Financial Deepening And Economic Competitiveness In Kenya: The Strides To Being An Economic Power House

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ABSTRACT

Economists have long held the view that financial deepening and economic development are closely intertwined. Kenya’s development blue print, Vision 2030, is anchored on this belief and aims to create a vibrant, globally competitive financial sector, envisioning Kenya as a leading financial centre in Eastern and Southern Africa. Using descriptive survey design, this study investigated the state of financial deepening in Kenya and how this enhances the country’s economic competitiveness. Data was collected from a key informant in the four largest banks by asset base that have subsidiaries/branches in other East African countries using a structured questionnaire. It focused on Mobile banking, Agency banking and credit referencing as indicators of financial deepening and established that Kenya has made remarkable strides in financial deepening, which has enhanced the country’s competitiveness through wider access of financial services, reduced operation and transaction costs, product diversification, superior customer experience and reduced loan default rates.

Keywords

Financial Deepening, Economic Competitiveness, Kenya

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Type (Method/Approach)

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1 INTRODUCTION

Financial deepening may be defined as an increase in the size of the financial system and its role in the pervasiveness in the economy (Visco, 2007). It refers to the increased provision of financial services geared to all levels of the society. It also refers to the macro effects of financial deepening on the larger economy. The more liquid money is available in an economy the more opportunities exist for continued growth. According to Shaw (1973) in the Keynesian theory, financial deepening occurs due to an expansion in government expenditure. An increase in government expenditure increases aggregate demand and income, thereby raising demand for money. Berkaert (2005) says that it is financial liberalisation which leads to financial deepening and higher economic growth. Financial liberalisation refers to the deregulation of domestic financial markets and the liberalisation of the capital account. He regards financial markets as the agents of financial deepening by assisting in mediating the flows of financial funds. Financial intermediaries such as banks, performs the essential role of channelling funds to firms and individuals with potentially productive investment opportunities. Moreover, they also permit households to borrow against future income and allow countries to access foreign funds and, thus, accelerate economic growth. As financial markets expand across borders, they have a significant impact not only on economic growth, but also on employment and economic policy as well. The extent of intermediation is the standard measure of the depth of a financial system. This paper would rely on this as the basis of financial deepening.

2 FINANCIAL DEEPENING IN KENYA

Kenya is an open economy with fully liberalized financial markets and no capital accounts controls. There is free movement of capital into and outside the economy. By average standards of Sub-Saharan African countries, Kenya is considered to have a well-developed financial system. Kenya’s financial sector comprises a number of commercial banks and non-bank financial institutions (Odhiambo, 2010). One of the biggest impediments to financial deepening in Kenya has been the lack of access to financial services among the poor. Sabana (2003) notes that one of the biggest development challenges in Kenya is the lack of access to finance among the poor. This segment of the population has no bank accounts and also mainstream banks have shunned them because of the attendant credit risk and high transaction cost. However, advances in mobile phone technology have made it possible for the banks to access the unbanked and the poor cost-effectively. The advent of credit referencing has also made it possible for banks to “comfortably” lend to the hitherto shunned poor population because of the problem of information asymmetry which heightens credit risk has now been resolved. Financial deepening has very wide reaching dimensions that cannot be conclusively discussed in this paper. The paper will only focus on the three aspects of: mobile and agency banking, and credit referencing because of their fundamental impact on financial deepening, their novelty, and their visibility in the Kenyan economy.

2.1 Mobile Banking and Agency Banking

Improving access to financial services can contribute to transforming peoples lives in developing countries. However, majority of the ordinary people in these countries still have limited access to these services. According to an African Development bank report (2010) today, an estimated 2.7 billion people in developing countries have no access to financial services. Over a billion people in Africa, Latin America and Asia are currently without bank accounts but do have mobile phone. And this number was set to reach 1.7 billion by 2012. In Africa, the majority of the population has no access to banking services, with only 20% of African families having bank accounts. Despite this, the International Telecommunication Union (2010) indicates a fairly impressive mobile cellular telephone subscriptions within the East African region as:- Kenya 19,364,600; Tanzania 17,469,500; Uganda 9,383,700. This state has made Kenyan financial system to leverage the mobile phone technology platform to reach the massive unbanked population.

