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# Entrepreneur Financial Literacy, Financial Access, Transaction Costs and Performance of Microenterprises in Nairobi City County in Kenya

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**GJMBR-A Classification:** JEL Code: L26



ENTREPRENEUR FINANCIAL LITERACY FINANCIAL ACCESS TRANSACTION COSTS AND PERFORMANCE OF MICROENTERPRISES IN NAIROBI CITY COUNTY IN KENYA

*Strictly as per the compliance and regulations of:*



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## I. INTRODUCTION

Entrepreneurs operate in dynamic environments and as financial markets become more competitive and financial portfolios more complex, entrepreneurs become vulnerable to information asymmetries if the complexity in financial markets is not matched by a commensurate growth in entrepreneur financial literacy (Barte, 2012). At macroeconomic level, small businesses are the backbone of many economies and when the financial literacy skills among entrepreneurs are not sufficient to operate successful enterprises, the whole economy is at risk (Dahmen et al., 2014).

Studies suggest that there is a direct relationship between entrepreneur financial literacy and the performance of microenterprises (Barte, 2012). Other studies suggest indirect relationships where financial literacy influences the performance of microenterprises through its interaction with other factors such as financial access and transaction costs. Studies also indicate that entrepreneur financial literacy enhances access and utilization of financial services which enables enterprises to innovate and exploit

growth opportunities (Nunoo et al., 2010). Entrepreneur financial literacy influences transaction costs incurred by microenterprises in the process of obtaining and utilizing financial services (Hieltjes, 2013). Scholars and Policy makers have recognized that financial literacy is an entrepreneurial competency which enables enterprises to survive in an increasingly turbulent environment (Ahmad 2010).

This study is anchored on resource based theory. It views financial resources as key resources for the acquisition and configuration of other resources and maudgen need to be financially literate in order to manage them (Briuckmann et al., 2011). The contingency theory provides a relevant framework for examining the relationship between entrepreneurial financial literacy and micro enterprises performance (Szilagyi et al 1980). Transaction cost theory, was used to determine the relationship between financial literacy, financial access transaction costs and performance of micro enterprises (Hieltjes 2013). This study sought to demonstrate that performance of microenterprises is contingent on the interaction between financial literacy, financial access sand transaction.

Microenterprises are key drivers of economic growth, providing employment, providing market linkages across various sectors, promoting innovation, reducing poverty and contributing to GDP in both developed and developing countries (Cole et al, 2010). In Kenya, microenterprises created over 50% of all jobs and contributed over 40% of the country's GDP (KNBS, 2013). However, majority of entrepreneurs in Kenya suffer from weak levels of financial literacy, limited access to financial services as well as exposing them to high transaction costs of financial services (Njoroge, 2013). This leads to the low prevalence of new venture creation, low graduation rates and ultimately the high failure rate among microenterprises thus contributing to the missing middle phenomenon that is so prevalent in the economy (Mengich, 2013). A study on how entrepreneur financial literacy influences the performance of microenterprises will assist in promoting the growth and competitiveness of the sector.

### a) Entrepreneur Financial Literacy

Entrepreneur financial literacy refers to the financial knowledge and abilities that enable

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entrepreneurs to adopt effective financial management strategies for their enterprises. Literacy is defined as the ability to read and write as well as knowledge and competence in a specified area (OECD, 2000). Financial literacy is defined as 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 (Remund, 2010).

In the context of microenterprises, financially literate entrepreneurs manage resources more widely, use financial information more astutely thereby improving the profitability and of their enterprises (Berman et al., 2008). Financial literacy also enhances participation in financial markets which facilitates asset accumulation and consumption smoothing and access to wider sources of funding (Van Rooj et al, 2011). Financial literacy is linked to debt and investment literacy (Lusardi, 2008). Financial literacy also influences the access and utilization of financial services (Nunoo et al., 2010).

#### b) *Financial Access*

Access to finance is defined as the ability of households and firms to access and utilize a range of financial services if they choose to do so (Rojas-Suarez et al., 2010). Financial access is an important determinant of the performance of microenterprises as it provides them working capital, fosters greater firm innovation and dynamism, enhances entrepreneurship, promotes more efficient asset allocation and enhances the firm's ability to exploit growth opportunities (Beck, et al, 2006). Providing broad access to finance for deserving firms has significant impact on economic growth because when enterprises have limited financial access economic and social opportunities are restricted, enterprise creation and growth are restrained, households and enterprises are more vulnerable to threats and payments are more costly and less safe (Rojas-Suarez et al., 2010).

