

# Financial Literacy Position in Developing Economies: A Review of Studies and Open Issues

Juma Buhimila Mabula\*  
*Business Administration*  
*Harbin Institute of Technology*  
Harbin, China  
buhimay@yahoo.co.uk

Han Dong Ping  
*Accounting*  
*Harbin Institute of Technology*  
Harbin, China  
handonping@hit.edu.cn

**Abstract—**As studies on financial literacy gain thrust in the entire world, developing economies unfold a unique set of domain and concerns due to the relative financial sector and institutional framework level of development. The review reveals fair availability of research on financial literacy concerning firms, businesses and entrepreneurship, even though the most studies were not scientifically undertaken. General financial literacy studies focusing on individuals in developing economies has been undertaken by multilateral research bodies like Organization for Economic Cooperation Development (OECD) still there is an open gap for specific groups financial literacy studies in the society, like women, students, employees etc. Financial literacy and financial education are phenomenon that has been overly explored in the developed world, on the other end is scarcely examined in developing economies. Much need to be done in terms of research on the subject matter, there is a need to restructure the institutional frameworks to enhance initiatives and policies for upselling financial literacy educational outreach in developing countries.

**Keywords**—financial literacy, financial education, developing economies

## I. INTRODUCTION

As the concern for consumer's financial literacy gain thrust in the world, there is need to make a vivid classification of how the concept is conceived and applied in different economic zones. Accordingly the world economic level is generally categorized into developed (advanced) and developing (less developed economies) economies [1]. This means that there is a huge diversity of the economy and financial settings in these distinct zones. The relative advancement financial sector economies has an obvious avenue to be superior on financial literacy compared to less advanced financial setting economies. This is because the financial sector and the availability of financial products automatically engages individual and firm into transactional networks forcing them into a learning stream hence automatically becomes literate. [2] reveals countries with highest financial literacy rates are Australia, Canada, Denmark, Finland, Germany, Israel, The Netherlands, Norway, Sweden, and United Kingdom where by about more than 65% of adults are financially literate on the other end south Asia and Africa have the lowest financial literacy scores. Also [3, 4] doing financial literacy survey around the world indicates that developing economies has the lowest general level of financial literacy as it is to the general literacy level. But consumption and need for financial service differs in these economic zones hence diverse domains of financial literacy causal factors.

Therefore there is a need to interpret financial literacy in developing economies in line with the features characterizing these countries economy and their level of financial sector development. Meanwhile we also need to recognize that there is a rapid growth of financial sector in developing economies, there is entry of new providers and ever-more complex financial products and services, and the integration of new consumers in the market poses a great deal of international capital flows, consequently increase the need of financial literacy in developing countries.[5]. In low income countries financial literacy has the following correlates: having a bank account, financial literacy affects insurance take-up, business literacy is low, but interest in financial education, however appear to be wide spread [4].

We reckon that financial knowledge and skills is of paramount importance in developing economies especially in this era where there is a steady increase of complex financial products in the financial markets. Considering that many government now are trying to boost the access of consumers to financial services, increasing the number of people with bank accounts and access to credit financing [2].

In this study we review literature and open issues about financial literacy in developing economies. We aim to capture the issues about financial literacy at stake and uncover the distinct factors and constructs that uniquely feature in developing economies. We aim at capturing the unique set of problems hindering access to financial capability in developing economies and provide the way forward. It is an attempt to review the state of art of financial literacy particularly in developing economy critically reviewing all issues related to this phenomenon. To be more specific this study attempted to analyze the financial literacy position in Africa developing economies setting.

## II. FINANCIAL LITERACY DEFINITION

Defining financial literacy has been a subject of no cut-off stance, but many definitions still stipulate either one, two, or more constituents of financial literacy in different philological. [6] Argue that financial literacy has been variably defined as a specific form of knowledge, the ability or skills to apply the knowledge, the perceived knowledge, good financial behavior and even financial experiences. While other scholar uses financial literacy and financial education interchangeably, though are related concept they stem into different grounds. The President's Council on Financial Literacy (PACFL) define

financial literacy as the ability to use knowledge and skills to manage financial resources effectively for lifetime of financial wellbeing [7]. The jump\$start coalition defines financial literacy as the ability to use knowledge and skills to manage one's financial resources for lifetime financial security (Jump\$start coalition for personal financial literacy, 2007).

