

Financial Literacy, Financial Behaviour and Economic System

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Abstract:

Financial literacy measures how much one comprehends key money related financial concepts, through appropriate short-term decision making, so Financial literacy is the essential information and that individuals need to make due in modern society. Financial literacy can be affected by environmental issues, such as regional differences and economic systems. The relationship between financial literacy and financial behaviour has been considered in a number of other studies, financial literacy is an important determinant of financial behaviour in developing countries, financial literacy is also associated with increased equity ownership, the use of low-cost mortgages, and retirement planning behaviour.

Keywords: Financial literacy, Financial Behaviour, Economic System.

JEL Classification: E40, G02, G20.

ملخص:

يقيس محو الأمية المالية مدى فهم الفرد للمفاهيم المالية الرئيسية المتعلقة بالمال ، من خلال اتخاذ القرارات المناسبة على المدى القصير ، وبالتالي فإن معرفة القراءة والكتابة المالية هي معلومات أساسية يحتاج الأفراد الى اكتسابها في مجتمعنا المعاصر. يمكن أن يتأثر محو الأمية المالية بالمتغيرات البيئية، مثل الاختلافات الإقليمية والنظم الاقتصادية. حيث تم النظر في العلاقة بين محو الأمية المالية والسلوك المالي في العديد من الدراسات والبحوث، كما يعتبر محو الأمية المالية أحد المحددات الهامة للسلوك المالي في البلدان النامية ، فهو مرتبط بمتغيرات كثيرة على غرار ملكية الأسهم، واستخدام الرهون العقارية منخفضة التكلفة وسلوك تخطيط التقاعد.

الكلمات المفتاحية: محو الأمية المالية ، السلوك المالي ، النظام الاقتصادي.

تصنيف JEL : E40, G02, G20.

1. Introduction

The financial literacy of individuals has been assessed in many countries, and the consensus is that people lack the financial knowledge to make use of the new information that is provided to them in the new age of information sharing. The recent financial product developments now make it even more important for individuals to understand the financial decisions they are making as the “human touch” of traditional banking services are now being transitioned to Internet-based platforms and algorithms (Killins, 2017).

On the research side, many financial literacy topics are under investigation. In some cases, a general agreement has been reached such as on the necessary prerequisites to gauge financial literacy (including the types of knowledge that best motivate and facilitate financial action), or in the definition of survey questions and methodologies to effectively measure a latent variable such as financial literacy. However, although the role of diversity (e.g., gender, ethnicity, age, education) has been well documented, including considering different settings and time spans, our understanding of how these forms of diversity continue to generate financial gaps as well as the best ways to eliminate them is far from complete. In many other cases, we are still in the infancy of our knowledge, particularly with respect to the analysis of information - seeking behaviours by financial consumers and their impact on financial habits. A better understanding of such topics is paramount for financial regulators who seek to improve the disclosure mechanisms that help consumers understand financial options and improve their financial decision - making. (Bongini & Zia, 2018)

The Financial Literacy and Education Commission (established under the Fair and Accurate Credit Transactions Act of 2003) is tasked with the development and maintenance of a national financial education website (<http://www.mymoney.gov/>) and a national strategy on financial education. Financial Literacy Month (April) became officially recognized by the United States in 2004; Resolution 316, "States that the Senate designates April 2004 as Financial Literacy Month to raise public awareness about the importance of financial education in the United States and the serious consequences that may be associated with a lack of understanding about personal finances." (Al, B. A., Weathers, J., & Patel, D., 2019)

Standard economic models assume that individuals are well equipped with the skills to manage financial risks and to optimize consumption and savings over the life cycle. However, we know from empirical studies that many individuals lack the skills to understand basic financial concepts and, thus, are financially illiterate. Several studies show that financially illiterate individuals are more likely to fail at making efficient decisions about financial markets, especially in regard to savings and investments, indebtedness and mortgages, retirement planning, and wealth accumulation. While many scholars have investigated the importance of financial literacy for households' financial decision - making, the relationship between financial literacy and self - employment has been found to be under - researched. (Ćumurović & Hyll, 2019)

Unfortunately, as a requirement, wide-scale surveys of financial literacy in many countries remain relatively uncommon. Even when conducted, they are often irregular, and therefore offer little in the way of understanding how financial literacy evolves over time, especially in conjunction with its posited determinants and outcomes (West, T., & Worthington, 2018)