Financial access enhances financial inclusion thereby contributing to financial sector deepening and overall economic growth. Financial inclusion aims at drawing the unbanked population into the formal financial system to enable them access a wide range of financial services including savings, payments, money transfers and credit and insurance (Hanning et al, 2010). Financial inclusion of small firms reduces liquidity constraints, encourages investment which in turn influences industrial structure, firm size, and competition in an economy (Beck, et al., 2006). Financial inclusion also leads to financial deepening, which drives investment growth poverty reduction and total factor productivity in the economy (Atkinson et al, 2012).

#### c) *Transaction Costs*

Transaction costs are defined as the costs of running an economic system and include the direct and indirect costs of negotiating, monitoring and enforcing explicit and implicit contracts between the firm and customers (Kamyabi et al, 2011). Transaction costs can be divided into pecuniary costs which relate to travel costs, opportunity costs, administrative hassle and non-pecuniary transaction costs which include various requirements for accessing financial services such as minimum deposit requirements, withdrawal fees, opening fees and other requirements (Karlan et al, 2013). In financial markets, transaction costs relating to deposit and lending services make up the largest part of the costs of intermediation and it is the efficiency with which financial institutions can reduce these market frictions that determine the depth, breadth and efficiency of the financial system (Beck, 2006). Financial markets in developing countries markets are highly imperfect characterized by high transaction costs, information asymmetries, moral hazard and adverse selection (Hietjes et al 2013).

Costs associated with transactions in the financial markets lead to market imperfections or the absence of trade and for small firms, transaction costs may exceed the benefits of the (Masuko et al., 2003). Transaction costs constrain both the supply and demand of financial services among microenterprises. On the demand side, high transaction costs discourage entrepreneurs from seeking financial services, even where then they are available (Swamy, et al., 2011). High borrower transaction costs significantly increase the total cost of borrowing, particularly for small loans which affects the performance of microenterprises (Ladman, 1988).

#### d) *Firm Performance*

Performance refers to the ability to attain set objectives. Firm performance is therefore defined as a firm's ability to achieve planned results as measured against its intended outputs and encompasses outcomes related to financial performance, market performance and shareholder return (Richard et al., 2009). Measuring firm performance has attracted considerable debate but to date, there is no consensus on measures of performance. However, common measures of firm performance include both financial and non- financial indicators. Financial indicators include profitability indicators such as return on asset (ROA), return on investment (ROI), return on equity (ROE), return on sales (ROS), market share and operational efficiency (Gentry et al, 2010). Non- financial measures include job satisfaction, organizational commitment, employee turnover and entrepreneur satisfaction (Mayer et al., 1992).

In the context of microenterprises, it is recognized that small firms often consider financial

performance measures to be confidential and guard them from public scrutiny (Sapienza et al., 1988; Gruber et al., 2010). In addition, due to legal reasons small firms tend to manipulate some data and control such manipulation through subjectively adjusting measures (Sapienza et al., 1988). Consequently, researchers can evaluate business performance of small firms using general subjective measures that can reflect more-specific objective measures (Covin, et al 1989 Wallet et al., 2004). The use of such measures to evaluate performance is acceptable, as it shows high positive correlations with objective measures (Song et al., 2005). This study proposes to sue subjective measures of both financial indicators and non-financial indicators of performance.

#### e) *The Microenterprise Sector in Kenya*

The Government of Kenya, through the Microenterprise Act (GoK, 2012), Defines a microenterprise as a firm, trade, service, industry or a business activity which employs less than ten people and whose annual turnover does not exceed five hundred thousand shillings (GoK, 2012). The sector plays an important role in the Kenyan economy contributing about 82% of total employment and over 40% of the country's GDP (KNBS, 2013).

Nairobi County has the largest concentration of microenterprises in Kenya, providing about 25% of total employment in the sector (KNBS, 2013). Despite its important role, the microenterprise/informal sector in Nairobi treated as a marginal economic activity and it is neither adequately regulated nor supported by the city authorities who consider informal traders as threats to city development (UN Habitat, 2006). In addition to external challenges, microenterprises in Nairobi County are constrained by weak financial literacy, financial access and high transaction costs (Mengich, 2013). A review of current studies on the relationship between financial literacy, financial access and transaction costs and the performance of microenterprises has identified conceptual, contextual and empirical gaps which this study aims to address.