OECD define financial education as the process by which individuals improve their understanding of financial products and concepts, and through information , instruction/or objectives advice develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and take effective action to improve their financial well-being and protection[8], by this definition, financial education is considered as a kit to attain financial literacy. Financial literacy therefore is a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing[3].

Financial capability is also a synonymous term to financial literacy, the term was introduced by the UK Financial services Authority (FSA). The authority defines financial capability as capability possessed by individuals to make informed financial decision. Individual who are numerate and can budget and manage money effectively. Understand how to manage credits and debts. They are bale to assess the needs of insurance protection. They can examine the various risks and returns involved in different saving and investment options. They have an understanding of the wider ethical, social, political and environmental dimensions of finances [9].

The UK government's economic and finance ministry (HM treasury) consider financial capability as a wider concept, comprising of people's knowledge, skills and understand their own financial circumstances, along with the motivation to take action financially capable consumers plan ahead find and use information, know when to seek advice and can understand and act on this advice, leading greater participation in financial service market [10]

### III. MEASURING FINANCIAL LITERACY

As there is no standard definition of financial literacy the attempt to measure it has been undertaken variably. Besides of the varying approaches ought to focus on realization of harnessing better results. [11] measures financial literacy by using construct validation instituted by[12], they use this logical approach which involves four main aspects; definition of the construct, item content, method of measure and the scoring procedure. As a result they discovered that the majority of the study don't include the definition of financial literacy, the contents were distinctly used into varying degrees, substantial variation among studies in the number of items used to measure the financial literacy construct, and the reviewed studies didn't provide clear rating for financial literacy.

The approaches to measure financial literacy depict a varying trend, [13] uses percent of correct scores on 10 multiple choice items, a performance test with investment domain focus [14] uses percent of correct scores on 36 multiple choice items a performance test with saving, investment and

debt domain emphasis.[15] also uses a performance test to test for saving, investment and debt domains. [16] has a bit unique approach mixing self-testing and performance test, and categorized financial literacy into financial knowledge, financial experiences, financial behavior and debt confidence and they included all the domain of saving, investment and debt.[17, 18] uses a correct responses to 3 multiple choice questions and true/false questions. This was a performance test and including saving and investment domain only.

### IV. FINANCIAL LITERACY GENERAL STATE IN DEVELOPING ECONOMIES

Many studies on financial literacy has been conducted in the developed world, and mostly studies has been able to be connected with the financial behavior including planning and saving, pension plan participation, retirement planning[19-21], stock market participation [22-25], portfolio diversification[26, 27], to mention a few and all these studies done in the developed world base their analysis into a quite distinct financial setting and economic level relative to developing nationals. Even though the world survey for financial literacy depict a low level of financial literacy but fail to tailor their analysis into the specificity of the developing economy financial system. For instance we talk of financial planning and saving as it is done in developed economy where by the formal financial markets and products outreach is at high level, contrast to the financial markets in developing economy most of the savings and planning are done into informal markets [28, 29]. The participation of individuals and firms in the stock markets in the developed world is very high, it is worth analyzing their individual and firms financial literacy based on this construct[30]. Whilst there is a very limited number of participants in developing economy stock markets caused by the number of setbacks including the weak market institutional and capacity to accommodate many members to transact. Looking on the portfolio diversification of the developed world is quite significant different because many individuals invest into the formal financial markets in the developed world while developing world has ample avenue of investing into informal markets. The practice of keeping livestock, farming activities because of arable land, investing into micro and small businesses, local financial associations, participation into informal financial institutions characterize the developing economies.

The general level of financial literacy education and programs initiatives is relatively high in developed world [31], in the sense that most schools now have an embedded curriculum specialized for financial education. Contrary in developing world for instance in Tanzania, there is dearth syllabus content for children to learn financial knowledge until at some higher levels of study. The general literacy level .as it stated in [32, 33] depict a literacy level below 60% in Sub-Saharan Africa while Central Asia, Central Europe and Eastern Europe has almost 100% literacy rate. And according to the data countries with literacy level below 50% are Guinea, Benin, Burkina Faso, Niger, Mali, Chad, Ethiopia, Liberia, Sierra Leone and Haiti, all these belongs to Sub-Saharan Africa except Haiti. These facts calls for a distinct approaches towards

defining and making interventions for financial illiteracy in developing economies.

