Factors that Influence Financial Literacy: A Conceptual Framework

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Abstract. Development of financial management theory developed rapidly; forming branches roots. Start with Value of the firm theory, capital structure theory up to investment theory. Investment theory; behavioural finance is relatively new field that combine behavioural, psychological, economics and finance. This paper aims to develop conceptual Framework of factors that Influence Financial Literacy. Research in factors that influence financial literacy gives new development of financial theory through perception view. This research use qualitative study with grounded theory model of financial literacy. Moreover, this research gives implication in comprehensive framework that can be used in developing future research.

1. Introduction

In recent year, there has been increase interest in studying individual financial literacy since the world face financial crisis that imply the risk that people around the world face [1]. The research conducted by OECD that reviewed 12 countries’ financial literacy (USA, UK, European, and Australia) [2]. That study concludes that financial literacy in those countries is very low. Lack of personal budgeting and financial concept as variables that influence financial literacy of Latvian Citizens [3]. The low utilization financial market among manager Small Medium Sized Business. The fact is almost half of managers prefer to invest in gold and deposit account in a bank. At the same condition, the level of financial literacy is still in the moderate range. Study in financial literacy is important not only for the individuals but also business level. At the recent years, financial literacy has been prioritized on government level [4].

In Indonesia, Survey conducted by OJK shows that only 50 million from 250 million people of Indonesia that join the formal financial institution. In the percentage, only 21.84 % Indonesian people categorized in the well literate level. Table 1 shows the overview of Indonesia Financial Literacy:
From Table 1, Indonesian people only 21.8% well literate in bank product, but for other product is less than 20%. Indonesian people categorized in sufficient literate in bank product, i.e. 75.44%. Only a little of Indonesian people that not literate in bank product. In the other hand, more than 70% of Indonesian people that not literate about financial funding institution, pension funds, and capital markets. The utility of those products is also in the low level.

The important financial literacy for individuals, business, and society [3]. Due to the important of financial literacy, strategic financial literacy should be important and developed in all levels. This study aims to develop conceptual framework from many research of factors that influence financial literacy. Considering the rapid growing factors that influence financial literacy, the author tries to develop comprehensive framework that have not been explored or developed or proposed by other researcher. The needed of the comprehensive framework become the background to do this research. Moreover, the framework can give more implication in developing financial literacy strategy in national context.

2. Conceptual framework
Financial literacy is a combination of awareness, knowledge, skill, attitude, and behaviour necessary to make sound financial decision and ultimately achieve individual financing wellbeing (Organization of Economic Co-operation and Development). Other definition by President Advisory Council on Financial literacy, financial literacy consist of ability to use knowledge and skill to manage financial resources effective for lifetime (Pailella, 2016). Financial literacy as the ability to collect important information, and also differentiating between diverse financial option, discussing financial issues, planning and proficiently answer that affect financial decision making [1].

Financial literacy is a conceptual model containing six basic components: (1) Saving Borrowings; (2) Personal Budgeting; (3) Economic Issues; (4) Financial Concepts; (5) Financial Services; (6) Investing [3]. Saving borrowings related to the knowledge of saving and borrowing, evaluate and ability to make financial planning. Personal budgeting related to the understanding of budgeting based on the personal income. Economic issues related to the understanding about economic issues in a country or worldwide. Financial concept related to understanding the basic financial concept. Financial services related to the knowledge about the current product and service. Investing related to the knowledge in investment and risk of the investment.

Gender, age, nationality, race, income, work experience, academic discipline and class rank as financial literacy measurement of the college student in USA [5]. Age, income, gender, education, and previous online trading experience as financial literacy measurement of online investor [6]. Investigate
the difference source of information as a factor that influences investment decision [8]. ACNielsen Research investigates education, skill, income, marital status, and age as variable for measuring financial literacy in adult of Australia. Money SENSE Financial Education Steering Committee (2005) proved knowledge of current product and service as factor influencing financial decision.

Factor unpredictable influencing financial literacy including religion reasons and family member’s opinion [7]. Tamimi also proved the financial literacy as variable that influence investment decision. At 2014, Tamimi conducted the influential factor that affect the investment decision, which is self-image firm image coincidence, neutral information, accounting information, advocate information, personal financial needs.

Financial training as a strategy can gives impact in exposing managers’ financial literacy and the participation in financial market. People with training course tend to affect level of financial literacy [4]. Learning is the important element of strategic management of the company. The more people trained well the more they can make better decision [4].

The validity of financial literacy including content level, competence construction level, and Personal level [8]. Content level consists of debt, creation wealth, Insurance and Taxes, Monetary Transfer, Monetary Policies. Competence Construction level consists of role, situation, requirement, content, task layout, problem solving, perspective. Personal level consists of motivation, online tools, attitude, and Volition.

