# Financial Literacy: A Peep into the Literature and Note for Policy

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# Abstract

This paper provides a review of the financial literacy literature mostly on definitional issues and some determinants. The paper also explores an emerging genre of research into financial literacy that emphasizes interconnectedness with society and financial systems, in general. The authors employ a literature review to examine the extant literature on the conceptual framework of financial literacy as well as empirical evidence on the causal relationship between financial literacy and efficient financial decision making. We argue that whilst the literature on financial literacy is growing it is far from being exhaustive, with substantial research outputs in other climes other than Africa. There is almost a tidy conclusion from the literature that young people and women are less likely to grasp basic financial concepts. The paper concludes by calling for a reconfiguration of research efforts in financial literacy to reflect context, and for policymakers to properly align the design of financial literacy programmes to meet the needs of key demographic segments in the short term, and to contribute to financial stability in the medium to long term.

Keywords: Financial literacy, financial knowledge, socioeconomic factors

# 1. Introduction

Much of the literature on financial literacy has prominently converged around its relationship with positive financial behaviour and financial well-being. Indeed, several authors, including Kaiser and Menkhoff, (2017), Miller et al. (2015), Lusardi and Mitchell (2007, 2008, & 2011), Stango and Zinman (2009), Hung et al. (2009), and Hilgert and Hogarth (2003), have pursued closely related themes documenting, in the process, the relationship between financial literacy and improved positive financial behavior, precautionary savings, and financial wellbeing. Atkinson and Messy (2012) are more direct in linking financial literacy and financial well-being. They viewed financial literacy as a combination of awareness, knowledge, skills, attitudes, and behaviour necessary for decision making that will eventually impact financial well-being. Stressing the importance of financial literacy to financial well-being, for instance, Hung et al. (2009), note that financial mistakes are most likely to be committed by those who are less financially literate. Extending the financial well-being argument, Lusardi et al. (2009) suggest that familiarity with even the most basic financial concepts opens the boundaries for people to make sensible investment and savings decisions. The overarching theme in all these works seems anchored on sensible financial decisions, translating into improved financial behaviour or positive financial and economic outcomes.

Anthes and Most (2000) introduced an exciting twist suggesting that financial literacy reduces or mitigates the risks of bankruptcy and high consumer debt. Similarly, Braunstein and Welch (2002) found useful pathways for financial literacy to enable people to navigate away from unsecured providers and products. They posit that financial literacy can offer a better understanding of mainstream financial services and, at the same time,

enhance the capacity of people to a void nonstandard financial services that may ultimately prove costly and risky. In pursuing similar themes, Ardic et al. (2011) are more direct, arguing that financial literacy can reduce information asymmetry because people become better informed about the different financial products offered in the financial market. Following this, we argue that improved financial literacy levels may transcend individual benefits to have implications for financial stability and the overall well-being of the financial system of a country. Indeed, Shakari, Na varathinam and Suganya (2014), submit that financially educated consumers may impose service innovation and efficiency on financial institutions through competition emanating from the knowledge and competencies of financial products and services. Whilst this benefits individuals, the contributions to the development of financial systems and the economy, in general, cannot be ignored. Mundy and Masok (2011) summarize this better, arguing that financial literacy benefits the individual and serves the best interest of financial service providers and promotes a sound financial system.

It is helpful to contextualize the role of financial literacy concerning the development of financial systems in different climes. For example, Anthes and Most's (2000) work may be more relevant in advanced financial systems than systems in the developing world where informality thrives, and literacy rates are low. It is within this proposal for contextualizing that we introduce the work of Cohen and Nelson (2011), who draw in poor people and argue that financial literacy and basic financial skills help the poor to become more informed financial decision-makers, increasing the sense of awareness on financial issues as well as expanding choices. Pursuing similar themes albeit with a minor focus on financial inclusion, the OECD (2009a) argues that empowering poor households with financial knowledge and skills will enhance financial inclusion and enable such households to make informed financial decisions and strategic financial choices. Whilst the reference is about basic financial skills, we ask the question; in the context of poverty and poorly developed financial systems, what basic financial skills are needed, and in what doses for people to be financially literate? Prominent metrics that have been used in the financial literacy debates include savings, debt, inflation, stocks, bond, and insurance, but as espoused by Zarcadoolas et al. (2012), literacy refers to a person's ability to read and write. Extended notions of literacy encapsulate understanding and application of financial concepts. On the basis of the foregoing, we suggest that many of the metrics mentioned earlier may readily not be at the forefront of memory for many people in the developing world, even among those with an appreciable level of education. Those metrics, we further argue, may reflect the financial systems of the developed world, and perhaps partly explains the relative dearth of literature on financial literacy relating to Africa.