There are number of studies scientific and nonscientific on financial literacy construct. Many of the studies conducted in South Africa, Kenya, Ghana and Nigeria as far our best internet search could provide. Besides of the world's multilateral organization researching on the issue, still there are very few scientific studies that has embarked into analyzing financial literacy in the region. Many of the studies focus on SMEs and entrepreneurship, few financial literacy programs for establishing a strong conclusion on a researched matter.

#### V. FINANCIAL LITERACY AND POVERTY REDUCTION

A number of poverty reduction programs, campaigns and initiatives has been implemented in developing economy, still financial literacy as one of the tool in combating poverty hasn't been fully comprehended and utilized. Financial literacy is recognized as one of the pillar of financial inclusion., it facilitate the informed use of microfinance, promote participation in formal financial sector and it guides individuals and firms in sound decision with regard to borrowing, spending, saving and financial management in general [34]. A link is established on the failure of poverty reduction and welfare improvement programs to lack of financial literacy. This calls to the need to integrate poverty reduction programs with financial literacy program [35]. Individual and businesses in developing economies faces high inherent risk financial literacy will enable effective saving and consumption soothing. [36] doing a randomized experiment direct impact and social network spillovers providing financial literacy they found that farmers receiving financial literacy materials increased the likelihood of the farmer to purchase insurance. Financial literacy and inclusion are issues of critical importance in developing economies to endeavor for more transparent, healthy and sustainable economy. Being smart on spending, saving, debt and investment for long term future to achieve the desired financial goals is at stake [37].

#### VI. FINANCIAL LITERACY AND SMEs

One of the emerging and increasing trend in developing economy is the study of financial literacy on SMEs and how literacy impact performance of the firm. most there is a number of financial literacy studies that have been undertaken with a focus on SMEs, small business and entrepreneurship.[38, 39] examined the financial literacy and firm performance: the moderating role of financial capital availability and resource flexibility testing a sample of entrepreneurial firm in Ghana. Generally, these studies reveal positive relationship between financial literacy and performance of the firm

[40] working in Kenya setting, confirm that there is significant role played by financial literacy on the profitability of women owned enterprises in in Kenya. Also [41] also envisaged that borrowing and budgeting to SMEs enhances their firm performance.

#### VII. FINANCIAL LITERACY AND FINANCIAL BEHAVIOR IN DEVELOPING ECONOMIES

There is ample evidence to confirm that financial knowledge and skills is connected to financial behaviors. The literature in developed world talks about wealth accumulation, stock market participation, portfolio diversification, participation and asset allocation, retirement planning, saving, indebtedness, and generally a responsible financial behavior.

The following are some of the financial behavior displayed in the studies meant specifically for developing economies:

Financial literacy and entrepreneurship activities[42] assessing financial literacy with entrepreneurship in south Africa among youth, found that there is was a great correlation between financial literacy and successful entrepreneurship. Above all with their small sample they found that the financial literacy of the entrepreneurs were above average.

#### VIII. GENDER AND FINANCIAL LITERACY IN DEVELOPING ECONOMIES

The FinScope surveys indicates inequalities by gender on access to financial services, this could be translated into differences in the level of financial literacy. however [43] found that the coefficient on gender was insignificant when controlled for variables such as financial sector knowledge, education and other demographic factors.

In general term there is dearth of studies focusing primarily on women in developing economies in particular. Generally women in African countries and some Middle Eastern countries has lower score of financial literacy index. The gender gap in financial literacy is of particular concern as women are prone to financial vulnerability than men due to longer life spans, shorter work experiences. [44]

#### IX. FINANCIAL LITERACY AND STUDENTS IN DEVELOPING ECONOMIES

Like into other determinants financial literacy for students at various levels of studies has been amply examined. The groups of young in primary schools and the upper levels up to colleges. In US for instance the presence of the program like Jump\$tat brings a lot of impact to the young scholars. However the situation is alarming in developing economies where by just few initiatives, few researches and programs has been established particularly for students. For instance in Tanzania, the formal syllabus for primary schools studies doesn't include and subject related to financial matters, a specific group is touched in secondary schools and at university not all students learn financial literacy subjects. Therefore we have very few studies in this occult.