## II. LITERATURE REVIEW

Existing studies have established that financial literacy, financial access and transaction costs each individually and separately influence the performance of microenterprises. The results of these studies are still fragmented and inconclusiveness. A review of the studies identified conceptual, empirical and contextual gaps. At conceptual level, most of the studies conceptualized one- dimensional linear relationships between each of the variables and performance of microenterprises. The studies did not integrate the variables into a single model in order to examine how interactions among them influence performance of microenterprises.

Resource based theory as the anchor theory for the study was informed by theoretical arguments that for microenterprises, the entrepreneur is the resource carrier whose personal resources, which exist as idiosyncratic and personalized collections of assets, impact upon the firms' competitive advantage and performance (Bamford et al, 1999, Chrisman et al., 1998, Greene et al, 1998). Other entrepreneurship theories supporting this study include economic theories of entrepreneurship, psychological theories of entrepreneurship, contingency theory of entrepreneurship and transaction cost theory of entrepreneurship. Theoretical perspectives were also drawn from the financial literacy theory.

#### a) *Overview of Entrepreneurship Theory*

Entrepreneurship theory is a heterogeneous body of knowledge comprising of perspectives from diverse disciplines including economics, accounting psychology, sociology, law, strategic management and organizational behavior (Rosa, 2013). While scholars from the different disciplines have adopted different theoretical assumptions, most of these concern three central features of entrepreneurial phenomena namely the nature of entrepreneurial opportunities, the nature of entrepreneurs as individuals and the nature of the decision making context within which entrepreneurs operate (Alvarez, 2010).

Economic theories of entrepreneurship are rooted in the classical and neoclassical theories of economics and the Austrian market process (AMP). These theories, first advanced by Cantillon (1755, 1931) recognize the critical role of the entrepreneur as an explanatory force of several economic phenomena. The AMP, a model advanced by Schumpeter (1934) concentrated on human action in the context of an economy of knowledge. Schumpeter (1934) described entrepreneurship as a driver of market- based systems and was based on three main conceptualizations namely arbitrating market in which opportunities emerge for given market actors, alertness to profit-making opportunities in which entrepreneurs discover and entrepreneurial advantage and distinction between ownership and entrepreneurship (Kirzner, 1973).

Psychological theories emphasize personal characteristics that define entrepreneurship. The most prominent among the psychological theories are trait theory of entrepreneurship, internal locus of control theory and need for achievement theory. Trait theories of entrepreneurship advanced the notion that certain identifiable psychological traits could predict the entrepreneurship potential of individuals (Pittaway et al., 2011). The locus of control theory advanced by Rotter, (1966) relates to how strongly individuals perceive their own efforts as being instrumental in reaching their goals.

The theory proposed that those who assume that the consequences of their actions are dependent



upon their own behavior are said to have an internal locus of control while those who attribute the consequences of their actions to other causes are said to exhibit an external locus of control. The need for achievement theory advanced by Mclelland (1965) posited that the need to achieve success and the degree of perceived autonomy in aspects such as problem solving, goal setting and goal attainment drive entrepreneurship growth. The sociological theory of entrepreneurship holds that social cultures are the driving force of entrepreneurship.

Thus the entrepreneur becomes a role performer in conformity with the role expectations of the society and such role expectations based on religious beliefs, taboos and customs exert a substantial influence in creating entrepreneurs as well as entrepreneurship (Katz et al, 1991). Management theories have attempted to bridge the gap between management and entrepreneurship and perceive entrepreneurs as managers of small businesses often performing all management functions (Foss et al, 2004). Stevenson (1983) categorized the management functions of entrepreneurs along six namely strategic orientation, commitment to opportunity, commitment of resources control of resources, management structure and reward management.

#### b) *Resource-based Theory*

The essence of the resource- based theory is that given resource heterogeneity and resource immobility and satisfaction of the requirement of value, rareness, imperfect imitability and non- substitutability a firm's resources can be a source of sustained competitive advantage (Barney et al, 1991). Three basic types of resources may provide competitive advantage namely physical resources, organizational capital resources and human resources (Barney et al, 1991).

RBT posits that resources are embedded in organizations and the standard carriers of resources are established firms and corporations. However, in the entrepreneurial context, the entrepreneur is the resource carrier whose personal resources, which exist as idiosyncratic and personalized collections of assets, impact upon the firm's competitive advantage and performance (Bamford et al, 1999, Chrisman et al, 1998, Greene et al, 1998). The human-based entrepreneurial resources neutralize the liability of newness of entrepreneurial firms and enables entrepreneurs to marshal tangible resources and formulate and implement the right strategy in the right industry determining venture survival and growth (Stinchcombe, 1965).