In the next section, we surveyed the existing literature on the conceptual framework of financial literacy. This is followed by a discussion of the empirical evidence on the causal relationship between financial literacy and efficient financial decision making. The final two sections of the paper highlight the determinants of financial literacy, the conclusion, and policy recommendation.

# 2. Conceptualising Financial Literacy

Defining financial literacy has typically suffered from two dilemmas; (i) many writers have avoided providing direct definitions, and (ii) many others have used the term interchangeably with closely related concepts such as financial knowledge, financial capability, and financial education. Huston (2010), for instance, discover that as much as 72% of 71 individual studies gleaned from 52 different data sources failed to account for definitions of financial literacy. We, therefore, begin this section by exploring some definitions proposed by various actors as outlined in Table 1.

Table 1: Conceptual definitions of financial literacy

Source	Conceptual Definition
Hilgert, Hogarth, and Beverley (2003)	Financial knowledge
Moore (2003)	"Individuals are considered financially literate if they are competent and can
	demonstrate that they have used the knowledge they have learned. Financial
	literacy cannot be measured directly so proxies must be used. Literacy is
	obtained through practical experience and active integration of knowledge. As
	people become more literate, they become increasingly more financially
	sophisticated, and it is conjectured that this may also mean that an individual
	may be more competent" (p. 29).
Mandell and Klein, (2007)	'The ability to evaluate new and complex financial instruments and make
	informed judgments in both choice of instruments and extent of use that would
	be in their own best long-term interests' (pp. 163-164).
Lusardi and Mitchell (2007c)	[Familiarity] with 'the most basic economic concepts needed to make sensible
	saving and investment decisions' (p. 36).

Many of the definitions mentioned in the table highlight the ability of an individual to use financial literacy knowledge for better or informed personal financial decisions or financial well-being. It is worth noting that improved financial decisions, as advocated in the conceptual definitions, revolve around a diverse collection of financial and economic metrics such as debt, equity, savings, and investment, a mong others. In all these, what constitutes financial well-being has not been adequately explained, with the potential of complicating what should be measured as the outcome of financial literacy. One of the most notable and useful descriptions of financial well-being is that elucidated by the Consumer Financial Protection Bureau of the United States (CFPB). CFBP (2015) views financial well-being as a state in which people can fully meet immediate financial obligations, feel secure about their financial future, and are well placed to make choices for a better life.

In terms of terminology, financial literacy, financial knowledge, financial capability, and financial education are often used interchangeably, with the potential to introduce confusion and mischaracterisation. In this regard, the work of Huston (2010) brings clarity by first defining financial literacy as measuring how individuals understand and use personal finance-related information. Huston (2010) proceeds to argue that financial knowledge is an integral part of financial literacy, and not necessarily the same since financial literacy has an application dimension that requires an individual to possess the ability and confidence to deploy the personal finance knowledge to make informed financial decisions. In an earlier paper, Huston (2009) conceptualises financial literacy as involving two dimensions; understanding personal finance knowledge and finance application.

We introduce the works of the OECD and the World Bank directed at bringing clarity to the apparent confusion in terminology. The OECD (2012) conceptualises financial literacy as knowing and understanding financial concepts, including risks and the motivation and confidence to deploy such skills in making a broad range of financial decisions to improve personal and societal decisions that ultimately facilitate participation in economic life. This is to be distinguished from financial capability, which is the ability to act in an individual's best financial interest within a specific socioeconomic context (World Bank, 2013). Financial capability is thus a broader concept involving the knowledge, skills, and attitudes related to personal resource management and how that directs and shapes the choice of financial products and services to satisfy needs. Saeedi and Hamedi's (2018) work throws more light on the terminology. Financial education is considered a prelude to financial literacy, with financial literacy serving as a preface for financial capability (Saeedi & Hamedi, 2018). Following from this, we posit that an individual starts with obtaining financial education, proceeds to become financially literate, and then ultimately acquires financial capability that facilitates effective and rational decision making relative to managing personal finances and economic decisions in general.