1. Definition of Financial Literacy

One of the first definitions of financial literacy is given in the JumpStart Survey from 1997: 'the ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security. Since then the construct of financial literacy has taken on a broad variety of meanings and interpretations. One strand of the literature uses the term financial literacy to refer to the pure knowledge of financial products, their basic consequences, the necessary numeracy skills and the knowledge of basic financial concepts such as diversification. In such studies three questions on interest compounding, inflation and risk diversification are often asked. The answers on these 'stored' knowledge questions, however, are a very weak predictor for financial behaviour, which is driven by perceived rather than actual financial literacy. (Oehler, Horn, Wendt, Reisch & Walker., 2018)

Financial literacy is a measure of the degree to which one understands key financial concepts and possesses, the ability and confidence to manage personal finances through appropriate short-term decision making and sound, long-range financial planning, while mindful of life events and changing economic conditions (Tokar, 2015).

Financial literacy is defined as the ability to process economic information and make an informed decision about financial planning, wealth accumulation, debt, and pensions (Lusardi, 2015). Over the past decade, financial literacy has been pushed into the spotlight by different government organizations around the globe. The Organization for Economic Co-operation and Development (OCED) has initiated some financial literacy programs and studies via the Program for International Student Assessment to assess and develop the financial literacy of youth across the globe. On a national scale, many developed countries now see the importance of financial literacy, which can bring increased financial stability to financial markets and have launched campaigns and surveys to promote and collect data on financial literacy (Killins, ,2017).

We briefly look at what economists mean for financial literacy and how they measure it. In general, for financial literacy economists intend the knowledge of financial concepts. Some authors, however, extend this definition to include cognitive and applicative abilities. According to Mason and Wilson, for instance, financial literacy is 'the ability of an individual to obtain, understand and evaluate the relevant information to make decisions(Baglioni, Colombo & Piccirilli, 2018).

Financial literacy is a complex concept, encompassing a number of personal abilities related to one's capacity to make informed financial decisions in daily life. There are many situations we face during our lives that require basic financial knowledge and skills to

understand and make informed financial decisions. For example, we regularly need to manage inflows and outflows of money, possibly budgeting our income and expenditure. Sometimes we need to borrow money to make an investment that we cannot afford on our own. In addition, life often throws financial curveballs beyond our control which require management by means of insurance and protection. Ultimately, we need to plan our future in financial terms, smoothing consumption through savings and financial investments, which requires evaluating the different risks and returns involved (Bongini, & Zia, 2018)

The complexity of measuring financial literacy appears for several reasons. First, literacy skills are required to be able to read and understand product disclosure statements or similar documents relating to financial transactions people need to understand in order to make fully informed decisions. Second, numeracy skills are required to understand the impact of variables like interest rates, fees, inflation and risk on the investment or credit product under consideration. As with other skills, financial literacy skills are acquired through awareness and practice, and thus there is a strong link between household demographic and socioeconomic characteristics, including education, income and wealth, and financial literacy. While there is no universally agreed definition of financial literacy, there is general agreement that it is the ability to obtain information and analyse, manage and communicate one's own personal financial situation as it affects one's own material wellbeing (West & Worthington, 2018).

Most recent empirical studies on financial literacy fall into two categories: those describing sub - groups among the population with higher or lower levels of knowledge and those providing evidence of financial education interventions mostly for specific target groups. The first set of studies is purely descriptive. Findings are, for example, that women, people with low income, and those with low education tend to be less financially literate. In these studies, however, no answers are given on why those groups have lower levels of financial literacy compared to others. The second group of studies examines the effects of financial education programs at school and the workplace and programs targeting specific groups at risk of low literacy. Fernandes et al. and Kaiser and Menkhoff provide meta - analyses of such interventions. Lusardi and Mitchell offer an extensive discussion of this literature and its limitations: apart from flaws in the experimental designs, the central issue is that many of the studies lack theoretical models and clear hypotheses about who should or should not invest in financial literacy. Mostly these evaluation studies only measure the short - term effects of very specific interventions and do not allow for an examination of the long - term outcomes and behavioural changes. Therefore, it seems crucial to look for more natural contexts in which the accumulation of financial literacy can be studied so that inferences about the process can be made. We think that the German re - unification provides us with such an opportunity (Bucher & Lamla, 2018).

