is expected to contribute to women to understand the financial knowledge they have to make risk assessments according to their beliefs when choosing financial products. Furthermore, financial planners are expected to provide advice to female clients to diversify their client's personal investment product portfolio.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Financial Literacy

Financial literacy is part of a person's mental intelligence related to how to find solutions to financial problems (Kiyosaki, 2008). Lusardi & Mitchell (2007) define financial literacy as financial knowledge an individual has to achieve well-being. Xu & Zia (2012) say that financial literacy includes concepts that start from awareness and knowledge of financial products. One of the main goals of financial literacy is to equip each individual with the ability to make a plan with the existing financial products such as retirement planning or homeownership credit (Kredit Pemilikan Rumah (KPR)) as well as making healthy financial decisions. Chen & Volpe (1998) say that financial literacy is an individual's financial comprehension of general knowledge on finance, savings and loans, investments, and insurance, such as the following:

a. The aspect of Financial General Knowledge is the basic knowledge of personal finance that includes several general items in finance, such as basic knowledge on finance, financial planning, effects of inflation, and asset liquidity.
b. The aspect of Savings and Loans is an individual's comprehension of knowledge on savings and loans, including interest rate, time value of money, and credit cards.
c. The aspect of Investment is the understanding of definition, types, methods, and returns of various investments including investment products and investment risks.
d. The aspect of Insurance includes basic knowledge of insurances, insurance products, insurance benefits, types of insurances, and insurance premiums.

Chen and Volpe (1998) stated that a low level of financial literacy tends to lead someone to have an incorrect opinion, causing an incorrect decision to be made in the field of general education, savings, loans, and investments. In the long term, if the individual involved still cannot manage his finance, it will be an issue in his life in society. To increase financial knowledge, the individual can acquire it through formal education as well as informal, so he can understand various financial products namely investment products, savings, mortgage, credit cards, other loans, health insurance, and life insurance (Farrell, Fry, & Risse, 2016).

Behavioural Finance

Behavioral finance is a fast-growing field of science related to economic decisions that combines psychological theories of behavior, cognitive, and conventional finance. The underlying assumptions of behavioral finance are the information structure and characteristics of market participants that influence individual investment decisions and market outcomes, due to the human brain processes information using emotional shortcuts (Baker & Nofsinger, 2010). The combination of cognitive processes and emotional dynamics ultimately affects individual behavior during the financial decision-making process. (Shefrin, 2000; Nofsinger, 2001; Ricciardi, 2006). One of the psychological factors that play an important role in individual behavior is personality (Robbins dan Judge, 2012).

Self-efficacy is a person's belief in achieving success in a given task due to having confidence, optimism, and a belief that a person can overcome various life challenges (Bandura, 1977, 2006). Individuals with a high level of self-efficacy have confidence that they can perform well in a given task. Although a person has a high level of self-efficacy, his confidence varies depending on the task to be completed (Bandura, 2006). The basis of self-efficacy is the result of an individual's cognitive process in the form of decisions, beliefs, or appreciation of the extent he estimates his ability to perform a certain task or action required to achieve the desired result (Bandura, 2000). In finance, financial self-efficacy is the confidence an individual has in solving various financial problems with the right solution, using the Financial Self-Efficacy Scale (FSES) test. The scale of FSES was developed and validated by Lown (2011) using the general self-efficacy scale which was developed by Schwarzer and Jerusalem in 1995 following the advice of Bandura in 2006.

Changes in an individual's behavior in managing finance to achieve his life goals can be developed through financial education (Shockey & Seiling, 2004). Lyons (2007) states that financial education is necessary to start a better financial life. Individuals need a supply of knowledge, life skills, and an attitude of self-developing related to finance (Farrell, Fry, & Risse, 2016). Contributing to financial literacy is a source of financial knowledge that an individual acquires through the process of self-learning as well as from others, which leads to socialization learning. Socialization learning is a process in individuals to acquire knowledge, skills, and values to participate in society (Brim, 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, social learning is someone who learns from others by observing and imitating their behavior, attitude, and emotional reaction (Bandura, 1977; Gutter, Garrison, & Copur, 2010). There are two sources of socialization learning which are Financial Education and Financial Socialization.

