

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

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6 *Received: 14 December 2017 Accepted: 3 January 2018 Published: 15 January 2018*

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8 **Abstract**

9 The purpose of this study was to establish the relationship between entrepreneur financial
10 literacy, financial access, transaction costs and performance of micro- enterprises in Nairobi
11 City County in Kenya. The study was anchored on resource based theory which posits that
12 given resource heterogeneity immobility and satisfaction of the requirement of value rareness,
13 imperfect imitability and non substitutability, a firm's resource can be a source of sustained
14 competitive advantage. The study also used contingency theory which supports a framework
15 for examining influence of financial literacy on financial access and transaction costs. The
16 study established that financial literacy had influence on financial access transaction costs and
17 performance of micro-enterprises. The paper advance the argument and theoretical perspective
18 that entrepreneur financial literacy is a major determinant of micro enterprise performance.

19

20 **Index terms**— entrepreneur financial literacy, financial access, transaction costs theory, resource based theory,
21 contingency theory, performance.

22 **1 I. Introduction**

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

29 Studies suggest that there is a direct relationship between entrepreneur financial literacy and the performance
30 of microenterprises (Barte, 2012). Other studies suggest indirect relationships where financial literacy influences
31 the performance of microenterprises through its interaction with other factors such as financial access and
32 transaction costs. Studies also indicate that entrepreneur financial literacy enhances access and utilization of
33 financial services which enables enterprises to innovate and exploit growth opportunities ??Nunoo et al., 2010).
34 Entrepreneur financial literacy influences transaction costs incurred by microenterprises in the process of obtaining
35 and utilizing financial services (Hieltjes, 2013). Scholars and Policy makers have recognized that financial literacy
36 is an entrepreneurial competency which enables enterprises to survive in an increasingly turbulent environment
37 (Ahmad 2010).

38 This study is anchored on resource based theory. It views financial resources as key resources for the acquisition
39 and configuration of other resources and maudgen need to be financially literate in order to manage them
40 ??Briuckmann et al., 2011). The contingency theory provides a relevant framework for examining the relationship
41 between entrepreneurial financial literacy and micro enterprises performance ??Szilagyi et al 1980). Transaction
42 cost theory, was used to determine the relationship between financial literacy, financial access transaction costs

4 D) FIRM PERFORMANCE

43 and performance of micro enterprises (Hieltjes 2013). This study sought to demonstrate that performance of
44 microenterprises is contingent on the interaction between financial literacy, financial access and transaction.

45 Microenterprises are key drivers of economic growth, providing employment, providing market linkages across
46 various sectors, promoting innovation, reducing poverty and contributing to GDP in both developed and
47 developing countries ??Cole et al, 2010). In Kenya, microenterprises created over 50% of all jobs and contributed
48 over 40% of the country's GDP (KNBS, 2013). However, majority of entrepreneurs in Kenya suffer from weak
49 levels of financial literacy, limited access to financial services as well as exposing them to high transaction costs of
50 financial services (Njoroge, 2013). This leads to the low prevalence of new venture creation, low graduation rates
51 and ultimately the high failure rate among microenterprises thus contributing to the missing middle phenomenon
52 that is so prevalent in the economy (Mengich, 2013). A study on how entrepreneur financial literacy influences
53 the performance of microenterprises will assist in promoting the growth and competitiveness of the sector.
54 entrepreneurs to adopt effective financial management strategies for their enterprises. Literacy is defined as
55 the ability to read and write as well as knowledge and competence in a specified area (OECD. 2000). Financial
56 literacy is defined as the degree to which one understands key financial concepts and possesses the ability and
57 confidence to manage personal finances through appropriate, short-term decision-making and sound, long-range
58 financial planning, while mindful of life events and changing economic conditions (Remund, 2010).

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

65 2 b) Financial Access

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

74 Financial access enhances financial inclusion thereby contributing to financial sector deepening and overall
75 economic growth. Financial inclusion aims at drawing the unbanked population into the formal financial system
76 to enable them access a wide range of financial services including savings, payments, money transfers and credit
77 and insurance (Hanning et al, 2010). Financial inclusion of small firms reduces liquidity constraints, encourages
78 investment which in turn influences industrial structure, firm size, and competition in an economy (Beck, et al.,
79 2006). Financial inclusion also leads to financial deepening, which drives investment growth poverty reduction
80 and total factor productivity in the economy ??Atkinson et al, 2012).