Mobile banking (M-banking) involves the use of a mobile phone or another mobile device to undertake financial transactions linked to a client account. M-banking is one of the newest approaches to the provision of financial services through information communication technology (ICT), made possible by the widespread adoption of mobile phones even in low income countries. Emerging mobile banking (m-banking platforms) in developing markets enable two sided markets, bringing together mobile handset users with other mobile users and commercial partners. It has the potential to bring basic and electronic transactions services to unbanked consumers in developing markets (Anderson, 2010). Consumers are moving more portions of their lives to their mobile phones, and those financial institutions that make the leap to mobile in concert with consumer demand will create a sustainable competitive advantage. Simple, short text messages that alert customers of basic, useful information such as current account balance, account balance thresholds or notice of insufficient funds are not only reducing banks’ operational expenses, but they are also improving customer retention rates. Marlon (2010) says that M-banking separates a bank from its competitors in a crowded market place. Citing June 2009 Yankee Group report“Mobile Banking Creates a Bright Spot Within the Struggling Financial Industry”, he notes that introduction of these new mobile banking services is not resource-intensive. According to Tubin (2010) mobility has been to drive considerable and meaningful change within financial services. He reports that, scant three years or so into the deployment of mobile banking, many banks that provide the service report a positive impact to customer satisfaction and customer profitability. Universally, success in mobile delivery of financial services is predicated on understanding that mobile is not “internet-lite” but a unique channel with distinct characteristics and hence, the potential for a value propositions different from that of online banking. The mobile channel provides an immediacy and persistence of communication that is not possible via traditional channels, including the online channel. The device is virtually always on and always available. Consequently, the more successful mobile banking programs are supported by business and IT resources dedicated to evolving and supporting the channel.
Kenya’s M-pesa

M-pesa in Kenya now probably represents the best example of the most successful mobile money scheme. Launched in March 2007, M-pesa allows customers to transfer and receive funds and also shop with money charged or credited to their mobile phones. Afful (2011) narrates the success as follows: For Safaricom, the statistics at the outset encouragingly showed the need for such a service: 81 percent of the population was unbanked, 19 percent had access to banking services but largely in urban areas, and 55 percent of the population had access to mobile phones in 2007 when the service was launched. There were more mobile phones than there were bank accounts in Kenya. In 2005, mobile telephone subscribers stood at 4.5 million in Kenya; by 2008 this figure had risen to 12.9 million. It was estimated that for 2011, there were more than 22 million mobile phone users and this is a conservative estimate. As customer up-take of the service M-pesa offers has grown, so has the need to provide other mobile financial services in Kenya. Currently, Safaricom provides M-kesho, M-pesa International Money Transfer (M-pesaIMT). M-kesho, launched in May 2010 is a partnership between Safaricom and Equity Bank of Kenya. The account allows M-pesa account holders to transfer money to and from their Equity Bank accounts. Customers are able to check their bank balances on their mobile phones with no need to visit a bank branch. Customers are also able to get personal accident insurance cover and short-term loans. M-pesa IMT allows money to be transferred from the UK to a receiver’s-pesa mobile phone account in Kenya. Costs of transfer are lower than competitors like Western Union. Kenya’s central bank has supported mobile banking services in the country by changing the rules on cash handling in retail banking to accommodate mobile phone banking. These changes allowed banks to use certain retail outlets— including M-pesa agents and also the mobile financial services platforms on mobile phones to move cash and also to promote their financial products.

Agency banking is fairly a recent initiative in Kenya. FSD Kenya (2010) notes that it was in 2009, when the Central Bank of Kenya (CBK) commenced measures to open up banking channels to non-bank agents. An amendment to the Banking Act (passed as part of the Finance Act 2009) allowed banks to start using agents to deliver financial services. Using small shops, petrol stations, pharmacies and other retail outlets as agents could have a dramatic impact on improving access to financial services, especially in rural areas. This was expected to lead to substantial reduction in branch set up costs and also additional delivery channels hence easier to tap more deposits and transaction based income.

2.1 Credit Referencing

Lofgren (2002) says that asymmetric information is a common feature of market interactions. The seller of a good often knows more about its quality than the prospective buyer. The job applicant typically knows more about his ability than his potential employer. The buyer of an insurance policy usually knows more about her individual risk than the insurance company. One side of the market is better informed than the other. The seller knows more than the buyer about the quality of his car; the CEO and board of a firm know more than the shareholders about the profitability of the firm; insurance clients know more than the insurance company about their accident risk. This same problem confronts financial institutions—the borrower knows more than the lender about his credit worthiness. Informational asymmetries can produce adverse selection in markets. It is even more difficult to obtain information about the unbanked and the poor. Therefore, banks are particularly wary of lending to this segment of the population. However, the innovation of credit reference bureaus has largely addressed this problem and made it possible for banks to lend more without necessarily exposing themselves to huge risk. Tufano (2002) notes that a functioning credit referencing system enables individuals and entities to accumulate a credit history that can be taken into consideration in lending decisions. Banks play a central role in extending financial services within an economy. In support of this role, credit bureaus help lenders make faster and more accurate credit decisions. Credit histories not only provide necessary input for credit underwriting, but also allow borrowers to take their credit history from one financial institution to another, thereby making lending markets more competitive and, in the end, more affordable. Credit Reference Bureaus (CRBs) assist in making credit accessible to more people, and enabling lenders and businesses reduce risk and fraud. Kenya has made strides in this regard, the Banking (Credit Reference Bureau) Regulations, 2008 was operationalised and took effect from 2nd February 2009. Prof. Ndung’u (2011) stated that the central bank of Kenya licensed the first credit reference bureau in the year 2008, and more would be coming in due course. The purpose of the bureau is to collect, collate, analyse and disseminate credit information among credit providers.