Financial Socialization is a process in which a person acquires and develops values, attitude, standards, norms, knowledge, and behavior that contributes to financial skill and comprehension (Fox, Bartholomae, & Gutter, 2000). Parents have a greater influence on the development of knowledge, attitude, and financial behavior of their children compared to work experience and higher education (Shim, 2010). Parents' role is to prepare their children to live independently, teach them how to manage finance, not directly (Danes, 1994; Moschis, 1987) but through appropriate behavior (Hayhoe, Leach, Turner, Bruin, & Lawrence, 2000; Joo, Grable, & Bagwell, 2003). In addition, parents might monitor their child's financial behavior, such as giving out pocket money, work training, and managing bank account as a form of the parents' trust to exercise their child's responsibility to manage personal finance. Individuals who make financial decisions will consider the risks and returns. Risk preference is the tendency in a person to make a risky decision (Weber & Hsee, 1998) according to the individual's boldness. Kuzniak, Rabbani, Heo, Menjivar, & Grable (2015) divide risk preference into four groups which are (1) choosing a great financial risk to get a great return; (2) choosing an average financial risk to get an above-average return; (3) choosing an average financial risk to get an average return; (4) unwilling to take any financial risk.

Effect of financial self-efficacy towards financial product selection

Individuals have different behaviors that depending on their own self-efficacy, although they have the same abilities (Gist & Mitchell, 1992). Self-efficacy affects a person's choice, goals, problem-solving, and perseverance. If a person's self-efficacy is low, then he tends to give up easily when faced with a difficult challenge, in contrast, a person with a high self-efficacy will be able to do something to change the events around, thus encouraging him to persevere. Said individual tends to view challenges as something that can overcome through the appropriate effort and competence (Avey, Luthans & Jensen, 2009). The study of Farrell, Fry, & Risse (2016) shows that women have a higher financial self-efficacy compared to men. This indicates that women can manage finances and plan for the future well; they have a greater probability to choose financial products such as investments, savings, mortgages, health insurance, and life insurance. Women also have a smaller probability to choose credit cards and other loans. Financial products such as investments, savings, mortgages, and insurances are financial products that will give benefits later on, in the form of return, so that the sum of money increases. Meanwhile, a mortgage which is a loan for the purchase of a house gives two views. Homeowners benefit from the increased home value, while on the other hand, owners suffer loss from the interest rates paid. In the end, mortgages are still viewed as a financial product that gives off benefits. Insurances are considered to be a useful financial product due to self-protection from potential losses. On the contrary, credit cards and other loans add to the financial burden as loan interest must be paid and not followed by an increase in the value of the asset purchased.

H_1: Financial self-efficacy significantly affects financial product choice.

Financial literacy influences an individual's financial behavior such as managing or precisely allocating finances (Robb dan James, 2009). In adolescence, if women get socialized about financial knowledge, it will encourage them to become individuals who have the responsibility of managing bank accounts. As a result, in adulthood, investment products become the choice of women. On the other hand, if she had a negative experience in financial management from childhood to adolescence, then loan products are chosen to accomplish her life goals (Farrell, Fry, & Risse, 2016). Individuals who make financial product selection depend on their boldness, thus forming a financial risk preference for said individual to decide which financial product they will choose (Grable, 2000). Women who dare to take risks will be more likely to choose investment products or credit cards. On the contrary, women who tend to avoid risks will choose savings products. The reluctance to financial risks is also found to be influential in 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 the demographic factors, income affects the individual's activity that the higher the income earned, the more likely the choice of financial products are credit cards, mortgages when first proposed, and investment products (Hogarth & O'Donnell, 2000).