Asses the financial literacy use bank statement, mortgage, pension funds and annuity, inflation, diversification and share vs bonds knowledge [1]. And also use socio demographic characteristic (age, education, marital status, occupation, wealth and income). The research try to answer the differences of portfolio diversification behaviour can be explained by differences in their levels of financial literacy.

Gender, age, education level, marital status, family income, financial decision-making process, budgeting and expenditure as influence factor in financial literacy [9]. Agarwala uses the OECD to compare financial literacy among country: i.e. Financial knowledge, financial behavior, financial attitude.

Respondents appear to be financially literate based on interest rate, inflation, diversification, demographic and socioeconomic groups, and financial tendencies program participant (including risk tolerance, investment preferences, investment goals, etc.) as investment behavior [10].

Age, gender, marital status, occupation, qualification, hopelessness, religiosity, financial satisfaction, Retirement plan intention as variable that affect financial literacy [11]. Defining and measuring financial literacy is essential to understand educational impact as well as barriers to effective financial choice [12]. Focus of Hutson work is in financial education that influences financial literacy. Gender, marital status, age, religion, education, the discipline of study, occupation, work experience, income and parent’s education and parent’s occupation [13]. Basic knowledge, money management, savings & investments, risk management, and perception and opinion [13].

Based on the OECD framework for measuring financial literacy in various country around the world, the framework consist of three majors variable; (1) knowledge and skills, (2) Behaviour, (3) Attitude. Knowledge and skills measures the person’s knowledge and skills of financial. Behaviour measure the person’ behaviour about the basic money management, saving behaviour and financial participation. Attitude measures the attitude towards money and financial responsibility. The framework of OECD as shown in the following table:
Table 3. OECD Framework

(1) Knowledge and Skills

| Knowledge of financial concepts | Financial numeracy                          |
|---------------------------------|---------------------------------------------|
| – Inflation & investment risk   | – Division & time                            |
|                                 | - Return                                     |
|                                 | - Simple & compound interest                 |

(2) Behaviour

| Basic Money Management          | Savings Behaviour                           |
|---------------------------------|---------------------------------------------|
| Decision maker                  | Past 12 months savings method               |
| Household budget incidence      | Savings sustaining power in the event of    |
| Decision making - P2Y new ownership | income loss                                 |
| Sources of information - P2Y new ownership | Financial deficit – incidence / response |

| Financial Participation         |
|---------------------------------|
| Financial products awareness    |
| Current holdings                |
| Past 2 years purchase           |

(2) Attitude

| Attitude towards money         |
|---------------------------------|
| Financial responsibility       |

Source: OECD (2012)

3. Research Methods

Qualitative research concern in data in the form of words, like interview notes, transcripts of focus group, answers of open questions, transcriptions of video recording, data gathering from internet sources, articles, book and like. Data qualitative can be informed from primary data or secondary data. Based on the secondary data, researchers can gather the information from books, journal articles, conference proceedings and the like or the rich source from the internet. In this research, author gathering data from selected journal articles that mostly give comprehensive view to map variable and indicator that influence financial literacy. Every journal has different of view. Author is participating in comparing those sources information to make a comprehensive framework. This research use content analysis. Content analysis is research to observe systematically symbolic content to analyze newspaper, website, advertisement, books and the like. Content analysis make researcher analyze large amount about the focus of the study, and also identify the properties such as a concept, word, characters, themes, sentences. Content analysis can use either conceptual analysis or relational analysis. Conceptual analysis related to existence and frequency of concept in a text. Relational analysis refers to building conceptual analysis by examining the relation concept in the text. In this research, author use both conceptual analysis and relation analysis. Author gather data from concept theoretical of financial literacy and relational relationship from the variable that influence financial literacy.

4. Result and Discussion

Based on the literature review, author tries to highlight and the variable and indicators that influence financial literacy to make a framework. The proposed framework consists of four variables based on combination variable and indicators from the literature review. The author categorizes the factor that
influence financial literacy to the four major variable (1) Personal Socio-demographic characteristics, (2) Financial Knowledge, (3) Financial Behaviour, (4) Financial Attitude, (5) Financial Training

Table 4. Proposed Framework of Financial Literacy

| Personal Socio Demographic Characteristics | Financial Knowledge | Financial Behaviour |
|--------------------------------------------|---------------------|---------------------|
| • Age                                      | • Knowledge about current product and Services | • Basic Money Management |
| • Gender                                   | • Educational of financial | • Savings behaviour |
| • Education                                | • Basic Knowledge    | • Investment behaviour |
| • Marital Status                           | • Money Management  | • Portfolio and diversification behaviour |
| • Nationality                              | • Savings & Investment| • Financial participation |
| • Income                                   | • Risk Management   | (bonds, bills, repo, stocks, hedge funds, gold, foreign currency, term deposit and none). |
| • Personal Level (motivation, online tools, attitude and Volition) | • Perception & Opinion | |
| • Occupation                               |                      |              |
| • Wealth                                   |                      | |
| • Qualification                           |                      | |
| • Hopelessness                            |                      | |
| • Religiosity                             |                      | |
| • Parent’s education                      |                      | |
| • Parent’s occupation                      |                      | |
| • Family member opinion                    |                      | |
| • Workplace activity                      |                      | |

