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FINANCIAL MANAGEMENT MODEL FOR FORMAL WORKERS IN INDONESIA

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Abstract

Purpose of the study: This paper is intended to understand the investment pattern for formal workers in Indonesia. Thus, it is also aimed to provide a specific form of variable construction of productive financial management for workers.

Methodology: This study followed qualitative research by emphasizing the active interaction of the subject and the object of researchers in the form of a discussion to determine the ideas or basic reference model of productive financial management, specifically and focus on each individual form in which the organization is located. The data were gathered using in-depth interviews with respondents in the category of civil servants, state-owned and private employees with lower, middle, and upper-level segregation of interests and reasons for making investment decisions.

Main Findings: The findings showed that the investment decision making for formal sector workers are motivated by benefits and financial security in the future. Their investment decision also considers the income received by individuals in each type of institution. Lastly, technology contributes to change investors' economic behaviour. The ease of getting information strengthens the motivation of formal sector workers in productive financial management.

Applications of this study: This study provides an investment decision model for formal workers that can be considered ways to enhance the individual understanding of investment.

Novelty/Originality of this study: This study aims to contribute to this growing area of research by exploring investment patterns for formal workers then propose a financial management model for workers.

Keywords: *Investment Decision, Financial Management, Individual Behaviour, Financial Decision, Economic Behaviour, Investment Model.*

INTRODUCTION

Revenue is one of the main drivers of the individual to work in a formal sector. Social security in the form of pensions is also a big attraction for someone to work in the formal sector, especially government agencies, where social security is one of the regulations of the government that has been set. Even though, in fact, the pension is actually their own fund which has been set aside every month from salary deductions and then managed by government-appointed institutions. This condition creates the consumer's behaviour on formal sector workers because they feel no need for preparation for the financial security of the future will come. As a result, the retirement age, formal sector workers of men are suffering financial instability due to the fact that the amount of funding the pension received could not meet the need in the future.

Most formal sector workers from government, state-owned and private institutions, carry out the habit of carrying out consumptive expenditure. Factors others that contribute to this behavior are the financial literacy of formal sector workers the government (Lusardi, 2019). Public sector workers in developing countries face problems with their financial literacy so that it also becomes a problem for financial security, especially during retirement (Kamakia et al., 2017). The importance of financial literacy is for individuals who will be able to plan, save, borrow, invest, and spend wisely, take steps to reduce risk to the income they obtain and search for information relating to financial development (Atkinson & Messy 2012; Grohmann et al. 2014; Idris et al., 2016; Lusardi & Mitchell, 2017; Van Rooij et al. 2011). In other studies also revealed that a large number of people around the world do not have adequate financial literacy (Wulandari & Narmaditya, 2018; Xu & Zia, 2012; Lusardi& Mitchell, 2011). Xu and Zia (2012) in their study found that the level of financial literacy is insufficient both in high and low-income countries. Whereas Lusardi and Mitchell (2011) observed that the lack of financial literacy is widespread, including in countries with well-developed financial markets. This lack of knowledge about investment is also the reason why these investment activities are not popular in Indonesian that makes the number of individual investors is still low compared to other countries (Utomo et al., 2019).

Besides the factor of social security of the institution into one of the causes that drive individuals not pays attention to financial security in the future will come. The existence of social security in the form of pension funds often causes a worker not seriously to carry out financial planning in the future. Public sector workers, who already have pension guarantees tend not to think productively while private-sector workers where pension guarantees and certainty continue to work are smaller, tend to be more active in thinking productively like employers. A more objective performance appraisal of private workers forces them to think productively while still actively working as part of the anticipation of matters related to the termination of employment that can occur at any time. This is certainly not found in workers in the public sector and the state-owned sector.

However, there are several phenomena occur at this time, there are findings where a formal sector worker also makes wise planning and spending on their finances. This condition is the antithesis of the Kaldor consumption theory (Tobin, 1989) where the two classes in the consumption function are undivided. These formal sector workers carry out their financial management productively without leaving their active activities in their workplaces. This productive financial management they do in the form of business, savings, and investment whose purpose is for their financial security, especially at retirement.

Environmental factors and policies of the government greatly affect their thinking patterns in economic actions. In accordance with Adam Smith's economic philosophy that economic activity is driven by strength from within his individual and social environment, this is what developed countries in the driven economic action of their people have developed. Although the investment decision cannot be separated from the large level of income of the community, it does not necessarily mean an investment decision is made because the income of the individual increases, the need for encouragement from the social environment that provides the power for investment decisions can be realized.