Schooley & Worden (1999) state that marital status affects the financial product of choice in order to support the future. A married person will tend to choose investments that are not high in risk, as they prioritize household need first (Ranganathan, 2004). Married women will make investment decisions together with their partners. Furthermore, married women who have a high income tend to choose health insurance (Farrell, Fry, & Risse, 2016). With age, individuals give preference to investments with low financial risk. This is based on the fact that older investors do not have a sufficient recovery period from the possibility of losses from risky investments (Grable and Lytton, 1998; Jianakoplos and Bernasek (2006); Alwahaibi (2019). The reluctance to bear risk occurs in individuals aged 65 years and above (Harrison, Lau, & Rutström, 2007).

H_2: Financial self-efficacy significantly affects financial product choice with control variables of contributing to financial literacy, financial risk preference, and demographic factors.

3. RESEARCH METHOD

This study is an explanatory study of financial products owned by women. Sample selection is done on women who live in Surabaya where they are currently working and have their own income. Data collection was done through a questionnaire shared offline and online, which was then processed using SPSS for Windows. The model used is a binary probe, based on a latent variable that a person who has a certain financial product cannot be observed directly but is estimated as a probability with a value between zero and one. Next, psychological testing for Financial Self-Efficacy using the Financial Self-Efficacy Scale (FSES) developed from Lown (2011). Respondents are asked to respond from six statements based on the Likert scale, from completely inaccurate to very accurate. Responses for each question are rated from 1 to 4 with the highest score given to the highest level of financial literacy. The scores of each participant for the six items were summed to produce a total score from a minimum of 6 to a maximum of 24. This sum is an individual score in FSES. Furthermore, systematically, other variables related to individual background and socio-demographic characteristics were selected as models in control variables. These variables were selected to isolate the relationship between financial self-efficacy and observed behavior, in spite of other misleading factors. The use of the first control variable, namely the level of financial literacy in women during their lifetime, includes; general education level (where they can develop basic skills of letters and calculation needed to acquire financial knowledge and develop financial literacy); if she has attended financial training (training designed to facilitate the development of financial literacy); aspects that can affect her financial literacy later on (how positive the values her childhood experience related to money; and, as a teenager, if she received money from her parents, if she made money by working, and if she had the responsibility of managing a bank account). Individual experiences about money management can form their financial literacy in their adult lives, especially through the process of socialization (Gutter et al., 2009; Lee & Mortimer, 2009). The second, risk preference which is the individual's willingness to bear risks if they have cash for investment with the options of 'not willing to bear risks', 'willing to bear average risk for average returns', 'willing to bear above-average risks for above-average returns', and 'willing to bear great risks for great returns' (West & Worthington, 2014). Third, the types of financial products an individual has depend on his demographic and socio-economics that reflect their life stages (Hogarth & O'Donnell, 2000; Worthington, 2009). The measurement of these variables uses the Likert scale and dummy variables. The data is then processed using logistics regression, as the variable of financial product selection as a dependent variable is a binary variable. The model used is:

$$ln\frac{Pi}{(1-Pi)} = \alpha + b_{FSE}FSE + b_{FCL}dCFL + b_{FRP}FRP + b_{FD}dFD + e$$

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

4. DATA ANALYSIS AND DISCUSSION

The analysis is conducted using the data gathered from 253 female respondents with an income in Surabaya, as 10 data (out of 263 data) cannot be processed because they do 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.