The interest in financial literacy in the literature and policy discussions may reflect the benefits and potential on individuals, groups, and even on nations. Jappelli and Padula (2013) refer to a strong correlation between financial literacy and wealth. Interestingly, an emerging genre of research takes discussions around financial literacy beyond the individual to encompass societal considerations. One appetising piece of scholarly work in this direction is Lucey et al.'s (2015), categorisation of financial literacy into thick and thin perspectives. From a purely thin perspective, financial literacy is perceived as how an individual acquires, accumulates, and manages money for personal use, whilst a thick approach to financial literacy recognises that the choices and decisions pursued by individuals occur within a social system which affects their lives and others. Pursuing similar themes, Danes et al. (2016) opine that savings for oneself may be construed to mean selfishness in a context where extended family members have unmet basic needs. Our preliminary reaction against this thinking is what looks like discouraging hard work and rewarding free riding. But Danes et al. (2016: 63), elucidate by further arguing that 'success is measured by one's a bility to contribute to the well-being of others, not one's a bility to save.' But that is an entirely different preposition, well beyond the remit of financial literacy.

In this link with larger social benefits, Mundy and Masok (2011) explore the relationship between financial literacy and a country's financial stability and establish that the benefits attributable to increased levels of financial literacy go beyond an individual to include financial service providers and the health of the financial system. In explaining this, we introduce the work of Shankari et al. (2014), who note that consumers with higher financial literacy levels put pressure on service providers to innovate and differentiate, which will benefit not only consumers of financial products and services but the financial system and ultimately the national economy. This can be linked to the supply-leading and demand-following hypotheses in the literature on financial developmenteconomic growth. According to the supply-leading hypothesis, improved financial services through higher financial development ultimately spurs economic growth. However, for the demand-following hypothesis, improved economic growth results in higher incomes of people who then demand efficient financial products and services to be provided by the financial sector (see Opoku et al., 2019; Ibrahim & Acquah, 2021). It may be inferred that as more people acquire financial knowledge and capability, users will ask questions, and tastes and preferences will widen, thereby imposing competition on financial intermediaries. Consumers will better understand product features, including pricing, thereby substantially reducing information asymmetry. Messy and Monticone (2012) give a better summary by postulating that financial literacy may play useful roles in reducing demand-side barriers to financial inclusion and potentially contribute to market efficiency.

Our key takeaway from the foregoing is the interconnectedness of relationships and systems and how an individual decision may cascade the entire system. In other words, the financial decisions of an individual or a group of individuals have the potential to engender near and distant social and economic consequences. The 2018 Ghanaian banking sector crisis and the resulting clean-up evoke a memory of how individual financial decisions metamorphosised into an obligation for the public through the government (Torku & Laryea, 2021). A thick perspective of financial literacy is therefore essential.

#### 3. What Causes What?

Whilst there has been an appreciable growth in the financial literacy literature, significant opportunities exist to expand the frontiers of research around this concept. In particular, and given the numerous positive outcomes the authors mentioned above have attributed to financial literacy, it will be stimulating to explore issues around attribution and causality deeply. For instance, Lusardi and Mtichel (2014) explore the relationship between financial literacy and good financial decision-making, arguing that people's ability to process economic information is linked to improved decisions about financial planning, wealth accumulation, debt, and even pensions. Berry et al. (2018) established a relationship between financial literacy and savings accumulation, whilst the paper by Drexler et al. (2014) recognises the significant role of financial literacy in wealth accumulation for microentrepreneurs. Similarly, van Rooij, Lusardi, and Alessie (2007) argue that financial literacy has implications for participation in the stock market, noting that those with low levels of financial literacy are less likely to participate in accumulating wealth.

Karlan et al. (2014) explored the effectiveness of financial education and access to formal savings accounts in Uganda and found that financial literacy increased bank savings among youth clubs. Similarly, Supanantaroek et al. (2017) examined the relationship between financial literacy and savings and spending behavior among primary school students in Uganda and established a positive and significant impact. These should be pleasing to policymakers in Africa, especially amidst reports of low savings rates in many countries on the continent. Indeed, savings have been described as the forgotten part of financial intermediation in developing countries Diop, Dorsner and Gross, (2003), and less than 15% of Africa's gross national disposable income against 30% of the same metric (Loayza et al., 2000). In Ghana, it is estimated that 34.5%, just one—third—of all households have savings accounts (Ghana Statistical Service, 2014).