Thus entrepreneurship is an intricate part of the resource- based framework because discerning appropriate inputs is ultimately a matter of entrepreneurial vision, intuition and the abilities of the entrepreneur are the principal resources of the firm

(Connor, 1991; Rumelt, 1987). Empirical studies have examined determinants of microenterprise performance using RBT. Masakure et al, (1994) used the RBV theory to assess whether firm- specific resources influence microenterprise performance, as suggested by the resource-based theory and established that factors embodied in firm-specific resources jointly impact enterprise performance.

Okeyo (2013) used RBT to examine the relationship between entrepreneurial orientation, business environment, business development services and performance of small and medium manufacturing enterprises in Kenya. Thapa (2014) used the RBT to examine the influence of managerial foresight on microenterprise performance in Nepal and established that managerial foresight had a crucial role on enhancing microenterprise performance and that managerial foresight mediated the effects of several entrepreneur- enterprise and environment- related factors on microenterprise performance.

Kinuthia (2011) used RBT to investigate the marketing strategies and factors influencing their implementation by garment- making micro-enterprises in Nakuru town and concluded that both internal and external resource factors influenced the implementation of marketing strategies in microenterprises. Mira et al., (2013) used the RBT theory to examine the challenges facing accessibility of credit facilities among women owned enterprises in Nairobi Central Business District in Kenya.

#### c) *Contingency Theory*

The contingency theory attempts to relate organizational performance to many management variables and emphasize the importance of situational influences on the management of organizations. The business environment is the source of constraints, contingencies, problems and opportunities that effect the terms on which an organization transacts business (Khandwalla, 1977). Contingency theory holds that the relationship between two variables depends on the interaction with a third variable and therefore performance can be improved when key variables are correctly aligned (Naman et al, 1993). Entrepreneurship scholars have emphasized the importance of viewing the entrepreneur- behavior- performance relationship in a contingency framework (Covin et al, 1991; Lumpkin et al, 2001).

Therefore the performance of an enterprise should not be measured in terms of one organizational attribute but through the interplay of attributes within a given environment (Khandwalla, 1972). This study proposes to use contingency theory to demonstrate that the performance of microenterprises is contingent on the interactions between entrepreneur financial literacy, financial access and transaction costs.

#### d) *Entrepreneurial Competency Theory*

Entrepreneurial competency theory is an extension of the resource based theory of the firm and has been used to examine determinants of microenterprise performance. Competencies have been identified as a specific group of competencies relevant to the exercise of successful entrepreneurship and the development of small and new businesses (Mitchelmore et al, 2010).

Mitchelmore et al (2010) reviewed previous studies on competencies and identified a cluster of competencies associated with firm performance namely business and management competencies, human relations competencies, conceptual and relationship competencies. Entrepreneurship scholars suggest that entrepreneurial competencies are vital to business growth and that different competencies are needed at different stages of the venture development.

Man et al (2002) suggested that entrepreneurial competencies are more important during the start-up phase, while managerial competencies are more significant at the growth stage. Enterprises with managers who have high levels of entrepreneurial competencies tend to scan and manage the environment in which they operate in order to find new opportunities and consolidate their competitive positions (Covin et al, 1999). Zeelie et al (2004) identified three clusters of competencies related to entrepreneurial skills namely proactiveness, achievement orientation and commitment to others.

Achievement orientation includes identifying and acting on opportunities, efficiency orientation, concern for high quality of work and systematic planning. Commitment to others was related to commitment to work contract and recognition of the importance of business relationships. Chandler et al, (1994) identified three clusters of competencies associated with successful entrepreneurs namely entrepreneurial, managerial and technical competencies.

Entrepreneurial competence refers to the ability to recognize business opportunities while technical competence demands the founder to be skilled in the use of the tools or procedures required in their specialized field (Chandler et al, 1992). Spencer et al (1993) developed a generic competency model for entrepreneurs comprising of eight competencies namely opportunity competency, self-confidence, persistence, information gathering, systematic planning, concern for high quality of work, commitment to work contract and use of influence strategies.

Empirical studies have established that an entrepreneurs skills/competencies contribute to venture performance and growth. In a study on the performance of SMEs in Kenya, Ngugi et al (2012) established that the entrepreneur's technical competencies had a higher influence on the growth of small and medium enterprises than other variables. Agbim (2013) studied

SMEs in Nigeria and established that managerial competencies had a significant contribution to entrepreneur success.