Fixed income received consideration and any given time should be easier for workers to allocate a portion income for productive spending at each mouth. The support of government authorities by facilitating investment regulations in the capital market, opening savings and ease of building a business should be one of the drivers to be able to carry out productive economic activities. The amount of income earned from workers is also a factor that determines the economic decisions of a worker. Workers who have a good income level who are usually workers from the upper level will be more likely to allocate their income to productive expenses while at lower-level workers, the additional income earned will tend to consumptive spending. Several factors do affect investing for someone, one of which is financial flexibility. This factor is one of the major effects on investment decision-making compared to the profitability and risk that can be received from an investment (Anastassiadis, et al., 2015). Suresh and Devanathan (2012) examined that the factors that influence workers in investment decisions of the public sector pension scheme state that the importance of the investment is for extra benefits at maturity, the risk profile of the investment scheme and balance of investment portfolios by maximizing the guarantee and the last performance of the fund.

As with investment, savings and business are a form of productive financial management that can be done also by formal sector workers even though they are bound within the specified work time. If like the investment in the current technological era that can be done anytime and anywhere, business activities can also be technology-based. These factors are utilized by formal sector workers who act as entrepreneurs as well as in carrying out productive financial management. Expenditures made are not only for consumptive purposes but how consumptive expenditures can be used as productive expenditures.

If seen from the previous explanation, there are internal and external factors that can provide impetus to formal sector workers to determine economic decisions on productive expenditure, which can differ due to different professional and environmental background factors. Because of that, it is necessary to explore in more detail what factors actually become factors driving formal sector workers to manage productive financials for their present and future financial security informal sector workers who have roles as employees, entrepreneurs and investors at the same time and have succeeded in managing productive finance in that role.

LITERATURE REVIEW

Productive financial management

Productive financial management is aimed at obtaining financial benefits from the sacrifice of resources that have been made. Productive expenditure can be in the form of business, savings, and investment. The financial management of productive influenced by financial literacy as did natural of individuals directed to expenditures sage from start to plan, save, borrow, invest, and spend it wisely, step reduction of the risks to the revenue it collects as well as for the information related with financial development (Atkinson & Messy 2012; Grohmann et al. 2014; Attridge 2009; Lusardi & Mitchell 2011; Van Rooij et al., 2011).

Economic decisions also affected the economic behavior that is based on cognitive and psychological, including expenditures that are productive in the form of investment. The study of the influence of psychology on the behavior of individual investors is driven by several psychological factors such as conservatism, beliefs, opportunities, representation, and information. The results from Chandra and Sharma (2010) help in understanding the aspects of individual investor behavior.

One of the productive financial management is investing. The investment itself is a sacrifice in the present resource that aims to benefit the future will. The decision of an investment is always based on interests into account where, when, how and how much profit can be generated from an investment. Some people need others to provide input in investment decision-making through investment advisors and some make decisions without the need for help from others based on experience and strategies in investment placement that they have done. This experience and strategy depend on many things including conditions for each individual, allocation of available resources, opportunities available, macro and microeconomic conditions and socio-cultural factors. For small investors, they will exert all their abilities, knowledge and experience in managing finances to get the best investment that is as much income as possible with the least risk.

Investment knowledge and experience aim to minimize the level of risk that accompanies investment. Gilliam et al. (2010) stated that women predict under-estimation for risk factors while men in contrast to acceptable financial risk. Risk perception, knowledge and skills to handle and manage the risk and past experience of investors together have an influence on the investment decisions of workers. Yet, the demographic variables have no significant influence on investment decisions other than the age of the investor (Jain & Ranawat, 2012). The amount of risk that is willing to be borne by one investor with another investor is not the same even though the personalities are the same (De Bortoli et al., 2019). The type of work determines the level of preference for acceptable risk. Forbes and Kara (2010) also concluded the same thing about self-confidence has a significant relationship with someone in dealing with the risk of an investment.

An investment decision is taken not only because of the awareness obtained from information but also factors outside of awareness that is considered also important in the role of decision making. These factors are psychology, sociology, economics (Shiller, 1999). Empirically, Kansal and Singh (2015) proven that investors are individuals in this sample studied were engineers, often behave not in accordance with the standard principles of financial theory and economic behavior. They often make investment decisions that are less than optimal. This means that education can be a factor driving investment decisions but not necessarily generate maximum investment because the knowledge will be investing less.