[45] examined the impact of financial literacy programs on financial inclusiveness of marginalized population within the Eastern Cape in South Africa. Employing quintile and OLS regression for robustness checks. The study concluded that the level of financial literacy positively significantly relate to access to bank by individuals.

## X. FINANCIAL LITERACY AND FINANCIAL MARKET IN DEVELOPING ECONOMIES

[46] studied Lending terms, financial literacy and formal credit accessibility in Uganda, they found there is a significant relationship between perceived commercial bank lending terms, financial literacy and access to formal credit. Using structural equation modelling with analysis of moment structures.[47] stated the importance of financial literacy to developing economies one among them was in active debt management specifically enhancing participation in financial market, investing and choosing the right financial product, consumer rights and interventions. Financial literacy create cognizance of financial products available in the financial market hence increased demand of the same.

## XI. MULTILATERAL ORGANIZATIONS CONCERN

The multilateral organizations like the organization for economic cooperation development (OECD), department of international development (DFID), and The World Bank group to mention has a done a remarkable work in terms of financial literacy research and initiating and funding financial literacy education programs in developing economies. For instance OECD has undertaken in-depth studies on financial literacy in Africa, it has launched a high-level project on financial education in 2003 and has managed to formulate principles and good practices for financial education and awareness

## XII. DISCUSSION OF ISSUES UNCOVERED

Generally there is ample researches devoted on the theme of financial literacy on developed World, contrary to what has been observed in developing economies. More efforts need to be bone in developing economies. Encompassing with the efforts that has been employed so far the phenomena unfold issues still need scholarly attention in developing economies.

- The literature on financial literacy and financial behavior in developing economy has narrowly examined. The personal financial literacy for instance on debt management, financial planning, retirement planning, portfolio management, risk management has not been given sufficient attention. A deliberate move of propositioning appropriate financial behavior in developing economy is of more important to instil an improved financial awareness. The financial behavior displayed by most research in developed world are not necessarily irrelevant to the developing economy stance. Issue like saving behavior, indebtedness and portfolio diversification still could be analyzed in the pertinent context.
- Focusing on the issue of available research opportunities on financial literacy [48] studied financial literacy in South Africa, examined the current literature and explored the research opportunity available. They concluded that there is ample opportunities for research because of the various measures and constructs that used by the researchers. They suggested a longitudinal study on financial literacy for students as they move through university levels. The employer and

organizational financial literacy was also an interesting area of research suggested by the scholars. The research gap remain the same all over the sub Saharan developing countries.

- Which causes the other? Financial literacy or financial behavior. There is a need to come up with instruments that will be able to examine the causality of the phenomena. Again even though financial literacy has been shown to have a significant influence on financial behavior, financial behavior also can automatically add up a bunch of financial literacy to the beholder in experiential learning. There is an obligation for researchers to study financial literacy with developing economy based constructs reflecting the informal financial market ascendency. Defining and measuring financial literacy basing on developing economies financial market interconnectedness.
- Literature of financial literacy in developing economies unveil a focus on firm, businesses and entrepreneurship. Still these studies have had either small sample size or not undertaken with scientific data management and analysis. This calls for more scientific scholarly interventions.
- The multilateral and regional bodies on incumbent issues related to poverty reduction and welfare improvement are bidden to embed their initiatives with financial literacy campaign, while deepening their outreach programs by involving local stakeholders and increasing scholarly research sponsorship for local scholars studying the phenomena at its core stance.

## XIII. CONCLUSIONS

This brief review of literature uncover the need for specific interventions on defining and implementation of financial literacy initiatives tailor made for developing economies specificity. The generalization that is made by the multilateral organizations research bodies might have little to do with uncovering the specific societal impediment towards improving the level of financial literacy in developing economies. Much need to be done in terms of scientific studies into various groups' societal groups like Students, Youth, Women, Business, Entrepreneurs, Retirees and Workers. Although financial literacy has an undeniable connections with other initiatives like poverty reduction, microfinance interventions, financial inclusions and formal financial market participation campaign, it has not been amply featured as an important factor. This study call initiation of financial literacy programs and research work molded specifically for societal group.