Ahmad et al (2010) studied the role of competencies on business success in SMEs in Malaysia and established five clusters of competencies that contributed to business success namely strategic, conceptual, leadership, relationship and technical competencies. In a study on SMEs in Hong Kong, Man et al (2008) established that there was strong correlation between entrepreneurial competencies and performance of the SMEs. The knowledge based theory, which is also derived from the resource based theory of the firm, considers knowledge as the most strategically significant resource of a firm which is a major determinant of sustained competitive advantage and superior firm performance (Randall, 2013). A firms capability to create and utilize knowledge is the one of the key sources of a firm's sustainable competitive advantage (SCA) (Zheng, et al., 2010).

#### e) *Transaction Cost Theory*

Transaction cost theory explains that organizations incur costs as they acquire, configure and utilize resources. Transaction costs reflect the costs of economic or organization both outside the firm and inside the firm and are one means by which one can measure the efficiency of different institutional designs in achieving economic outcomes in particular environments (Polski et al, 2001). Transaction costs thus represent the difference between what a consumer pays and what a seller gets for the products (Ciborra, 1993).

In financial markets, transaction costs relate to the cost of accessing financial services. Requirements for accessing financial services impose reflect high transaction costs and microenterprises often face higher transaction costs of borrowing than large firms which affects their performance (Beck et al, 2009). Scholars argue that there are interdependencies between resources and transaction characteristics where resources are considered as antecedents of transaction costs (Zott et al, 2005). Further, firm –specific resources are characterized by high asset specificity and hence are associated with high transaction costs (Langlois et al, 2009; Silverman, 2009). It has also been hypothesized that resources that are difficult to isolate and emulate increase the costs of opportunities when they are exchanged in a transaction because of the high ambiguity involved in the exchange (Zott et al, 2005). In this study, transaction cost theory will be used to examine the influence of transaction costs on the relationship between entrepreneur financial literacy and performance of microenterprises.

#### f) *Financial Literacy Theory*

Financial literacy theory is an emerging theory that draws theoretical perspectives from other theories including economics, psychology, sociology and

management to explain the financial behavior of individuals. Financial literacy as a construct was first championed by the Jumpstart coalition for personal financial literacy in its inaugural study of financial literacy among high school students (Hastings et al., 2013). As operationalized in academic literature, financial literacy is a multi-dimensional construct comprising of knowledge of financial products, knowledge of financial concepts, having the mathematical skills or numeracy necessary for effective financial decision making and financial behavior such as financial planning (Wise, 2013).

Early literature on financial literacy began by documenting important links between financial literacy and several economic behaviors such as money management, debt and saving behaviors, retirement planning, asset ownership and participation in financial markets (Xiao, 2008a, van Rooj et al, 2011). Economic psychologists posited that factors associated with retirement saving and asset ownership behaviors are both economic and psychological (De Vaney et al, 2001; De Vaney, et al., 2007). Several behavior theories have also been used in the study of financial literacy and financial behaviors.

Hilgert et al, (2003) formed a financial practices index based upon self-benefiting behavior in cash-flow management, credit management, saving and investment practices and established that there was a positive correlation between financial literacy scores and financial practices index scores thus confirming that financial knowledge is related to financial practices. The theory of planned behavior, often used to understand and predict human behavior, has been applied to online shopping behavior, investment behavior and debt reducing behaviors (Xiao, 2008b).

The trans-theoretical model of change (TTM), which is used to understand how consumers eliminate undesirable behaviors and develop positive behaviors, has been applied to saving and debt reducing behaviors (Xiao, et al., 2004). The self-determination theory which posits that goals contribute to human well-being based on the extent of their contributions to the core human psychological needs of competence and autonomy has also been applied to study money motivation and attitudes (Stone et al, 2008).

Extant literature has established a correlation between financial literacy and several different financial behaviors and outcomes such as paying bills on time, tracking expenses, budgeting, paying credit card bills in full each month, saving out of each paycheck, maintaining an emergency fund and diversifying investments (Hilgert et al., 2003). Subsequent research has found that financial literacy is positively correlated with planning for retirement, savings and wealth accumulation, market participation and better financial diversification (Van Rooij, et al., 2011, Lusardi et al, 2006; 2007).