Driven of Economic

Adam Smith's theory which states that economic activity is influenced by driven of economic (Hope, 1989). Driven of economic is from within the individual or internal and surrounding or external environment. This drive of economics influences the decision making of economic actions as either the working class or the capitalist class. The habit of the community in behaving economically is one of the important influences in decision making (Maski, 2012). Educational background also often influences how an individual makes decisions. Although research has been conducted educational levels do not necessarily provide knowledge investments that generate sufficient experience to be the investment itself (Kansal& Singh, 2015). Warren et al. (1990) predict the selection of individual investments (e.g. stocks, bonds, real estate) based on lifestyle and demographic attributes. Investors perceive rewards depending on their own behavior (Rajarajan, 2000) and salaried individuals (Bhushan,2014).

Other studies where demographic factors are influential are only on location, income level, and knowledge, while marital status, gender, age, education level and position do not influence investment decisions (Jain & Mandot, 2012). Demographic factors, in this case, age (Kansal & Singh, 2015). Chavali and Mohanraj (2016) concluded that demographic factors and acceptable risk have an influence on one's investment decisions in investing. The demographic factors studied were gender, position and age. Of the three variables, the only gender has an enormous influence on the choice of investment type. Akbar et al. (2016) mentioned that factors give family and friends a great influence in making investment decisions compared to attempts to discuss the news in a letter newspaper, television, and Internet agents.

Thaler (1985) argued that investor behavior is not only related to existing financial theory and economic law principles but tends to be influenced and or based on psychological factors. The results of Subash (2012) research on the role of behavioral finance in investment decision making indicate that investors are significantly affected by behavior bias in making investment decisions. Biased behavior is more common in younger investors. This shows that investors with age younger tend to set the standard figure of an investment based on the image of the company they already know.

Factors from the results of the above research are driven by morality, namely encouragement that comes from the individual itself. It is an internal factor that influences economic activities. The factors that originate from driven institutions are external factors that influence individuals in their economic actions. Le (2004) added that the politics and economics of a country affect investment decisions. Ismail and Zaki (2019) indicated that financial literacy and financial pressure are significant factors that have a positive relationship with financial health. It is important to describe the ability to manage revenue and knowledge implementation will help make effective financial decisions. A study conducted by Müller and Weber (2010) shown that financial literacy is very influential in low-cost investment decisions. While Klapper and Panos (2011) proved that high financial literacy will give effect to the financial planning in retirement.

METHODOLOGY

This study followed qualitative research by emphasizing the active interaction of the subject and the object of researchers in the form of a discussion to determine the ideas or basic reference model of financial productive management, specifically and focus on each individual form in which the organization is located. The research was conducted in Malang of East Java in Indonesia. In this study, Malang is determined as the sample of the research due to that Malang has a number of formal sector workers of various types of institutions. The data were gathered using in-depth interviews with respondents in the category of civil servants, state-owned and private employees with lower, middle and upper-level segregation of interests and reasons for making investment decisions. Interviews were conducted to explore how their knowledge of investment, what drives them to invest, how they start investing, how they behave towards investment risk, how they manage investment and how they deal with error thinking that arises during the investment period. An interview was carried out on three types of institutions that have different types of welfare guarantees for their employees. The institutions are chosen purposively which covering three main institutions namely the private sector, civil servant and state-owned institution. In addition, the participants are chosen based on the criteria of the respondent is an employee and have an investment that has been more than three years with a significant level of success. Data was collected through in-depth interviews with each of the respondents who had been determined according to the criteria. Validation of data from exploration to this research in a descriptive manner than was analyzed carried out using the methodology triangulation technique by comparing the results of observations, surveys and interviews (Miles et al., 1994). In more detail, the interactive model in this study is illustrated in figure 1.

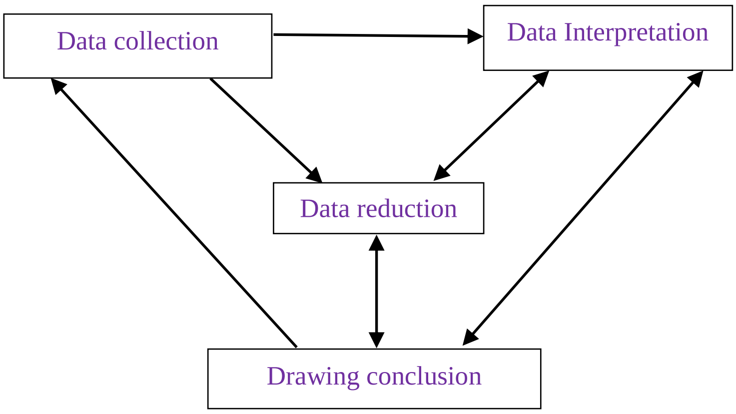

Figure 1: Interactive model of the study

Source: Adapted from Miles et al. (1994)