<insert Table 1>

Table 1 shows that dependent variables which

Author 1: It should reflect …

are financial products, with code 1 meaning the respondent chose a financial product (Investment; Savings; Home Ownership Credit; Credit Cards; Other loans; Health Insurance; Life Insurance) and code 0 meaning none were chosen. Savings financial product is the most preferred by women (90.12%) and other loans are the least (11.07%). Life insurance is less preferred compared to health insurance. The variable contributing to financial literacy consists of financial education and financial socialization. Financial education was measured using general education which showed the highest mean, indicating that 80.63% of women gained financial knowledge through general education, and only 8.7% of women had financial knowledge through Graduate/Post education. Financial socialization indicates that 87.35% of women received money from their parents as a teenager and had a positive experience managing money as a child. Furthermore, financial risk preference shows that most women are less likely to take a risk which was measured using the Likert scale. Demographic data showing age, income, and respondents' marital status use a dummy variable, namely, the majority of women (28.85%) are in the age group of 25-34 years old; 24.9% have an income of Rp. 5,000,000 – Rp. 10,000,000 and 41.9% of them are already married. The variable of financial self-efficacy was measured using the Likert scale, so it had minimum values (6) and maximum (24), as described in Table 2.

<Insert Table 2>

Table 2 shows that women tend to have difficulties maintaining spending and worry about not having enough funds at retirement, but 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 distribution of the total value of each FSES indicator.

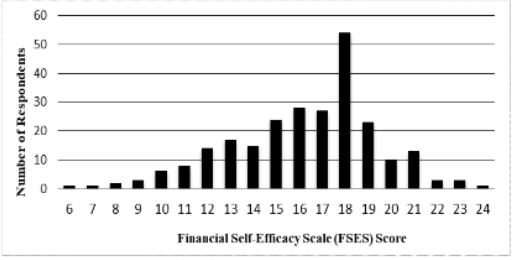

Figure 1. Total Observation of FSES

Most women have an FSES value of 18, and being in the range of 15-19 indicates that most women have fairly 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 Test and Financial Self-Efficacy Variable Reliability

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 α = 0.05

Validity and reliability tests are followed by logistics regression analysis without a control variable (Table 4) as attached.

<Insert Table 4>

Table 4 shows that financial self-efficacy has a significant positive effect on the financial products choices of investment, mortgage, health insurance, and life insurance, but financial self-efficacy has no significant effect on the remaining 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 ex-

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

<Insert table 5>

Nagelkerke R square value in Table 5 is 32.4%, 27.5% of savings, 70.4% of mortgages, 40.8% of credit cards, 51.4% of other loans, 24.9% of health insurance, and 42.9% of 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 significance Chi-Square value of each financial product of investment, savings, mortgages, credit cards, other loans, health insurance, and life insurance greater than 0.05, so 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.

Discussion

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

On the other hand, financial self-efficacy has no significant effect on the selection of financial products such as savings, credit cards, and other loans. A positive childhood experience directs them to have savings. Savings in a bank are not considered as investment activities, but a collection of funds that can be withdrawn at any given time using a debit card for daily living and 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 the expenditure. Therefore they tend not to be able to control their spending, but the upside is that the act of borrowing does not become a financial solution. This result is slightly contradictory to Perry & Morris (2005) in that the act of budgeting, saving, and controlling a person's spending is an indicator of forward-thinking and responsible financial behavior.

The use of control variables of contributing to financial literacy, financial risk preference, and demographic factors in financial self-efficacy was 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 as they are needed as a protection product needed by women, who are mostly still at a young age and not yet married. In contrast, financial self-efficacy and control variables have a significant impact on the choice of investment products, credit cards, and other loans. With an average income of more than Rp 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 have a negative impact later on if used excessively. Credit cards ought to be used as alternative funding in case of an emergency. The

Author 1: It should reflect …

knowledge that credit interest charged by banks is greater than savings interest also directs them to be more careful in using credit cards and other loans. Positive experiences in managing money as a child such as the habit of using savings for day-to-day operations and practical payment tools lead to the choice of savings products but are not influenced by the confidence and ability to manage money. House mortgage is not a product of financial choice for women, because the decision of mortgage for the purchase of a house depends more on the decision of the head of the family and is a joint decision. Therefore, the types of financial products owned by individuals are related to demographic and socio-economic conditions concerning the life cycle (Hogarth & O'Donnell, 2000; Worthington, 2009). Chowdhry & Dholakai (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 the financial ability of individuals (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 impact on the choice of financial products of investments, mortgages, health insurance, and life insurance. However, it has no significant effect on the choice of financial products of savings, credit cards, and other loans. Furthermore, financial self-efficacy has a significant impact on the choice of financial products of investments, credit cards, and other loans with control variables of contributing to financial literacy, financial risk preference, and demographic factors (age, income, marital status). However, financial self-efficacy has no significant effect on the selection of financial products of mortgage, health insurance, and life insurance with the control variable 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. Also, expanding to gender-based research will provide insights related to self-efficacy in both men and women, thus affecting the choice of financial products.