#### g) *Entrepreneur Financial Literacy and Microenterprise Performance*

Financial literacy enables firms to avoid business failures caused by poor financial management, particularly credit management and cash flow management (Berryman, 1983). Financial literacy also enables entrepreneurs to interpret financial information in order to make effective financial decisions that contribute to the financial goals of the firm (Dolezalek, 2006). Njoroge (2013) studied the relationship between financial literacy and entrepreneur success among SMEs in Nairobi County, Kenya and established that entrepreneurs in Nairobi County had some level of financial literacy and that in some cases those in formal SMEs were highly financially literate. Wise (2011) studied the impact of financial literacy on new venture survival in Canada and established that increases in financial literacy led to more frequent production of financial statements.

In a study on the effect of entrepreneur skills on the performance of SMEs in Zimbabwe, Zindiye (2008) established that financial skills, particularly book keeping skills, financial statements preparation, debit and credit control, budgeting skills and tax calculation affected the performance of the enterprises. Siekei et al (2013) studied the effect of financial literacy education on performance of small firms in Njoro, Kenya and established that training in financial analysis, budgeting and credit management improved the performance of microenterprises in the fishing subsector in the Philippines and established that the fish vendors has low financial skills which affected the incomes and growth of the microenterprises.

#### h) *Entrepreneur Financial Literacy, Financial Access and Performance of Microenterprises*

In many developing countries, majority of informal businesses have limited access to financial services and while many factors contribute to this, lack of financial literacy has been identified as one of the factors that limits financial access (OECD, 2012). Without broad access to financial services, such credit constraints make it difficult for poor households and small-scale entrepreneurs to finance high-return investment projects (Beck et al, 2007). Financial capital provides resource slack, allowing experimentation with new strategies and innovative projects that might not be possible in a more resource-constrained environment which in turn increases the willingness to innovate and pursue new opportunities (Wilkund et al, 2007).

Studies have established that financial literacy influences financial access which in turn influences the performance of microenterprises. In a study on the effect of finance on the performance of microenterprises in Sri Lanka, del Mel (2008) established that financial literacy improved the usage of financial products by the enterprises, which in turn improved their performance.

Nunoo et al (2012) studied utilization of financial services by SMEs in Ghana and confirmed that financially literate entrepreneurs were more likely to access and utilize financial services which in turn improved the performance of their enterprises. Using the national financial access (Fin Access) survey data in Kenya, Mwangi et al (2012) also established that financial literacy influences financial access and that this had a negative influence on the performance of the firms.

i) *Entrepreneur Financial Literacy, Transaction Costs and Performance of Microenterprises*

Studies have examined the relationship between transaction costs, financial literacy and performance of microenterprises. Entrepreneurs with lower levels incur higher transaction costs due to information asymmetries in the financial markets characterized by opaque and complicated fees structures (Lusardi et al., 2008). The high transaction costs then reduce profitability of enterprises. In the stock market, many investors even those who are well educated, fail to choose fee minimizing portfolios even in a context in which fees are the only significant distinguishing characteristics of the investments and the dispersion in fees is large (Choi et al, 2009). Other financial mistakes due to financial illiteracy which incur high transaction costs include purchasing whole life insurance rather than a cheaper combination of term life insurance in conjunction with a savings account (Anagol et al, 2012).

Hieltjes et al (2013) examined the influence of financial literacy, information and transactions costs as factors driving demand for and use of savings accounts among low income individuals and established that compared to financial literacy, transaction costs influenced the uptake and utilization of bank accounts. Beck et al, (2008) established that financial market imperfections such as informational asymmetries due to lack of financial literacy, transactions costs and contract enforcement costs are particularly bidding on poor or small entrepreneurs who lack collateral, credit histories and connections.

Sharma et al (2011) studied the financing constraints for microenterprises in Fiji and established that most microenterprises were constrained by high fees, high collateral requirements and high disclosure requirements. Swamy et al (2011) also established that in India, transaction costs were equivalent to 9% of the loan amount. Hosseini et al (2012) studied the costs of obtaining credit in rural Iran and established that the transaction costs of receiving a loan was equivalent to nine percent of the total loan size. The study also revealed that the contractual forms, loan size, long distances and borrower peculiarities were important determinants of transaction costs.

j) *Entrepreneur Financial Literacy, Financial access, Transaction Costs and Performance of Microenterprises*

The relationship between financial literacy, financial access and transaction costs has been captured in the concept of financial inclusion. Financial inclusion is defined as the process of promoting affordable, timely and adequate access to a wide range of regulated financial products and services and broadening their use by all segments of society through the implementation of tailored existing and innovative approaches (Atkinson et al, 2012). This definition combines the concepts of financial literacy, financial access and transaction costs. Financial literacy is an enabling factor that unlocks other key dimensions of financial inclusion which enables entrepreneurs to access small amounts of capital to invest in business ideas, to buy stock or to continue to build their business (Gardeva et al., 2011).