DISCUSSION / ANALYSIS

Based on the interviews with the respondents it is known that several factors affect an individual in determining investment decisions. First, there is a difference in motivation from the investment decision towards productive expenditure based on encouragement in individuals and the social environment. A government employee can be driven by morally that is different from someone who works in the state-owned entrepreneurship sector and the private sector. This finding is in line with study Shiller (1999) which revealed that an investment decision is taken not only because of the awareness obtained from information but also factors outside of awareness such as psychology, sociology and economics.

Government workers who have a clearer age-driven old age guarantee tend to have experience in investing while in state-owned entrepreneurship and the private sector, more encouragement to awareness to prepare for financial security at retirement, where old-age insurance facilities are not yet regulated by the institution especially at private companies. Guaranteed employment continuity at private and state-owned institutions, which often does not provide certainty, is also a factor influencing formal sector workers in both institutions to make the productive expenditure. Whereas in government institutions, these factors do not have a dominant influence, it is precisely the factor of the amount of income to be received at retirement that influences the decision to make productive expenditures. Therefore, these two conditions if drawn the common thread, the factors that become common are financial security factors during periods of inactivity are factors that affect individuals of the three types of institutions in carrying out productive expenditure.

The factors that have similarities in the three institutions are factors of financial literacy. It found that in general, the level of financial literacy is categorized as literate and some of them categorized as sufficient literate. However, financial literacy is an effective financial literacy in accordance with the needs of each of these institutions, so that different types of financial literacy are factors that influence the decision to make an investment or productive expenditure. The form of welfare guarantee provided by each institution is one of the factors that make different motivations for each individual to make investment decisions. Likewise, the form of investment spent depends on each level in the organization in the agency, this is related to the amount of income they received. This finding supports previous studies by Atkinson and Messy (2012); Grohmann et al. (2014); Idris et al. (2016); Lusardi and Mitchell (2017); Van Rooij et al. (2011) which mentioned that financial literacy is essential for individuals who will be able to plan, save, borrow, invest, and spend wisely, take steps to reduce risk to the income they obtain. In addition, Lusardi and Mitchell (2011) provided that the lack of financial literacy is widespread, including in countries with well-developed financial markets.

The existence of interference by policyholders in this case the government and business owners are a factor that also provides influence in shaping the pattern of financial management based on driven by institutions through the regulations issued. Workers in the government sector are indirectly forced to set aside their income as deductions from pension contributions that will be received when they are no longer active. The same applies to state-owned companies, while private institutions set aside a portion of their income for old age savings done on their own awareness so that it often becomes neglected because it is used more for consumptive expenses. The government regulation that makes it easy for individuals to prepare for financial security during their retirement through investment regulations is a factor that also influences the decision to make a productive expenditure for a formal sector worker from the three institutions. Global technological progress enables formal sector workers from the three institutions to be able to obtain information and opportunities in carrying out productive economic activities without leaving their principal activities as workers is a factor influencing productive spending decisions for formal sector workers of these three institutions.

Based on Adam Smith's theory (Hope, 1989) which asserts that any economic activity is actually driven by morality and any economic action is driven by institutions, this research shows that different organizations provide different individual driven so as to produce different institution driven. This is related to the factor of community habits in economic behaviour is one of the important influences in investment decision making (Maski, 2012). The role of government and business owners in establishing regulations relating to individual habits is very important so it needs to be implemented. The motivation underlying the investment decision making for formal sector workers are getting benefits and financial security of future that will come out which types of investments that they allocate That depends ng on the type of income received by individuals in each type of institution. This research is in line with previous studies that financial flexibility will determine an investment decision (Anastassiadis et al., 2015). From the type of investment and motivation that there can be concluded that the institutions that guarantee the welfare of goodwill shortly create employees who have the motivation to invest that tend to generate huge profits, although the level of risk is also great. Workers at the top level also mostly do this investment because it is related to the income they get. This means that at the top level workers and workers who have adequate welfare guarantees tend to invest the income they have in large-value investments that are expected to get large profits as well.