81 3 c) Transaction Costs

82 Transaction costs are defined as the costs of running an economic system and include the direct and indirect
83 costs of negotiating, monitoring and enforcing explicit and implicit contracts between the firm and customers
84 ??Kamyabi et al, 2011). Transaction costs can be divided into pecuniary costs which relate to travel costs,
85 opportunity costs, administrative hassle and nonpecuniary transaction costs which include various requirements
86 for accessing financial services such as minimum deposit requirements, withdrawal fees, opening fees and other
87 requirements (Karlan et al, 2013). In financial markets, transaction costs relating to deposit and lending services
88 make up the largest part of the costs of intermediation and it is the efficiency with which financial institutions
89 can reduce these market frictions that determine the depth, breadth and efficiency of the financial system (Beck,
90 2006). Financial markets in developing countries markets are highly imperfect characterized by high transaction
91 costs, information asymmetries, moral hazard and adverse selection (Hieltjes et al 2013).

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

98 4 d) Firm Performance

99 Performance refers to the ability to attain set objectives. Firm performance is therefore defined as a firm's
100 ability to achieve planned results as measured against its intended outputs and encompasses outcomes related
101 to financial performance, market performance and shareholder return ??Richard et al., 2009). Measuring firm

102 performance has attracted considerable debate but to date, there is no consensus on measures of performance.
103 However, common measures of firm performance include both financial and non-financial indicators. Financial
104 indicators include profitability indicators such as return on asset (ROA), return on investment (ROI), return on
105 equity (ROE), return on sales (ROS), market share and operational efficiency (Gentry et al, 2010). Non-financial
106 measures include job satisfaction, organizational commitment, employee turnover and entrepreneur satisfaction
107 ??Mayer et al., 1992).

108 In the context of microenterprises, it is recognized that small firms often consider financial performance
109 measures to be confidential and guard them from public scrutiny ??Sapienza et al., 1988; ??ruber et al., 2010).
110 In addition, due to legal reasons small firms tend to manipulate some data and control such manipulation
111 through subjectively adjusting measures ??Sapienza et al., 1988). Consequently, researchers can evaluate business
112 performance of small firms using general subjective measures that can reflect more-specific objective measures
113 ??Covin, et al 1989 ??allet al., 2004). The use of such measures to evaluate performance is acceptable, as it shows
114 high positive correlations with objective measures ??Song et al., 2005). This study proposes to sue subjective
115 measures of both financial indicators and non-financial indicators of performance.

116 **5 e) The Microenterprise Sector in Kenya**

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

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

129 **6 II. Literature Review**

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

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

143 **7 a) Overview of Entrepreneurship Theory**

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

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

158 Psychological theories emphasize personal characteristics that define entrepreneurship. The most prominent
159 among the psychological theories are trait theory of entrepreneurship, internal locus of control theory and
160 need for achievement theory. Trait theories of entrepreneurship advanced the notion that certain identifiable

9 C) CONTINGENCY THEORY

161 psychological traits could predict the entrepreneurship potential of individuals (Pittaway et al., 2011). The locus
162 of control theory advanced by Rotter, (1966) relates to how strongly individuals perceive their own efforts as
163 being instrumental in reaching their goals.

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

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

177 8 b) Resource-based Theory

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

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

190 Thus entrepreneurship is an intricate part of the resource-based framework because discerning appropriate
191 inputs is ultimately a matter of entrepreneurial vision, intuition and the abilities of the entrepreneur are the
192 principal resources of the firm ??Connor, 1991; ??umelt, 1987). Empirical studies have examined determinants
193 of microenterprise performance using RBT. Masakure et al, (1994) used the RBV theory to assess whether
194 firm-specific resources influence microenterprise performance, as suggested by the resource-based theory and
195 established that factors embodied in firm-specific resources jointly impact enterprise performance.

196 Okeyo (2013) used RBT to examine the relationship between entrepreneurial orientation, business environment,
197 business development services and performance of small and medium manufacturing enterprises in Kenya. Thapa
198 (2014) used the RBT to examine the influence of managerial foresight on microenterprise performance in Nepal
199 and established that managerial foresight had a crucial role on enhancing microenterprise performance and that
200 managerial foresight mediated the effects of several entrepreneur-enterprise and environment-related factors on
201 microenterprise performance.

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

207 9 c) Contingency Theory

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

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

220 10 d) Entrepreneurial Competency Theory

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

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

230 Man et al ??2002) suggested that entrepreneurial competencies are more important during the start-up phase,
231 while managerial competencies are more significant at the growth stage. Enterprises with managers who have
232 high levels of entrepreneurial competencies tend to scan and manage the environment in which they operate
233 in order to find new opportunities and consolidate their competitive positions (Covin et al, 1999). Zeelie e al
234 (2004) identified three clusters of competencies related to entrepreneurial skills namely proactiveness, achievement
235 orientation and commitment to others.