Studies have established a correlation between financial literacy and financial inclusion. An international survey of 301 financial service providers and investors confirmed that low levels of financial literacy are major barriers to financial inclusion because they lead to high transaction costs and restrict access to financial services (Gardeva et al, 2011). Evidence on the relationship of the study variables present mixed findings and none of the studies explored the multi-dimensional relationships among the variables.



Table 1: Summary of Empirical Studies and Knowledge Gaps

Study	Focus	Methodology	Findings	Research Gaps
Nyaboga et al (2014)	An assessment of the role of financial literacy on loan repayment by small and microenterprises in Ngara, Nairobi County	Descriptive survey research design.	The study established that the performance of SMEs was affected by skills related to book keeping, credit management and budgeting.	The study assumed a direct linear relationship between entrepreneur financial literacy and loan repayment. The study did not examine the effect on the performance of SME
Okeyo, Gathungu & Kobonyo (2014)	Impact of business development services on performance of small and medium enterprises in Kenya manufacturing sector	Descriptive cross sectional survey	Significant relationship between BDS and SME performance	Context way manufacturing limited generalization
Sieki et al (2013)	An assessment of the role of financial literacy on the performance of small and microenterprises in Njoro, Kenya	Descriptive survey design.	Training in financial analysis, budgeting and credit management improved the performance of microenterprises.	The study was uni-dimensional and assumed a direct relationship between financial literacy and performance of SMEs. The study did not focus on microenterprises.
Hielties et al (2013)	A study on the impact of financial literacy and transaction costs on bank account uptake and use	Randomized controlled experimental study design.	Financial literacy and transaction costs influence demand for and use of financial services and subsequent performance of microenterprises.	The study used a uni-dimensional model and focused more on savings uptake.
Wachira et al (2012)	A study on impact of financial literacy on access to financial services.	Secondary national financial access survey data.	Financial literacy influenced access to financial services. Low levels of financial literacy led to financial exclusion.	The study used a uni-dimensional model and assumed a linear relationship between financial literacy and financial access. The study did not focus on micro-enterprises
Mengich et al (2012)	Study on the challenges of equity financing by SMEs in Kenya	Descriptive research survey design.	Equity financing was constrained by low financial literacy, information asymmetries and transaction costs.	The study did not examine the relationship between financial literacy, equity financing and performance of micro-enterprises.
Barte (2012)	Financial literacy in micro-enterprises in the case of Cebu fish vendors in philippines	Descriptive research survey design.	Entrepreneurs had low levels of financial as demonstrated lack of financial records, lack of monitoring of profit and losses and lack of cash management practices.	Study used a uni-dimensional model and assumed a direct relationship between financial literacy and performance of microenterprises. It did not explore the effect of financial literacy on microenterpsies and transaction costs.
Hoseini et al (2012)	Transaction costs of obtaining credit in rural Iran	Research survey design.	The study established that the transaction costs of receiving a loan are on the average equivalent to nine percent of the total loan size. The study also revealed that the contractual form, loan size, distances and borrower peculiarities were important determinants of transactions costs	Study did not explore the relationship between transaction costs and the performance of micro-enterprise