Consequently, any evidence that provides clues to the potential to substantially raise the savings bar must provoke the interest of policymakers and development partners. Jamisonet et al., (2014) and Supernantaroek's (2013) findings that focus on young people are thus, refreshing in many respects, including the fact that targeting young people offers useful prospects for long-term savings growth. In our view, savings is one of two crucial metrics of financial literacy outcomes relevant for many developing countries, the other being protection from shocks and mechanisms to promote financial resilience. In this light, the work of Biener et al. (2014) comes in for mention and offers exciting opportunities for scholarship on financial literacy and well-being in Africa. Biener et al. (2014) argue that the microinsurance market is strengthened through the enhancement of financial literacy across the globe.

As noted earlier, there is growing scholarship on the relationship between financial literacy and financial behavior and similar broad outcomes, including poverty reduction. The World Bank suggests that financial literacy improves better financial decision making and choices by the poor and could socially and economically empower them to escape poverty (World Bank, 2009). Other authors such as Lusardi and Mitchell (2014) and Fernandes, Lynch and Netermer (2014) are less optimistic, insisting financial literacy interventions are only partially successful. We argue that much of the enumerated benefits and positive outcomes of financial literacy remain very broad and are, in many cases, silent on the nexus of causality. Many exploratory factors could potentially influence positive financial behaviour (however defined) and not just financial literacy. Exploring such factors and their potential interactive effects with others may provide better sunlight on causality. Interestingly, we find support in Robb and Woodyard (2011), who posit that financial literacy is essential but not sufficient to make sound financial decisions. There are thus significant opportunities to expand the frontiers of research on financial literacy. Similarly, what enhances financial literacy has typically been explored relying heavily on demographics, particularly age, sex, and education. We now turn our attention to these.

# 4. Determinants of Financial Literacy

Highlighting the enablers or determinants of financial literacy will prove useful to policymakers in designing financial literacy programs. In this regard, the work of Lusardi, Mitchell and Curto (2010) on the relationships

between financial literacy and variables such as age and sex requires attention. Other studies (see for instance, Guiso and Japepelli, 2008; Lusardi and Mitchell, 2008; Ansong and Gyensare, 2012) have highlighted the relationships between income levels, gender and level of education, and financial literacy. We now turn our attention to examining some of these variables.

#### 4.1 How Old is Old?

Lusardi et al. (2010) argue that financial literacy tends to be lower a mong the young and the old. Along similar lines and in an earlier study on age and gender, Lusardi and Mitchel (2008) demonstrated that there are generally lower levels of financial literacy among older women. Extending the age literature, Agarwal et al. (2013) explored personal financial decisions among young and old people and documented that financial mistakes are most prevalent among young and old people. The paper by Lusardi et al. (2010) argues that young adults are illequipped to make financial decisions. They provided an interesting twist to this finding by suggesting that family history may alter the levels of financial literacy of young people, with the real prospect that young people whose mothers have a college education are more likely to understand financial information. Studies on the age-financial literacy nexus seem to produce consistent results in different climes. For instance, Lusardi, Mitchell, and Curto (2010), found low levels of financial literacy among young adults in the United States. At the other end of the age continuum, and in a different study, Lusardi et al. (2014), found low financial literacy levels reported among older adults. Other studies such as Agarwal et al. (2015) in India, Alan and Ertac (2014) in Turkey, Xu and Zia (2012) in Somalia, and Burke et al. (2018) in Uganda all point to similar conclusions.

There appears to be a convergence that young people are less likely to be financially literate. What is strikingly lacking in many of the studies is to answer the following questions decisively; how young is young, and how old is old? We proceed with the general argument about the relationship between age and financial literacy despite this. We argue that younger people may not be interested in financial literacy because the need to be cautious about personal finance, income security, and retirement planning is of little significance at this stage of life, or that these concepts may not be at the forefront of memory for them. On the other hand, older people may have seen it all and no longer find them attractive. Taken together, these findings sit well with the life-cycle hypothesis aptly summarised by Japelli and Padula (2013), who suggest financial literacy and wealth will have some strong correlation over the life cycle with both rising until retirement and falling after that.