Show eight definitions, and said "of the eight definitions identified, two focused primarily on ability (definitions 1 and 2) and three on knowledge only (definitions 3, 7 and 8)

Table 1 : Definitions of Financial Literacy

1	Financial literacy is the ability to make informed judgments and to take effective decisions regarding the use and management of money (Noctor, Stoney, and Stradling 1992, definition used by Beal and Delpachitra 2003 and ANZ 2008).
2	Personal financial literacy is the ability to read, analyze, manage and communicate about the personal financial conditions that affect material wellbeing. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future and respond competently to life events that affect everyday financial decisions, including events in the general economy (Vitt et al. 2000; also cited by Cude et al. 2006).
3	Financial literacy is a basic knowledge that people need in order to survive in modern society (Kim 2001).
4	Financial literacy refers to a person's ability to understand and make use of financial concepts (Servon and Kaestner 2008).
5	Financial literacy is the ability to use knowledge and skills to manage financial resources effectively for lifetime financial security (Jump\$start Coalition 2007).
6	Financial literacy is the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being (U.S. Financial Literacy and Education Commission 2007).
7	Financial knowledge is defined as understanding key financial terms and concepts needed to function daily in American society (Bowen 2002).
8	Consumer literacy, defined as self-assessed financial knowledge or objective knowledge (Courchane and Zorn 2005).

Source : (HUSTON, S. J. ,2010)

Among other socio-economic determinants, financial literacy has been identified as an important ingredient for the economic and financial decision-making of consumers and investors. Previous research documents that financial literacy is of relevance both for the asset and debt side of households' balance sheets and matters for overall economic stability. Moreover, in a recent study, Lusardi et al. (2017) illustrate that financial knowledge might have a role in explaining wealth inequality among households. (Cupak, Fessler, Silgoner, & Ulbrich, 2018)

In 2007, EC drew up a concept of financial education that was based on lifelong perspective. Some rely on this concept as a platform for lifelong learning process, while emphasizing particular target groups (the elderly, unemployed, socially disadvantaged and financially excluded target groups, etc.). The financial education should be involved in the system of public policies that deal with a program of development and stability, education and qualification, protection and security of consumers, social inclusion, etc. from procedural point of view. Consequently, financial education cannot be a separate,

one-off activity that focuses only on a specific group of population in a specific time horizon, but it represents a complex system that requires application of demanding concepts, methodologies, means and tools from both long-term and short-term perspective(Kubak et al. ,2018).

2. Measuring Financial Literacy

Lusardi and Mitchell develop three quiz - like questions in order to measure objective financial literacy : (Lusardi & Mitchell, 2014)

- numeracy and capacity to do calculations related to interest rates, such as compound interest;
- understanding of inflation; and
- understanding of risk diversification. Translating these into easily measured financial literacy metrics is difficult, but Lusardi and Mitchell have designed a standard set of questions around these ideas and implemented them in numerous surveys in the United States and abroad.

The first question measures numeracy, or the capacity to do a simple calculation related to compounding of interest rates. The second question measures understanding of inflation, again in the context of a simple financial decision. The third question is a joint test of knowledge about “stocks” and “stock mutual funds” and of risk diversification, since the answer to this question depends on knowing what a stock is and that a mutual fund is composed of many stocks. As is clear from the theoretical models described earlier, many decisions about retirement savings must deal with financial markets. Accordingly, it is important to understand knowledge of the stock market, as well as differentiate between levels of financial knowledge(Lusardi & Mitchell, 2014).

Four principles informed the design of these questions. The first is Simplicity: the questions should measure knowledge of the building blocks fundamental to decision making in an intertemporal setting. The second is Relevance: the questions should relate to concepts pertinent to peoples’ day-to-day financial decisions over the life cycle; moreover, they must capture general, rather than context-specific, ideas. The third is Brevity: the number of questions must be kept short to secure widespread adoption; and fourth is Capacity to differentiate, meaning that questions should differentiate financial knowledge to permit comparisons across people

Bucher& Lamla (2018) define three summary measures of financial literacy based on these eight questions :

- **Basic financial literacy:** This variable can take values from 0 to 4 depending on the number of correctly answered basic financial literacy questions. Basic financial literacy questions are the interest, the inflation, the compound interest, and the money illusion question.
- **Advanced financial literacy:** This variable counts the number of correctly answered advanced financial literacy questions. The variable can take values from 0

to 4. We include the questions on risk diversification, return volatility, stock market functioning, and mutual funds.