Financial Attitude
• Attitude towards money
• Financial responsibility

Financial Training
• Received training in finance

People with different age will have different view of financial literacy. Several studies in developed country has low financial literacy among young children, several research proved the older people have more financial literacy. Many factors that can influence the situation are money owner, knowledge, motivation in the future, the expectation of their lives, etc. Education level indicated the knowledge of finance, their perspective and also

Their analysis of financial product that may improve someone in well literate level. Several study prove marital status and income influence the financial literacy, people in marital status has more motivation to try to get wealth, for example by their investment, their pension fund, long term objective. People with higher income, higher level in occupation, wealth, tend to be interest in some financial product, such pension, insurance, capital market product, financial product in business view; bond, stock, etc. Different nationality means differential country, developing country can’t be the same as the developed, or undeveloped country. People in undeveloped country still has more intention to develop the country by the physical infrastructure, has less ability in understanding financial market, lower educational level, lower income per capita. Some studies also prove that people with different personal level has different rate of financial literacy. When people have different motivation, hopelessness, attitude, volition, online access result the different action related to financial literacy. Argument in financial product and market viewed different by people with different religion. Islam religion people interest in Islamic product with the role that come from their God, tend to give different financial literacy than other people from other religion. Several studies also prove that family is one of the influence factor of financial literacy; parent’s education, parent’s occupation, family opinion. Those factors will bring different influence in financial literacy of a person.
Several studies prove that lack of financial literacy is because of lack of financial knowledge. Some country focus how to improve their financial literacy based on giving the knowledge in the school. Different financial knowledge related to financial behaviour and the financial attitude. The indicators that used in measuring the financial knowledge is the knowledge about existing product and services. The more they know the knowledge about current product and services, the more they can increase the financial literacy. Educational of finance is the next indicator that should evaluate in financial knowledge. Basic knowledge such a time value of money, inflation, interest, risk classification, the risk and return principle as shown basic knowledge of financial literacy. The knowledge about savings and investment, and money management also required as a financial knowledge that influence how well a person in financial literacy. Calculating and investing based on the risk of the product, try to balance the risk and return management influence the ability in financial literacy. At the end, financial knowledge gives perception and opinion of a person.

Financial literacy related to the word of behaviour. Financial behaviour of a person can be measured by their behaviour in managing basic money, the saving behaviour (related to their income, related to their consumption), and the investment behaviour. Some people interest in managing financial portfolio as combination of the diversification behaviour that gives high return and low risk. The most optimal balancing risk and return in the diversification is the best choice for well literate person. So, the financial portfolio and diversification behaviour will influence financial literacy. Financial behaviour also can be shown as the participation of a person in buying financial product, how many percentage of the participation in the market such bonds, bills, repo, stocks, hedge funds, gold, foreign currency, term deposit or none.

Other variable that influence to financial literacy is financial attitude and financial training. Financial attitude depend on attitude towards the money, and the financial responsibility. People that received financial training, they has more knowledge in financial and will make good decision, thus tend to more literate in financial.

5. Conclusion
Based on qualitative research, I found the variable that influence financial literacy discussed in most of literature related to financial literacy. Variables that influence financial literacy are (1) Personal Socio-demographic characteristics, (2) Financial Knowledge, (3) Financial Behaviour, (4) Financial Attitude, and (5) Financial Training.

These variables can give implication in strategic management in a national context to improve financial literacy with concern in personal demographic characteristics, improve financial knowledge, financial behaviour, financial attitude, and increase financial training.

Author propose comprehensive framework to measure financial literacy based on variables and indicator that can be shown in Table 4. Personal socio demographic characteristics consist of age, gender, education, marital status, nationality, income, personal level, occupation, wealth, qualification, hopelessness, religiosity, parent’s education, parent’s occupation, family member opinion, and workplace activity. Financial knowledge refers to knowledge about current product and services, educational of finance, basic knowledge, money management, saving and investment knowledge, risk management, and perception and opinion. Financial attitude refers to attitude towards money and financial responsibility. And last variable, financial training refers to the received training of financial. Frequently and content can be considerations of the training that received by an individual.

Even the comprehensive framework had been explore yet by other researcher, this research give implication in giving comprehensive framework as a guideline to measure financial literacy, and factors that influence financial literacy. Moreover, this research gives implication to conduct strategic option or strategic management to improve financial literacy. For further work, it needed development the instruments of questionnaire to measure every indicator of the framework that already developed and tested as reliable instrument.
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