#### 4.2 Sex

In highlighting the differences in financial literacy levels attributable to sex, Lusardi, Mitchell, and Curto (2010), maintain that men tend to have higher levels of financial literacy and observed similar patterns among younger respondents. Implicit in this is that younger women are less likely to have financial knowledge than their male counterparts. Lusardi et al. (2010) are of the view that this could have arisen because of honest responses to financial literacy questions during surveys, noting that many women, in response to survey questions on financial literacy, are very likely to indicate that they 'do not know' about questions they do not know about. Whist affirming a similar finding and attempting a nexplanation, Hsu (2011) posits that lower levels of financial literacy among women may reflect the household-level division of labour with married women acquiring financial knowledge much later in life. Hsu (2011) finds that women invest in financial literacy as spouses lose cognitive skills. Fletschner and Mesbah (2011) find that women are less financially informed than men are; however, their knowledge improves significantly with education, wealth, and encouragement by spouses to acquire and use it. It appears the low financial literacy rates among women hold even among educated people and students. Oseifuah et al. (2018) explore financial literacy among university students in Ghana and establish that male students are more likely to be financially literate than their female counterparts. Mirzaei and Buer (2022) also establish that financial literacy level in Oman is influenced by gender. Khusaini et al. (2022) on the other hand evidence that gender has no significant effect on the level of financial literacy.

Extending the literature on gender and financial literacy, Hasler and Lusardi (2017) discuss the gender gap, noting that this cuts across different economic and institutional systems, and transcends social and cultural backgrounds. In our view, this gap is confounding, defying other metrics that could offer an explanatory basis. Not surprisingly, Bucher-Koenen et al. (2017), in their paper conclude that the persistent gender gap in financial literacy remains unexplained even after accounting for factors such as marital status, education, income, and similar socioeconomic characteristics. Pursuing related themes, Chen and Volpe (2002) uncover lower levels of financial literacy among young women that are not attributable to class, race, work experience, and age. Fonseca, Mullen, Za marra and Zissimopoulo (2010) contribute to unravelling the gender conundrum by introducing marital status into the debate and discovered that married women are significantly more financially literate than unmarried women. This finding, in our view, finds roots in the broad category of explanations bothering on household-level

labour specialisation, well elaborated by Hsu (2011). In fact, the difficulty in attribution deepens even when attempts are made to unpack the various components of marital status. Bucher-Koenen and Ziegelmeyer, (2014) offer a compelling summary by observing that there are worryingly low levels of financial literacy even among women who normally decide by themselves including those who are single and widowed. Other issues require unpacking; what type of marriage? Our parting thoughts on the gender gap is that this specific area requires deeper and more focused research.

#### 4.3 Education

One of the conspicuous variables a bout the determinants of financial literacy is education. Bumcrot and Lusardi (2011), find a relationship between education and financial literacy and argue that education increases financial literacy. Similarly, Atkinson and Messy (2012), suggest that incomplete schooling leads to lower financial literacy levels, noting that people who have obtained education beyond secondary schooling tend to show higher levels of financial literacy. Mitchell and Lusardi (2015) note that the level of education attained by an individual will play a significant role in financial literacy and established that people without a university degree are much less likely to grasp basic financial concepts. These findings, in our view, indicate the predictive power of education at any level in explaining the level of financial literacy, with higher levels of educational attainment positively correlated with superior knowledge of basic financial concepts. This sits well with general notions about the role of education in transformation at the individual and societal levels. Education helps in developing an understanding of issues, increases the level of judgment, and engendering action. An educated individual is thus equipped to imbibe information targeted at certain outcomes, including basic financial concepts that will facilitate, other things held constant, financial planning and well-being.

We end this section with some caution that as rigorous as the various findings relating to the determinants may be, context remains crucial. As noted by Schmidt and Hryckiewicz (2006), the financial system of a country largely determines the design and implementation of financial relationships. It is thus, essential to note that financial systems differ considerably, and this diversity may have implications for the financial architecture and underlying institutions, including what roles financial literacy can play in individual lives and the national economy. The usefulness of financial literacy should therefore be situated contextually. For example, Adomako et al. (2016), found in Ghana that financial literacy can improve firm performance, especially with the availability of flexible finance to entrepreneurs. Here, the mediating role of capital availability, not just financial literacy, is apparent. To this, we add the work of Zokaityte (2017). Zokaityte (2017) reveals that most research findings make simplistic correlations between financial literacy levels and respondents' demographics, arguing that this approach ignores other crucial contextual factors such as personal finance and the environment. In particular, the en vironment in which people make financial and economic decisions shapes their reasoning and attitudes towards finance. Empirically, Castaeda et al. (2022) evidence that a person with a high education level and high income will have a greater likelihood of having a sufficient degree of financial literacy. Bangco et al. (2022) report that while a verage income has minimal influence on financial literacy, educational attainment improves financial literary. Likewise, Cossa et al. (2022) demonstrate that financial knowledge and behaviour in Mozambique are influenced by educational level.