REFERENCES

Alwahaibi, S.S.O. (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.

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*. Conference Proceeding: AARP The Public Policy Institute.

Baker, H.K., & Nofsinger, J.R. (2010). *Behavioral finance: Investors, corporations, and markets*. Hoboken, New Jersey: Wiley.

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. Jul*, 309-322.

Brim, O.G. (1966). Socialization through the life cycle. In O. Brim & S. Wheeler (Eds.). *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. doi: 10.1002/cfp2.1069

Danes, S. (1994). Parental perceptions of children's financial socialization. *Journal of Financial Counseling and Planning*, *5*, 127-149.

Dwyer, P.D., Gilkeson, J.H., & List, J.A. (2002). Gender differences in revealed risk taking: Evi-

dence from mutual fund investors. *Economics Letters*, *76*, 151-158.

Farrell, L., Fry, T.R., & 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., Bartholomae, S., & Gutter, M.S. (2000). What do we know about socialization? Consumer Interest Annual, *46*, 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 Counselling and Planning, 9*(1), 61-73

Grable, J.E, & Lytton, R.H. (1999). Financial risk tolerance revisited: The development of a risk assessment instrument. *Financial Services Review, 8*(3), 164-181.

Guo, L., Stone, D., Bryant, S., Wier, B., Nikitkov, A., Ren, C., Riccio, E.L., Shen, M., Trabelsi, S., & Zhang, L. (2013). Are consumers' financial needs and values common across cultures? Evidence from six countries. *International Journal of Consumer Studies*, *37*(6), 675-688. https://doi.org/ 10.1111 /ijcs.12047

Gutter, M.S., Garrison, S. & Copur, Z. (2010). Social learning opportunities and the financial behaviors of college students. *Family and Consumer Sciences Research Journal*, *38*(4), 387-404.

Hackett, G. & Betz, N.E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior*, *18*(3), 326-339.

Harrison, G.W., Lau, M.I., & Rutström, E.E. (2007). Estimating risk attitudes in Denmark: A field experiment. *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.M. & O'Donnell, K.H. (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*, 409–444.

Jianakoplos, N.A., & Bernasek, A. (2006). Financial risk taking by age and birth cohort. *Southern Economic Journal, Southern Economic Association, 72*(4), 981-1001.

Joo, S.H., Grable, J., & Bagwell, D. (2001). College students and credit cards. *Proceedings of the Association for Financial Counseling and Planning Education*, 8-15.

Kiyosaki, T. Robert (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? *Review of Economics and Statistics*, *93*(1), 244-265.

Kuzniak, S., Rabbani, A., Heo, W., Menjivar, J.R., & Grable, J.E. (2015). The Grable and Lytton risk-tolerance scale: A 15-year retrospective. *Financial Services Review*. *24*. 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 Stud, 1*(1), 45-62.

Lim, V.K.G., & Teo, T.S.H. (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.M. (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*(1), 205-224.

Lyons, A.C. (2007). *Credit practices and financial education needs of Midwest college students.* Working Paper, 2007-WP-23. Indianapolis, IN: Networks Financial Institute, Indiana State University.

Maharani, E. (2017). Survei: Perempuan lebih aktif menabung daripada pria. Republika.co.id. diunduh dari https://www.republika.co.id/berita/ekonomi/makro/17/05/22/oqcj4w335-survei-perempuan-lebih-aktif-menabung-dari pada-pria

McNeal, J. (1987). *Children as consumers: Insights and implications*. Lexington, MA: Lexington Books.