One-third of the things that can be given in financial management are more on how to manage the risks to the investments they have. In agencies that have not provided good welfare guarantees and in middle and lower-level workers, the motivation to invest in more aimed at short-term profits, meaning that they more often spend their income on investment needs that can provide benefits at any time. Therefore, learning financial management is better addressed how the allocation of income it has to be able to provide quick profits. The rapid pace of information technology contributes to changing people's economic behaviour, as well as formal sector workers. The ease of getting information strengthens the motivation of formal sector workers in productive financial management.

The forms of investment owned by respondents and how to manage them are actual examples of financial management models that can be used as a basis for building learning models. The forms of investment are as follows in table 1.

Table 1: The Forms of Investment for Workers

No	Individual driven investment model	Type of Investment	Recommended level	Suggested agency
1	A large investment value, a big risk and that provides a large return	Asset Investment - property, Capital Market Investment – Stock Saving	Upper level	Government, State-owned, Private
2	Small value investment, small risk, and small profit level	Business Investment, Capital Market Investment – Stock Trading	All Level	Government, State-owned, Private
3	Great investment value, big risk and which gives big profits and a small repetition rate	Asset Investment - property	Upper and middle level	Government, State-owned, Private
4	Small value investment, small risk and small profit level and large repetition rate	Capital Market Investment – Stock Trading	All levels	Government, State-owned, Private

Source: Authors (2019)

Table 1 provides information about the form of investment for formal workers. In general, workers in three different institutions have a different type of investment by comparing probability risks and expected returns. Based on the findings, the individual driven investment for workers are divided into four categories. First, for large investment value with big risk and expected returns, it is suggested to invest in the asset investment-property and capital investment – stock saving. This investment requires a longer time to be able to get the benefit. On the contrary, for small value investment with small profit and risk, the type of investment is business investment and capital market investment – stock trading with the recommended level of the upper, middle and lower level. However, for all types of investors is suggested in government, the state-owned company, and private company. This type of investment is usually carried out by the middle and lower levels because they will be able to immediately enjoy the results of the investment quickly, in addition to future financial security factors that can also help meet current needs.

The differences in the investment form of workers in three different institutions are reasonable. The amount of income earned from workers is also a factor that determines the economic decisions of a worker. Workers who have a good income level who are usually workers from the top level will have a greater tendency to allocate their income to productive expenditures while at lower-level workers, the additional income earned will tend to consumptive spending. There are several factors that really affect investing for someone, one of which is financial flexibility. This factor is one of the major effects on investment decision making compared to profitability and risk that can be received from an investment (Anastassiadis et al., 2015). Suresh and Devanathan(2012) added that the factors affecting workers in investment decisions of the public sector pension scheme state that the importance of the investment is for extra benefits at maturity, the risk profile of the investment scheme and balance of investment portfolios by maximizing the guarantee and the last performance of the fund.

CONCLUSION

Based on the previous analysis, it can be drawn that the investment decision making for formal sector workers are motivated by benefits and financial security in the future. Their investment decision also considers the income received by individuals in each type of institution. Lastly, technology contributes to changing investor's economic behaviour. The rapid pace of information technology contributes to changing people's economic behaviour, as well as formal sector workers. The ease of getting information strengthens the motivation of formal sector workers in productive financial management. The following literature review only presents the steps of this research which is a temporary conclusion to be able to do further research with a number of sample agencies that are the object of extensive research that can represent institutions of the object of research. The study was conducted with a variety of each type of agency more so that the driven institutions that occur are more able to describe conditions that are closer to reality about the behaviour of each agency. The results of the conclusions at the recommendation stage need to be poured into learning or training model that will be carried out for further dissemination so that it can be seen how much influence the training or learning has on investing behaviour for formal sector workers

LIMITATION AND STUDY FORWARD

It is suggested for further study to provide research with a large number of sample institutions that are the object of research that can represent the object of research. In addition, further research also can conduct a variety of each type of institution more so that encouraging institutions that occur more can think of conditions that are more discussing about each institution.

IMPLICATIONS OF THE STUDY

Giving enrichment to the consumption function of social theory where the consumption that is in it includes productive consumption, $Y = C + S$ which is C is included Investment.

This study contributes to the investment model particularly for workers. Further, in the macroeconomic context, these findings also provide in enhancing the number of investors that concern in the formal sector.

CO-AUTHOR CONTRIBUTION

N. K. I and S. U. M. W design the model and the computational framework and analyse the data. N. K. I and W. Y carried out the implementation. N. K. I perform the calculation. N. K. I and A. H wrote the manuscript with inputs from all authors. N. K. I and A. H conceived the study and were in charge of overall direction and planning.

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