#### 4.4 Rural and Urban Populations

Geographical location also significantly influences the level of financial literacy relative to the other demographic and economic factors. There is a general argument that people living in rural areas on a verage have lower levels of financial literacy relative to the urbanised population. For instance, Klapper and Panos (2011) found substantial geographic disparities in financial literacy in Russia, noting in the process, not only regional disparities but a very conspicuous rural-urban gap, with rural residents exhibiting significantly lower levels of financial literacy. Van Rooij et al. (2011) wade into what approximates the rural-urban debate by opting to focus on categorizing income sources into formal and informal criteria. According to Van Rooij et al. (2011), individuals who draw their income or interact with the formal economy are more likely to make sound financial decisions than those who receive their income or social support from informal sources. It is inferred that formal sector jobs are located more in urban areas than in rural areas. People employed in the formal sector typically operate bank accounts and are most likely to appreciate the needs of other financial and employment-related products. It may be argued that the location and cluster advantages come with opportunities for interactions on so many subjects including financial literacy. These product offerings and accompanying opportunities for interactions may not be readily apparent in rural climes.

Whilst there may be some merits in this argument, we recognize that this may not be universally applicable, and some rural contexts may provide opportunities for financial literacy than in some sections of urban locations. For instance, interventions such as village savings and loans (VLSAs) play critical roles in bringing

financial services to rural areas, particularly in developing countries where access to formal financial services is limited (Frimpong et al., 2020). These rural finance mechanisms are also outlets for financial education and may be contributing to increasing financial literacy levels in some rural environments. By way of conclusion, we will like to observe that in terms of attribution, several claims have been made regarding the impact of these programmes especially on improving financial inclusion, household and business outcomes, and women empowerment. A good study focus going into the future, is to rigorously examine the relevance of these financial interventions in enhancing financial literacy, especially in rural settings.

### 4.5 Employment Type

The type of job an individual does may be one of the predictors of financial literacy. Cumurovic and Hyll (2019) for instance, discovered that self-employed people tend to demonstrate more financial knowledge than employees, whether in the formal or informal sectors and unemployed people. A natural explanation for this centres on the argument that entrepreneurs are risk-loving and often explore concepts around finance, risk, and related topics, building significant knowledge and skills in the process. Furthermore, and as elucidated clearly by Alessie et al. (2011), self-employed people assume personal responsibility for retirement planning, savings, and other investment products, while employees usually have their mandatory pension plans managed on their behalf. Aluodi et al. (2017) caution against a straight interpretation of the type of employment and positive financial literacy nexus, insisting for instance that though people working on finance-related roles will generally exhibit a high level of financial literacy, employment status is not significant in explaining an individual's level of financial literacy than a person's general educational attainment. Making somewhat similar arguments Ariwala (2013), found no significant relationship between employment status and levels of financial literacy, and found, interestingly that, work experience proxied by the number of years in employment, correlates positively with financial literacy levels. In associating with this finding, we suggest that a longer stay in employment may bring the individual into contact with several financial products by different providers with accompanying opportunities to acquire skills and knowledge on financial concepts. Whilst settling on evidence that people who have work experience spanning several years are likely to be abreast with financial literacy and financial products, Bucher-Koenen et al. (2016) remind us of the gender gap and observed that low financial skills are prevalent among working women. Bucher-Koenen et al.'s (2016), results reinforce our earlier observation that the gender gap in financial literacy persists amid similar work environments and education.

# 5. Concluding Thoughts and a Note for Policy

The financial literacy literature has grown over the years in many climes, even though much more work is required in Africa. In the case of Africa, researchers must be willing to reconfigure efforts to align with contextual factors and underlying institutions. A bourgeoning informal sector and low literacy levels imply that approaches that work well in developed financial systems may not achieve results in predominantly informal systems. While focusing on context, research efforts in Africa should also deeply explore causality. For example, many rural women and farmers rely on informal finance mechanisms, some with significant operational challenges. Financial literacy programmes in such instances should move a way from high-end terms such as stocks and mortgages to concentrate on basic and everyday concepts such as interest rates, savings, and returns. Policymakers and national governments should intensify efforts in making financial literacy programmes practical and relevant given the critical role financial literacy has on the stability of financial systems.

The literature makes an almost tidy conclusion on low levels of financial literacy among young people and women. For Africa, this reveals and provides policy-makers with opportunities to promote efforts that ensure that two critical groups—young people and women—are not left behind. Apart from the fact that Africa's population is largely youthful, there is a promise that future generations will acquire financial knowledge that might positively impact individual lives and national economies. A practical starting point could be through the school curriculum.