Moschis, G.P. (1987). *Consumer socialization: A life cycle perspective*. Lexington, MA: Lexington Books.

Nofsinger, J.R. (2001). *Investment Madness: How Psy-*

Author 1: It should reflect …

chology Affects Your Investing and What To Do About It. Upper Saddle River: Prentice Hall.

Perry, V. & 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.

Powell, M. & Ansic, D. (1997). Gender differences in risk behaviour in financial decision-making: An experimental analysis. *Journal of Economic Psychology*, *18*(6), 605-628.

Ranganathan, K. (2006). A study of fund selection behavior of individual investor towards mutual funds – with references to Mumbai City. *Indian Institute of Capital Markets 9th Capital Markets Conference Paper,* http://dx.doi.org/ 10.2139/ssrn.876874

Ricciardi, V. (2006). Research starting point for the new scholar: A unique perspective of behavioral finance. *ICFAI Journal of Behavioral Finance, 3*(3), 6-23.

Robb, C.A. & James, R.N. (2009). Associations between individual characteristics and financial knowledge among college students. *Journal of Personal Finance, 8*, 170-184.

Robbins, S. & Judge, T. (2012). *Organizational Behavior*, 5th ed. New Jersey: Pearson Education, Inc.

Schooley, D. & Worden, D.D. (1999). Investor's asset allocations versus life-cycle funds. *Financial Analysts Journal, 55*(5), 32-37.

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

Shefrin, H. (2000). *Beyond greed and fear: Understanding behavioral finance and psychology of investing*. Boston, USA: Harvard Business School Press.

Shim, S. (2010). *Arizona pathways to life success for university students: Cultivating Positive Financial Attitudes and Behaviors for Healthy Adulthood.* Tucson: University of Arizona.

Shockey, S.S., & Seiling, S.B. (2004). Moving into action: Application of the trans-theoretical model of behavior change to financial education. *Financial Counseling and Planning, 15*(1), 41-52.

Stolper, O.A. & Walter, A. (2017). Financial literacy, financial advice, and financial behavior. *Journal of Business Economic*, 87, 581-643. https://doi.org/10.1007/s11573-017-0853-9

Weber, E. U. & Hsee, C. (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*(2), 1-14.

West, T., & Worthington, A. (2014). Personal attributes and financial risk-taking in Australia'. *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.* Paper presented at the Household, Income and Labour Dynamics in Australia (HILDA) survey research conference 2009, 16–17 July. University of Melbourne, Melbourne.

Xu, L. & Zia, B. (2012). Financial Literacy around the world: An overview of the evidence with practical suggestions for the war forward. *Policy research working paper series, 1*, WPS6107. The World Region

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
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
Graduate/Post 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 of 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: ≤ Rp 3,583,322)				
Rp 3,583,323 – Rp 5,000,000	0.2174	0.41329	0	1
Rp 5,000,001 – Rp 10,000,000	0.2490	0.43330	0	1
Rp 10,000,001 – Rp 15,000,000	0.0791	0.27035	0	1
> Rp 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 2. Financial Self-Efficacy Scale

Item	Very True	True	Untrue	Very Untrue	Total (%)
I can hardly control my monthly expense if there is an unexpected expenditure	17.8	49.0	30.0	3.2	100
I experience difficulties reaching my financial goal	14.6	39.6	39.1	6.7	100
I tend to take debt if there is an unexpected expenditure	4.3	12.7	38.3	44.7	100
I have trouble finding a solution when facing a financial problem	5.1	12.7	57.7	24.5	100
I lack confidence in managing my personal finances	8.7	17.8	46.2	27.3	100
I worry about not having enough funds when I retire	16.6	32.0	34.8	16.6	100