The question of developing countries financial literacy model is penitently linked to its social demographics and level of financial market development. Recognizing that financial literacy is a dynamic and multidimensional phenomenon, various initiatives and programs need to be implemented tailored to suit the developing economies position.

## REFERENCES

- [1] A. Portes, M. Castells, and L. A. Benton, *The informal economy: Studies in advanced and less developed countries*: Johns Hopkins University Press Baltimore, 1989.
- [2] L. F. Klapper, A. Lusardi, and P. van Oudheusden, *Financial Literacy Around the World: Insights from the Standard & Poor's Ratings Services Global Financial Literacy Survey*, 2015.
- [3] A. Atkinson and F.-A. Messy, "Measuring financial literacy," 2012.
- [4] L. Xu and B. Zia, "Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward," 2012.
- [5] M. Miller, N. Godfrey, B. Levesque, and E. Stark, "The case for financial literacy in developing countries: Promoting access to finance by empowering consumers," World Bank, DFID, OECD e CGAP, <http://www.oecd.org/dataoecd/35/32/43245359.pdf>, 2009.
- [6] A. Hung, A. M. Parker, and J. Yoong, "Defining and measuring financial literacy," 2009.
- [7] PACFL, "Annual Report to the President," 2008.
- [8] OECD, *Improving financial literacy: analysis of issues and policies*, 2005.
- [9] PFRC, "Measuring financial capability: an exploratory study. ,", Financial services Authority2005.
- [10] HM, "Financial capability," HM treasury2007.
- [11] S. J. Huston, "Measuring financial literacy," *Journal of Consumer Affairs*, vol. 44, pp. 296-316, 2010.
- [12] E. J. Pedhazur and L. P. Schmelkin, *Measurement, design, and analysis: An integrated approach*: Psychology Press, 2013.
- [13] R. P. Volpe, H. Chen, and J. J. Pavlicko, "Personal investment literacy among college students: A survey," *Financial Practice and Education*, vol. 6, pp. 86-94, 1996.
- [14] H. Chen and R. P. Volpe, "An analysis of personal financial literacy among college students," *Financial services review*, vol. 7, pp. 107-128, 1998.
- [15] M. A. Hilgert, J. M. Hogarth, and S. G. Beverly, "Household financial management: The connection between knowledge and behavior," *Fed. Res. Bull.*, vol. 89, p. 309, 2003.
- [16] D. L. Moore, *Survey of financial literacy in Washington State: Knowledge, behavior, attitudes, and experiences*: Washington State Department of Financial Institutions, 2003.
- [17] A. Lusardi and O. S. Mitchell, "Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth," National Bureau of Economic Research2006.
- [18] A. Lusardi and O. S. Mitchell, "How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness," National Bureau of Economic Research2009.
- [19] A. Lusardi and O. Mitchell, "Financial literacy and retirement preparedness: Evidence and implications for financial education," *Business economics*, vol. 42, pp. 35-44, 2007.
- [20] A. Lusardi and O. S. Mitchell, "Financial literacy and retirement planning in the United States," National Bureau of Economic Research2011.
- [21] T. Bucher-Koenen and A. Lusardi, "Financial literacy and retirement planning in Germany," National Bureau of Economic Research2011.
- [22] M. Van Rooij, A. Lusardi, and R. Alessie, "Financial literacy and stock market participation," *Journal of Financial Economics*, vol. 101, pp. 449-472, 2011.
- [23] M. Van Rooij, A. Lusardi, and R. Alessie, "Financial literacy and stock market participation," National Bureau of Economic Research2007.
- [24] J. Almenberg and A. Dreber, "Gender, stock market participation and financial literacy," *Economics Letters*, vol. 137, pp. 140-142, 2015.
- [25] J. Yoong, "Financial illiteracy and stock market participation: Evidence from the RAND American Life Panel," 2010.