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#### References

- Adomako, S., Danso, A., & Ofori Damoah, J. (2016). The moderating influence of financial literacy on the relationship between access to finance and firm growth in Ghana. Venture Capital, 18(1), 43-61.
- Agarwal, S., Driscoll, J. C., & Laibson, D. I. (2013). Optimal mortgage refinancing: a closed-form solution. Journal of Money, Credit and Banking, 45(4), 591-622.
- Agyei, S. K. (2018). Culture, financial literacy, and SME performance in Ghana. Cogent Economics & Finance, 6(1). 1-16.
- Alessie, R., Van Rooij, M., & Lusardi, A. (2011). Financial literacy and retirement preparation in the Netherland. Journal of Pension Economics & Finance, 10(4), 527-545.
- Aluodi, E., Njuguna, A., & Omboi, B. (2017). Effect of Financial Literacy on Retirement Preparedness among Employees in the Insurance Sector in Kenya. International Journal of Business and Management, 12(10), 242-251.
- Anderson, J. D. (1988). The education of Blacks in the South, 1860-1935., Chapel Hill: University of North Carolina Press.
- Ansong, A., & Gyensare, M. A. (2012). Determinants of university working-students' financial literacy at the University of Cape Coast, Ghana. International Journal of Business and Management, 7(9), 126-133.
- Atkinson, A., & Messy, F. A. (2012). Measuring Financial Literacy: Results of the OECD/International Network on Financial Education (INFE) Pilot Study. OECD Working Papers on Finance, Insurance and Private Pensions
- Bangco, R. A., Dimatulac, P. A., Sanchez, J. F., & Cabauatan, R. (2022). Determinants of Financial Literacy in the MIMAROPA Region. *Journal of Economics, Finance and Accounting Studies*, 4(1), 232-243.
- Berry, J., Karlan, D., & Pradhan, M. (2018). The impact of financial education for youth in Ghana. World Development, 102,71-89.
- Biener, C., Eling, M., & Schmit, J. T. (2014). Regulation in microinsurance markets: principles, practice, and directions for future development. World Development, 58, 21-40.
- $Braunstein, S.F., \&\ Welch, C.\ (2002).\ Financial\ literacy: an overview\ of\ practice, research, and\ policy.\ Federal\ Reserve\ Bulletin,\ Washington.$
- Bucher-Koenen, T., & Ziegelmeyer, M. (2014). Once burned, twice shy? Financial literacy and wealth losses during the financial crisis. Review of Finance, 18(6), 2215-2246.
- Bucher-Koenen, T., Lusardi, A., Alessie, R., & Van Rooij, M. (2017). How financially literate are women? An overview and new insights. Journal of Consumer Affairs, 51(2), 255-283.
- Burke, J., Luoto, J., & Perez-Arce, F. (2018). Soft versus hard commitments: a test on savings behaviors. Journal of Consumer Affairs, 52(3), 733-745.
- Castañeda, F., Ormazábal, F., & Cisternas, C. (2022). Sociodemographic Determinants of Financial Literacy Levels. *Studies in Business and Economics*, 17(2), 44-61.
- Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. Financial services review, 11(3), 289-307.
- Cohen, M., & Nelson, C. (2011). Financial literacy: A step for clients towards financial inclusion. Global Microcredit Summit, 14-17.
- Cossa, A., Madaleno, M., & Mota, J. (2022). Financial literacy environment scan in Mozambique. *Asia Pacific Management Review.* DOI: <a href="https://doi.org/10.1016/j.apmrv.2021.09.004">https://doi.org/10.1016/j.apmrv.2021.09.004</a>.
- Ćumurović, A., & Hyll, W. (2019). Financial litera cy and self-employment. Journal of Consumer Affairs, 53(2), 455-487.
- Drexler, A., Fischer, G., & Schoar, A. (2014). Keeping it simple: Financial literacy and rules of thumb. American Economic Journal: Applied Economics, 6(2), 1-31.