- **Financial literacy factor:** This financial literacy measure is constructed using factor analysis based on indicators of giving a correct answer to each of the eight financial literacy questions. We obtain one factor with an Eigenvalue of 4.8, which accounts for 91 per cent of the variance in these questions. The correlation between this factor and the individual items of the scale is at least 0.64. (Bucher & Lamla, 2018)

The last decade of research into financial literacy has attempted to define and refine the concept as well as identify personal characteristics that are potential indicators of being financially literate. While recent work and customized surveys can measure financial literacy more directly using Lusardi and Mitchell's three questions on interest, inflation and diversification, much of the literature has attempted to derive suitable proxies. These proxies have been largely based on an individual's financial decisions that are, asset selection and diversification, or stated attitudes and behaviours towards saving, taking a financial risk, budgeting, having precautionary savings, being under financial stress and similar in household surveys. Generally, international studies show that individuals who demonstrate higher levels of financial literacy tend to have higher levels of portfolio diversification, although it may also lead to overconfidence, aggressive investing, trend - following behaviour, local bias and under - diversification. Those with low financial literacy levels are more likely to be women, those on low incomes and with low levels of education (, and they tend to avoid equity investments. Low levels of financial literacy also cause people to overweight their decisions based on recent events, such as bull and bear markets. Overall, the suboptimal financial decisions associated with low levels of financial literacy mean that returns earned fall short of those potentially earned by well - informed, disciplined investors while borrowing costs can be much higher(West & Worthington , 2018).

The Test of Financial Literacy (TFL) was created to measure the financial knowledge of high school students. Its content is based on the standards and benchmarks stated in the National Standards for Financial Literacy (Council for Economic Education2013). The test development process involved extensive item writing and review. Test data collected from 1,218 high schools to evaluate the measurements indicate that the overall test is reliable and valid, and test items contribute to the effectiveness of the instrument. Further test analysis was conducted using an item response theory (IRT) model with four parameters to estimate item discrimination, item difficulty, guessing, and inattention. The IRT results indicate that the measure is effective in assessing student financial literacy across a broad range of student abilities. (Walstad & Rebeck, 2017)

Examination of the studies revealed three main barriers to developing a standardized approach to measure financial literacy: the lack of conceptualization and definition of the construct financial literacy, the content of the instrument and instrument interpretation. The first is the most important. Nearly three - quarters of the studies did not elaborate on the

construct used; the remainder used definitions with varying elements (e.g., knowledge, ability, outcome). Also, the majority that included the constructs of both financial literacy and financial knowledge used these terms interchangeably, providing more evidence of a need for construct clarification. Not having a precise and consistent construct conception limits the ability to conduct comparative analyses or assess financial literacy rates and their subsequent impact on financial well-being. This is a critical barrier because all other stages of instrument development depend on having a complete and well-defined construct. A second barrier to developing a standardized approach to financial literacy is the use of measures that are not comprehensive. Only one-quarter of the studies included all of the personal-finance components in their measure. Finally, an overwhelming majority of the studies (88%) reviewed did not include a guide for measurement interpretation. This lack of clarity is a barrier to a common or general understanding of the financial literacy construct (CUDE, 2010).

3. Gender Gap in Financial Literacy

The literature addresses the question of when the gender gap emerges. Some papers evaluate the effect of the traditional roles of women in society and show that financial literacy is lower among single women who are also in charge of their own finances. This finding goes against the thesis that gender differences are due to the specialization of tasks within the household and that married women only accumulate financial knowledge late in life, close to widowhood. Looking at young people divided up by groups, (less than 29 years old), there is evidence of a gender gap for people aged between 23 and 28 years old, despite higher education levels and labour force participation of younger women. This is also true among high school pupils and university students. Thus, despite the changes in the roles of women in society in many areas, literature is still documenting a gender gap in financial literacy. These findings point to the fact that gender differences are present at the start of the life cycle since the previous works document a gender gap even among young people (Arellano & Cámara, 2018).