- [26] L. Guiso and T. Jappelli, "Financial literacy and portfolio diversification," 2008.
- [27] M. Abreu and V. Mendes, "Financial literacy and portfolio diversification," *Quantitative finance*, vol. 10, pp. 515-528, 2010.
- [28] D. Germidis, "Interlinking the Formal and Informal Financial Sectors in Developing Countries/Les Relations Entre Les Secteurs Financiers Formels Et Informels Dans Les Pays En Voie De Developpement," *Savings and Development*, pp. 5-22, 1990.
- [29] D. Fletschner and L. Kenney, "Rural women's access to financial services: credit, savings, and insurance," in *Gender in agriculture*, ed: Springer, 2014, pp. 187-208.
- [30] M. D. Evans and V. V. Hnatkovska, "International capital flows, returns and world financial integration," *Journal of International Economics*, vol. 92, pp. 14-33, 2014.
- [31] L. E. Pinto, "When politics trump evidence: Financial literacy education narratives following the global financial crisis," *Journal of Education Policy*, vol. 28, pp. 95-120, 2013.
- [32] F. Huebler and W. Lu, *Adult and Youth Literacy: National, regional and global trends, 1985-2015*, 2013.
- [33] S. UIF, "ADULT AND YOUTH LITERACY, National, regional and global trends, 1985-2015," Montreal, Quebec H3C 3J7, Canada: UNESCO, 2013.
- [34] M. Chibba, "Financial inclusion, poverty reduction and the millennium development goals," *The European Journal of Development Research*, vol. 21, pp. 213-230, 2009.
- [35] L. K. Engelbrecht, "The global financial crisis: response of social workers to the financial capability of vulnerable households in South Africa," 2011.
- [36] X. Gine, D. Karlan, and M. Ngatia, "Social networks, financial literacy and index insurance," 2013.
- [37] O. S. Faboyede, E. Ben-Caleb, B. Oyewo, and A. Faboyede, "Financial Literacy Education: Key To Poverty Alleviation And National Development In Nigeria," *European Journal Accounting Auditing and Finance Research*, vol. 3, pp. 20-29, 2015.
- [38] D. A. Adomako S, "Financial Literacy and firm Performance: the Moderating role of financial Capital availability and Resource Flexibility," *International Journal of Management and Organizational studies*, vol. 3, 2014.
- [39] A. A. Eniola, E. Harry, and K. S. L. Ley, "Financial literacy and SME firm performance," *International Journal of Research Studies in Management*, vol. 5, pp. 31-43, 2016.
- [40] P. N. Kalekye and F. Memba, "The Role of Financial Literacy on the Profitability of Women Owned Enterprises in Kitui Town, Kitui County, Kenya," 2013.
- [41] P. Chepnetich, "Effect of Financial Literacy and Performance SMEs. Evidence from Kenya," 2016.
- [42] R. Rugimbana and E. Kojo Oseiuh, "Financial literacy and youth entrepreneurship in South Africa," *African journal of Economic and management studies*, vol. 1, pp. 164-182, 2010.
- [43] P. Honohan and M. King, "Cause and effect of financial access: cross-country evidence from the Finscope surveys," *Banking the world: empirical foundations of financial inclusion*, pp. 45-84, 2012.
- [44] OECD/INFE, "Women and Financial Literacy," FLE Russia Trust Fund2013.
- [45] S. Mishi and P. Chipote, "Impact of financial literacy in optimising financial inclusion in rural South Africa: Case study of the Eastern Cape Province," ed: Accessed, 2014.
- [46] S. Korutaro Nkundabanya, D. Kasozi, I. Nalukenge, and V. Tauringana, "Lending terms, financial literacy and formal credit accessibility," *International Journal of Social Economics*, vol. 41, pp. 342-361, 2014.
- [47] M. K. Refera, N. K. Dhaliwal, and J. Kaur, "Financial literacy for developing countries in Africa: A review of concept, significance and research opportunities," *Journal of African Studies and Development*, vol. 8, p. 1, 2016.
- [48] F. Olawale, "The financial literacy of Micro Entrepreneurs in South Africa," *Journal of social sciences*, vol. 42, p. 7, 2014.