- Fletschner, D., & Mesbah, D. (2011). Gender disparity in access to information: do spouses share what they know?. World Development, 39(8), 1422-1433.
- Ghana Statistical Service (2014). Demographic and Health Survey. Available at: https://dhsprogram.com/pubs/pdf/SR224/SR224.pdf
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. Federal Reserve Bulletin, Washington.
- Hung, A., Parker, A. M., & Yoong, J. (2009). Defining and measuring financial literacy. RAND Working Paper Series
- Huston, S. J. (2010). Measuring financial literacy. Journal of consumer a ffairs, 44(2), 296-316.
- Ibrahim, M., & Acquah, A. M. (2021). Re-examining the causal relationships among FDI, economic growth and financial sector development in Africa. International Review of Applied Economics, 35(1), 45-63.
- Jappelli, T., & Padula, M. (2013). Investment in financial literacy and saving decisions. Journal of Banking & Finance, 37(8), 2779-2792.
- Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when?. The World Bank Economic Review, 31(3), 611-630.
- Karlan, D. S., Jamison, J. C., & Zinman, J. (2014). Financial education and access to savings accounts: Complements or substitutes? Evidence from Ugandan youth clubs. Yale University Economic Growth Center Discussion Paper, Yale University.
- Khusaini, K., Mardisentosa, B., Bastian, A. F., Taufik, R., & Widiawati, W. (2022). The Impact of Financial Education and Socioeconomic Status on the Undergraduate Students' Financial Literacy. *Media Ekonomi Dan Manajemen*, 37(1), 55-76.
- Klapper, L., & Panos, G. A. (2011). Financial literacy and retirement planning: the Russian case. Journal of Pension Economics & Finance, 10(4), 599-618.
- Loayza, N., Schmidt-Hebbel, K., & Servén, L. (2000). What drives private saving around the world? The Review of Economics and Statistics, 82, 165-181.
- Lucey, T. A., Agnello, M. F., & Laney, J. D. (2015). A critically compassionate approach to financial literacy. Rotterdam, Netherlands, Sense Publishers.
- 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.
- Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare?. American economic review, 98 (2), 413-17.
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy around the world: an overview. Journal of pension economics & finance, 10(4), 497-508.
- Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. Financial services review, 16(2), 105-116.
- $Messy, F.\,A., \&\,\,Atkinson, A.\,(2012).\,Measuring\,Financial\,Literacy: Results\,of\,the\,OECD/International\,Network\,on\,Financial\,Education\,(INFE)\,Pilot\,Study.\,OECD\,Publishing\,Paper.$
- Messy, F. A., & Monticone, C. (2012). The Status of Financial Education in Africa. OECD Working paper.
- Miller, M., Reichelstein, J., Salas, C., & Zia, B. (2015). Can you help someone become financially capable? A meta-analysis of the literature. The World Bank Research Observer, 30(2), 220-246.
- Mirzaei, M., & Buer, T. (2022). First results on financial literacy in Oman. *Managerial Finance*, 48(9/10), 1413-1429.
- Moore, D. L. (2003). Survey of Financial Literacy in Washington State: Knowledge, behavior, Attitudes, and Experiences. Social and Economic Sciences Research Center, Washington State University.
- Opoku, E. E. O., Ibrahim, M., & Sare, Y. A. (2019). The causal relationship between financial development and economic growth in Africa. International Review of Applied Economics, 33(6), 789-812.
- Oseifuah, E., Gyekye, A., & Formadi, P. (2018). Financial literacy among undergraduate students: Empirical evidence from Ghana. Academy of Accounting and Financial Studies Journal, 22(6), 1-17.
- Robb, C. A., & Woodyard, A. (2011). Financial knowledge and best practice behavior. Journal of financial counseling and planning, 22(1), 60-70.
- Saeedi, A., & Hamedi, M. (2018). Financial literacy: Empowerment in the stock market. Cham: Springer.
- Shankari, S., Na varathinam, K., & Suganya, R. (2014). Financial literacy towards banking products and services: a survey. International Journal of Management Research and Reviews, 4(3), 396-402.
- Stango, V., & Zinman, J. (2009). Exponential growth bias and household finance. The Journal of Finance, 64(6), 2807-2849.
- Supanantaroek, S., Lensink, R., & Hansen, N. (2017). The impact of social and financial education on savings attitudes and behavior among primary school children in Uganda. Evaluation Review, 41(6), 511-541.
- Torku, K., & Laryea, E. (2021). Corporate governance and bank failure: Ghana's 2018 banking sector crisis. Journal of Sustainable Finance & Investment, 1-21.
- Xu, L., & Zia, B. (2012). Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward. World Bank Policy Research Working Paper, Washington DC.

 $Zarcadoolas, C., Pleasant, A., \&\ Greer, D.\ S.\ (2006).\ Advancing\ health\ literacy: A\ framework\ for\ understanding\ and\ action\ (Vol.\ 17), John\ Wiley\ \&\ Sons.$