With regard to demographic characteristics, most studies find a severely low level of financial literacy among old people, women, and low wages. Older men are generally more financially knowledgeable than older women, and similar patterns are observed among younger respondents.

No matter the aggregate level of financial knowledge of a country, men consistently perform better than women, by giving a larger number of correct answers. In addition, women are more likely to admit ignorance. Drawing from the global FinLit survey, the world share of financially literate individuals is 35 per cent for men, and 30 per cent for women. In addition, such a 5 per cent gender gap is remarkably stable across developing and developed economies. Single-country studies confirm this gap while emphasizing that women relative ignorance in financial matters adds to their larger exposure to financial risks due to longer life but shorter labour market attachment. The same studies also suggest that the gap

relates to intra-household specialization, as women tend to delegate financial decisions to their partners. The delegation, however, appears to be more a result of different education levels or different types of education rather than a pure gender effect (Baglioni, Colombo & Piccirilli, 2018).

A part of the documented gender gap remains unexplained. This is particularly worrisome because women need to deal with especially challenging circumstances. Women have different savings needs because they tend to live longer than men, have shorter working lives (i.e. women have less of an attachment to the labour market, with interrupted careers because of maternity), have lower wages than men and are likely to spend part of their retirement as widows. Thus, women are at risk of having inadequate retirement resources and of living their final years in poverty. Women are more likely to make important and daily decisions about the allocation of household resources. In addition, they are likely to take primary responsibility for childrearing and to have a major role in the transmission of financial habits and skills to their children. In this context, increasing financial education is needed not only to improve women's management of their personal and household finances but also to empower them to choose and access appropriate financial services and products, as well as to develop and manage entrepreneurial activities. Evidence on the role of non-cognitive skills should be taken into account for policymakers to both increase financial literacy and reduce the gender gap. Policies should be designed bearing in mind that cognitive skills alone do not explain an individual's financial decision-making, but are only part of the story (Arellano, C  mara, & Tuesta, 2018).

In the empirical landscape of advanced countries is the inverted-U shaped relationship between age and financial literacy. In advanced economies, the share of financially literate individuals reaches 62 per cent for those aged 36–50, while it amounts to 57 per cent both for those aged 15–35 and for those aged 51–65. Facing the task of interpreting this pattern for the US, Lusardi and Mitchell note that cross-sectional data do not allow to distinguish between age or cohort effects but they conjecture that young individuals are likely to accumulate knowledge, which then decays later in the life-cycle. Analogously, the decline of knowledge at the end of the life cycle to the decline in cognitive capabilities. (Baglioni, Colombo & Piccirilli, 2018)

The study of Bannier and Schwarz (2018) examines the influence of actual and perceived financial knowledge (i.e., financial literacy and confidence) on financial wealth. It shows that consideration of gender and education as moderators helps to uncover intricate effects. Greater financial literacy leads to higher wealth, with higher education strengthening this effect considerably for women, but not so for men. Men's wealth also rises in confidence, while there is hardly any confidence effect for women. Our results are robust against the employment of different instrumental variables and confidence measures, consideration of

one-time wealth effects and mode of financial decision making. - Bannier,(C. E., & Schwarz, M.,2018)

4. Financial Literacy and Economic System

Financial literacy may be affected by environmental issues, such as regional differences and economic systems. Those individuals living in rural areas generally have a poorer financial literacy than their city counterparts. For instance, Cole, Sampson, and Zia (2009) conduct several surveys in India and Indonesia to measure the household financial literacy and demand for financial services and find that rural households exhibit lower levels of financial literacy, and households that own a non-farm enterprise exhibit a higher financial literacy (Kim, Choi, & Lee, 2017).

For contrasting economic systems, Jappelli (2010) shows that the incentives to develop economic literacy are related to the number of resources available for private accumulation. Jappelli (2010) finds that former socialist countries have a lower economic literacy than other countries because the populations in the former socialist countries are less familiar with portfolio management and financial decisions for historical and institutional reasons. Bucher–Koenen and Lamla (2014) use the German reunification as a natural experiment setting to understand the drivers of financial accumulation. They attempt to determine those conditions that compare or contrast the financial literacy of individuals from East and West Germany. Women and immigrants from East Germany to West Germany have similar levels of financial literacy as West Germans. However, some fundamental differences in the financial knowledge of East and West Germans still exist even after controlling for their socio-economic characteristics or risk preferences. In conclusion, Bucher–Koenen and Lamla (2014) argue that households in former socialist countries may require a long time to gain the same level of financial sophistication as their peers in Western countries (Kim, Choi & Lee, 2017).