k) *Conceptual Model*

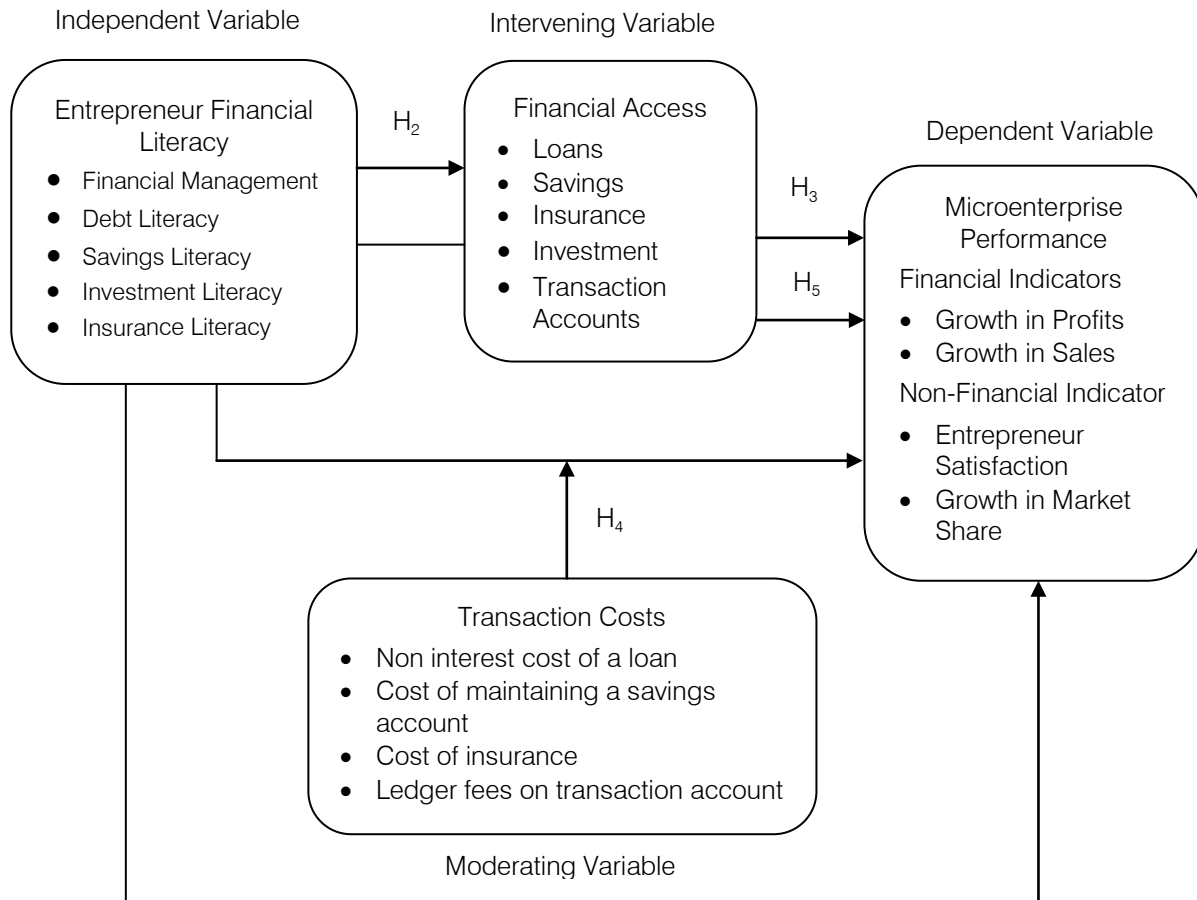


Figure 1

### III. CONCLUSION OF THE STUDY

In conclusion theoretical review and empirical studies that have examined relationship between entrepreneur financial literacy, financial access, transaction costs and performance of micro-enterprises. These studies have produced mixed results. Some studies established that there was a relationship among the variables while other studies failed to establish any relationship among them. Studies on the relationship between entrepreneur financial literacy and performance of microenterprises have established that entrepreneur financial literacy has a significant influence on microenterprise performance. Studies established that entrepreneur financial literacy enables firms to avoid business failures caused by poor financial management, particularly credit management and cash flow management (Berryman, 1983). Studies on the relationship between entrepreneur financial literacy and financial access established that entrepreneur financial literacy has a significant influence on financial access. Studies have also established that financial access has an intervening influence on the relationship between entrepreneur financial literacy and performance of microenterprises.

Entrepreneur financial literacy improves utilization of financial services as more literate entrepreneurs are more likely to access and utilize financial services which in turn improves the performance of their enterprises (Nunoo et al, 2012). Studies have also established that transaction costs moderate the relationship between entrepreneur financial literacy and performance of microenterprises.

Entrepreneurs with lower levels incur higher transaction costs due to information asymmetries in the financial markets characterized by opaque and complicated fees structures (Lusardi et al, 2008). The high transaction costs then reduce profitability of enterprises. Studies have also established that entrepreneur financial literacy, financial access and transaction costs influence on the performance of microenterprises. The joint influence of these variables on microenterprise finance is captured in the context of financial inclusion. Higher levels of financial inclusion influences by entrepreneur financial literacy, higher levels of financial access and lower transaction costs. The study recommends that future empirical research using longitudinal designs should consider testing financial literacy as a configuration concept in order to determine various demonitring of entrepreneur financial

literacy and provide assessment of causal linkages among various variables.

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