Table 4. Logistics Regression Output Without Control Variable

Variable	Financial Product						
	Invest-ment	Saving	Mort-gage	Credit Card	Other Loans	Health Insurance	Life Insur-ance
Financial Self-Efficacy							
Financial Self-Efficacy Scale (FSES)	0.043**	0.230	0.072*	0.618	0.260	0.004***	0.003***
	(0.082)	(0.076)	(0.088)	(-0.020)	(-0.069)	(0.129)	(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 Classifica-tion	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 5. Logistics Regression Output With Control Variable

Variable	Financial Product						
	Inves-ment	Savings	Mort-gage	Credit Cards	Other Loans	Health Insurance	Life In-surance
Financial Self-Efficacy							
Financial Self-Efficacy 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 occupational 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 Education	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)
Graduate/Post Education	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 teenager	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 of managing a bank account as a teenager	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 management 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	Produk Keuangan						
	Invest-ment	Savings	Mortgage	Credit Cards	Other Loans	Health Insurance	Life In-surance
Demographical Factor							
Age (Base group: 15-24 years old)							
25-34 years old	0.259	0.884	0.453	0.262	0.289	0.898	0.186
	(0.562)	(0.104)	(0.993)	(0.553)	(1.120)	(0.066)	(-0.680)
35-44 years old	0.569	0.701	0.010***	0.080*	0.630	0.074*	0.179
	(-0.398)	(0.548)	(3.818)	(1.238)	(0.705)	(1.459)	(1.018)
45-54 years old	0.237	0.997	0.540	0.330	0.896	0.380	0.110
	(-0.906)	(17.486)	(0.849)	(0.699)	(-0.165)	(0.687)	(1.260)
≥ 55 years old	0.999	0.270	0.098*	0.110	0.002***	0.999	0.999
	(-22.518)	(-1.847)	(2.907)	(1.736)	(7.420)	(20.347)	(21.114)
Income (Base group: ≤ Rp 3.583.322)							
Rp 3,583,323 – Rp 5,000,000	0.562	0.570	0.996	0.000***	0.030***	0.204	0.021**
	(-0.241)	(-0.324)	(18.671)	(2.059)	(2.524)	(0.527)	(0.985)
Rp 5,000,001 – Rp 10,000,000	0.505	0.253	0.996	0.001***	0.560	0.111	0.000***
	(0.340)	(1.009)	(19.582)	(1.957)	(0.739)	(0.847)	(2.199)
Rp 10,000,001 – Rp 15,000,000	0.508	0.998	0.995	0.000***	0.001***	0.998	0.000***
	(0.470)	(18.044)	(20.745)	(2.960)	(5.862)	(20.765)	(2.928)
> Rp15,000,000	0.025**	0.997	0.995	0.001***	0.000***	0.035**	0.000***
	(1.594)	(17.950)	(22.216)	(2.529)	(7.021)	(1.553)	(3.305)
Marital Status	0.124	0.368	0.002***	0.455	0.059*	0.321	0.098*
	(0.814)	(0.854)	(2.967)	(0.395)	(-2.148)	(-0.542)	(-0.940)
Constant	0.001	0.579	0.995	0.306	0.459	0.206	0.013
	(-4.183)	(-1.051)	(-23.338)	(-1.385)	(1.719)	(-1.649)	(-3.220)
No. of observa-tion	253						
Nagelkerke R Square	0.324	0.275	0.704	0.408	0.514	0.249	0.429
Sig. Hosmer Test and Leme-show	0.051	0.925	0.286	0.113	0.877	0.522	0.331
Overall Percent-age 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%

self-efficacy

ORIGINALITY REPORT

8%	8%	9%	2%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	researchbank.rmit.edu.au Internet Source	3%
2	lib.dr.iastate.edu Internet Source	1%
3	journal.perbanas.ac.id Internet Source	1%
4	onlinelibrary.wiley.com Internet Source	1%
5	link.springer.com Internet Source	1%
6	Submitted to Universitas 17 Agustus 1945 Surabaya Student Paper	1%
7	pdfs.semanticscholar.org Internet Source	1%

Exclude quotes	On	Exclude matches	< 1%

Exclude bibliography Off