5. Financial behaviour and Financial literacy

Though it is comparatively under-researched in developing countries. Instead, most studies focus on measuring the existing levels of financial literacy. These assessments show that overall levels of financial literacy are disappointingly low, with ample room for improvement, even in more developed nations. In Africa, estimates of financial literacy levels are scarce or, for many countries, non-existent. FinScope studies provide some proxy measures but the financial literacy information they provide is limited, because they focus on access to financial products, not capabilities. (Sayinzoga, A., Bulte, E. H., & Lensink, R.,2016)

The majority of research into financial literacy has focused on financial knowledge. Financially knowledgeable households are consistently found to be more likely to exhibit beneficial financial behaviours, while less financially knowledgeable households tend to exhibit more troubling behaviours. Financial knowledge is negatively associated with high cost debt borrowing instruments and positively associated with more responsible credit card practices and “best practice”. Financial knowledge is also associated with

increased stock ownership , the use of lower cost mortgages , and retirement planning behaviour .Additionally, financially knowledgeable individuals are less likely to underestimate their total household debt. (Seay, M. C., Kim, K. T., & Heckman, S. J., 2016)

The link between financial literacy and financial behaviour has been looked at in a number of other studies. The literature of financial literacy first developed to study the link between financial literacy and retirement planning . Apart from better retirement planning, financially literate individuals are more likely to invest in stocks and have more diverse portfolios . Regarding borrowing decisions, financially literate people have lower-cost debt and are more likely to be aware of their optimal debt level . They have less high-cost consumer credit and fewer problems with repaying credit card debt. Studies in developing countries confirm that better financial literacy is positively related to retirement planning , to greater participation in financial markets, to greater use of formal sources of borrowing , to higher voluntary savings and better diversification. A more recent strand of the literature focuses on the effect of financial literacy training on financial decision making. Many of these studies are based on randomized control trials, studying poor people in developing countries. Results of these studies show that the effect of financial literacy training is small , but training is more effective in improving savings behaviours than borrowing behaviour (Grohmann, 2018).

Researchers often emphasize what people actually know at a given time, yet understanding perceptions are also important. perceived knowledge is related to cognitive functioning, including recognition , identification , and problem-solving. Both an individual's actual financial knowledge and perceived financial knowledge influence investments , retirement planning ,and credit card behaviours . numeracy based knowledge, financial literacy may also affect decisions through an individual's increased awareness and initiative. Thus, financial confidence is a critical component of financial decision making. Often there is a discrepancy between an individual's actual knowledge and an individual's self-perception, or confidence. Correlations between actual and perceived financial knowledge vary considerably on an individual basis . It is interesting to look at the interactions and differences between these two measures of knowledge, specifically in situations where confidence exceeds actual knowledge(Tokar, 2015).

A more complicated relationship has been found between financial confidence and financial behaviour. While financial confidence is positively related to "best practice" financial behaviours and responsible credit card behaviour , it is also positively associated with high cost borrowing behaviour . This disparity may be somewhat explained by situations in which consumers' financial confidence is misaligned with their actual knowledge and ability. individuals that exhibit high financial confidence and low financial knowledge are more likely to exhibit poor financial decisions. Similarly, financially overconfident individuals are more likely to engage in suboptimal mortgage borrowing behaviours. Financial capability has most often been proxied

through cognitive ability or financial sophistication, a measure that blends financial capability, financial behaviour, and financial knowledge. Individuals with higher levels of cognitive ability are more likely to participate in the stock market, less likely to overreact to market changes, exhibit fewer behavioural biases, and demonstrate more patience when making financial decisions (Seay, Kim & Heckman, 2016).