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

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

246 Empirical studies have established that an entrepreneurs skills/competencies contribute to venture performance
247 and growth. In a study on the performance of SMEs in Kenya, Ngugi et al (2012) established that the
248 entrepreneur's technical competencies had a higher influence on the growth of small and medium enterprises
249 than other variables. Agbim (2013) studied SMEs in Nigeria and established that managerial competencies had a
250 significant contribution to entrepreneur success. Ahmad et al (2010) studied the role of competencies on business
251 success in SMEs in Malaysia and established five clusters of competencies that contributed to business success
252 namely strategic, conceptual, leadership, relationship and technical competencies. In a study on SMEs in Hong
253 Kong, Man et al ??2008) established that there was strong correlation between entrepreneurial competencies and
254 performance of the SMEs. The knowledge based theory, which is also derived from the resource based theory of
255 the firm, considers knowledge as the most strategically significant resource of a firm which is a major determinant
256 of sustained competitive advantage and superior firm performance ??Randall, 2013). A firms capability to create
257 and utilize knowledge is the one of the key sources of a firm's sustainable competitive advantage (SCA) (Zheng,
258 et al., 2010).

259 11 e) Transaction Cost Theory

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

265 In financial markets, transaction costs relate to the cost of accessing financial services. Requirements for
266 accessing financial services impose reflect high transaction costs and microenterprises often face higher transaction
267 costs of borrowing than large firms which affects their performance ??Beck et al, 2009). Scholars argue that
268 there are interdependencies between resources and transaction characteristics where resources are considered
269 as antecedents of transaction costs ??Zott et al, 2005). Further, firm -specific resources are characterized by
270 high asset specificity and hence are associated with high transaction costs (Langlois et al, 2009; Silverman,
271 2009). It has also been hypothesized that resources that are difficult to isolate and emulate increase the costs of
272 opportunities when they are exchanged in a transaction because of the high ambiguity involved in the exchange
273 ??Zott et al, 2005). In this study, transaction cost theory will be sued to examine the influence of transaction
274 costs on the relationship between entrepreneur financial literacy and performance of microenterprises.

275 12 f) Financial Literacy Theory

276 Financial literacy theory is an emerging theory that draws theoretical perspectives from other theories including
277 economics, psychology, sociology and management to explain the financial behavior of individuals. Financial
278 literacy as a construct was first championed by the Jumpstart coalition for personal financial literacy in its
279 inaugural study of financial literacy among high school students ??Hastings et al., 2013). As operationalized

14 H) ENTREPRENEUR FINANCIAL LITERACY, FINANCIAL ACCESS AND PERFORMANCE OF MICROENTERPRISES

280 in academic literature, financial literacy is a multi-dimensional construct comprising of knowledge of financial
281 products, knowledge of financial concepts, having the mathematical skills or numeracy necessary for effective
282 financial decision making and financial behavior such as financial planning (Wise, 2013).

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

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

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

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

306 13 g) Entrepreneur Financial Literacy and Microenterprise

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

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

322 14 h) Entrepreneur Financial Literacy, Financial Access and 323 Performance of Microenterprises

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

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

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

340 15 i) Entrepreneur Financial Literacy, Transaction Costs and 341 Performance of Microenterprises

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

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

357 Sharma et al (2011) studied the financing constraints for microenterprises in Fiji and established that most
358 microenterprises were constrained by high fees, high collateral requirements and high disclosure requirements.
359 Swamy et al (2011) also established that in India, transaction costs were equivalent to 9% of the loan amount.
360 Hosseini et al (2012) studied the costs of obtaining credit in rural Iran and established that the transaction
361 costs of receiving a loan was equivalent to nine percent of the total loan size. The study also revealed that the
362 contractual forms, loan size, long distances and borrower peculiarities were important determinants of transaction
363 costs. The relationship between financial literacy, financial access and transaction costs has been captured in
364 the concept of financial inclusion. Financial inclusion is defined as the process of promoting affordable, timely
365 and adequate access to a wide range of regulated financial products and services and broadening their use by all
366 segments of society through the implementation of tailored existing and innovative approaches ??Atkinson et al,
367 2012). This definition combines the concepts of financial literacy, financial access and transaction costs. Financial
368 literacy is an enabling factor that unlocks other key dimensions of financial inclusion which enables entrepreneurs
369 to access small amounts of capital to invest in business ideas, to buy stock or to continue to build their business
370 ??Gardeva et al., 2011).

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

376) Conceptual Model Figure 1

377 16 III. Conclusion of the Study

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

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

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

16 III. CONCLUSION OF THE STUDY

400 financial literacy as a configuration concept in order to determine various demonitoring of entrepreneur financial
401 Entrepreneur Financial Literacy
? Financial Management ¹

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Figure 1: Table 1 :

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