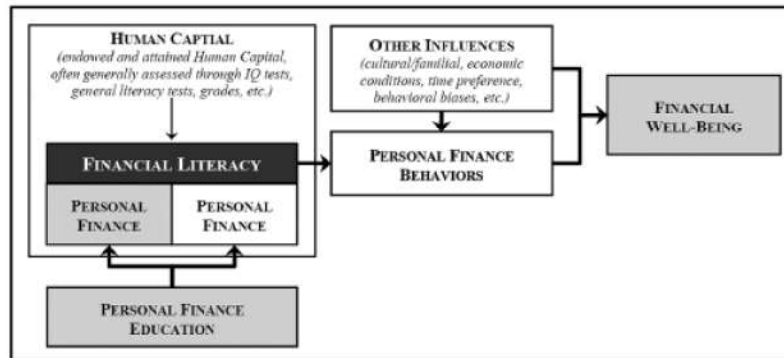
Insofar as financial literacy is an important determinant of financial behaviour in developing countries, financial training may be a promising supplementary activity for development agencies, accompanying the extension of financial services to heretofore unbanked populations. This prediction implicitly assumes a causal chain, or a so-called 'theory of change', describing how the intervention leads to the desired results. The relevant theory of change envisaged by the intervening agency is as follows:

- Financial literacy training increases financial knowledge, which;
- affects financial behaviour and economic outcomes. Moreover, as a prerequisite for achieving 'scale' cost-effectively, it is generally assumed that;
- Financial knowledge diffuses beyond the trained population and improves the livelihoods of large swaths of the target population. (Sayinzoga, A., Bulte, E. H., & Lensink, R., 2016)

Recent research concerning this specific topic has shown that high levels of financial illiteracy are usually associated with high levels of indebtedness. Relevant research provides evidence that financial competence is directly related to the ability to make better decisions regarding loans. The conclusion is that individuals who learn more about credit cards should make better choices on loans. On the contrary, people with lower levels of financial literacy usually make poor loan decisions. The research reported that low levels of financial literacy among loan users are associated with high loan costs. Similarly, it was found that financial illiteracy is connected to debt accumulation and reported a correlation between low levels of literacy and poor mortgage choices. In their research, it was concluded that the key predictor for loan outcomes is financial behaviour determined by the level of financial literacy. Moreover, their study reported that people with low financial literacy are found to be more likely to have debt problems. The findings of the research conducted by it suggest that a consumer with a higher level of financial literacy is less likely to exhibit excessive borrowing behaviour. The relationship between debt literacy, financial experience and debt levels implies that financially illiterate people have a higher risk of indebtedness (Bahovec, Barbic & Palic, 2015).

Figure 2 shows the relationship among financial knowledge, education, literacy, behaviour and well-being:

Fig.1 : Relations among Financial Literacy, Knowledge, Education, Behaviour and Well - Being



Source : (Bahovec, Barbic & Palic, 2015)

Financial literacy consists of both knowledge and application of human capital specific to personal finance. The level of overall endowed and attained human capital influences a person's financial literacy. For example, if an individual struggles with arithmetic skills, this will certainly impact his/her financial literacy. However, available tools (e.g., calculators, computer software) can compensate for these deficiencies; thus, information directly related to successfully navigating personal finances is a more appropriate focus than numeracy skills for a financial literacy measure. Financial literacy is a component of human capital that can be used in financial activities to increase expected lifetime utility from consumption (i.e., behaviours that enhance financial well - being). Other influences (such as behavioural/cognitive biases, self - control problems, family, peer, economic, community and institutional) can affect financial behaviours and financial well - being. A person who is financially literate (i.e., has the knowledge and the ability to apply the knowledge) may not exhibit predicted behaviours or increases in financial well - being because of these other influences (HUSTON, 2010).

6. Conclusion

The complexity of measuring financial literacy in literacy and numeracy skills is necessary to understand the impact of variables such as interest rates, fees, inflation and risk on the investment or credit product under study. Among other socio-economic factors, financial literacy has been identified as an important element in economic and financial decision-making for consumers and investors. Previous research documents that financial literacy is important for the asset and debt side of household budgets and macroeconomic stability.

Financial literacy can be affected by environmental issues, such as regional differences and economic systems. The link between financial literacy and financial behaviour has been looked at in a number of other studies, and relevant research provides evidence that financial competence is directly related to the ability to make better decisions regarding loans. Financial literacy training increases financial knowledge, which affects

financial behaviour and economic outcomes. Moreover, as a prerequisite for achieving 'scale' cost-effectively, it is generally assumed that Financial knowledge diffuses beyond the trained population and improves the livelihoods of large swaths of the target population.

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