2.3 Financial Deepening and Competitiveness

Various researches have been carried out in different contexts to establish the role of financial development(deepening) in the development of an economy. Masoud (2012) carried out a research to find out the impact of financial development on economic growth. He found out that the relationship between most stock markets development indicators and economic growth as robust, even after controlling the economic variables associated with growth rate. Other researchers, Boopen et al. (2009) carried out a research entitled “financial development and economic growth”. Financial development was found to have a positive impact on economic growth. However the other exogeneous variables namely investment, openness and education were found to possess more explanatory power. Another researcher, Salih (2007) did a study to investigate possible co-integration and direction of causality between financial development, international trade and economic growth in India. The results revealed that there is a long run equilibrium relationship between financial development, international trade and real income growth. Generally, most researches have established that there is a positive relationship between financial deepening and economic development (competitiveness).

Porter (1985) has identified three generic strategies that an organisation can follow inorder to be competitive. The first one is cost leadership, whereby the organisation aims to be the lowest cost producer within the industry. Secondly, an organisation can adopt differentiation, through which it seeks some unique dimension in its product/ service that is valued
by consumers. Finally, there is focus strategy, whereby the organisation determines the way in which the strategy is focused at particular parts of the market. The Kenyan financial sector might be enjoying competitive advantage vis-a-vis financial service providers in other countries where financial deepening has not been as advanced. As discussed above mobile and agency banking have enormous cost advantages. Additionally, credit referencing also reduces information search costs for the operators. Moreover, both mobile and agency banking have made it possible to focus on the previously unbanked population. Furthermore, mobile banking has made it possible for financial institutions to differentiate their product offerings that suit customer needs (differentiation). It is clear that all these aspects of financial deepening can bring about competitive advantage as articulated by Michael Porter. Naturally, this competitiveness of the Kenyan financial sector by extension means a more competitive Kenyan economy globally. Notably, the now globally acclaimed M-pesa has put Kenyan economy in the world competition map.

3 METHODOLOGY

The study was conducted in Kenya using a descriptive survey design. Data was collected from a key informant in the four largest banks by asset base that have subsidiaries or branches in other east African countries using a structured questionnaire. The instrument used a five point Likert type scale to establish how key measures of financial deepening enhanced the competitiveness of the banks’ Kenyan operation relative to their operations in other East African countries. The questionnaire was piloted for validity and Cronbach’s alpha coefficient used to test the reliability of the measurement scales giving a 0.726 Cronbach’s alpha coefficient which is above the threshold of 0.70 (Santos, 1999; George and Mallory, 2003). The questionnaire was administered personally through a drop and pick procedure. 75% of the questionnaires that were administered were returned which represents a reliable response rate (Garland and Tweed, n.d.).

4 RESULTS AND DISCUSSION

The objective of this paper was to identify how financial deepening enhances economic competitiveness of a country using mobile banking, agency banking and credit referencing as the key indicators of financial deepening. Economic competitiveness was evaluated on the basis of market penetration, reduction in operation costs, customer retention and accessibility, product diversification (cross selling), customer convenience, timeliness in financial product delivery and reduction in credit defaults. All the banks that participated in the study embraced credit referencing and mobile banking while 66.7% embraced agency banking (Appendix I). This shows that financial deepening is ripe in Kenya.

Financial deepening has enhanced Kenya’s economic competitiveness as compared to other east African countries in terms of market penetration and accessibility to customers by financial institutions. 33.3% of respondents suggested that mobile banking has increased market penetration to a very great extent while 66.7% suggested that this is so to a moderate extent (Appendix II a). Another 33.3% of respondents attributed a very great deal of market penetration to Agency banking (Appendix II b). In terms of accessibility 100% and 67.7% (Appendix III) of the respondents agreed that agency banking and mobile banking respectively enhances the accessibility of financial services by customers to a very great extent while 33.3% suggested that mobile banking improve accessibility to a great extent. Market penetration and accessibility has also been enhanced by the ability of the financial institution to diversify their product packages by selling different products to same group of customers. Cross selling is prime in Kenyan banks due in part to financial deepening with 66.7% of respondents showing that mobile banking enhanced cross selling to a moderate extent and 33.3% to a very great extent (Appendix II c). This is in line with the AIDB (2010) report which showed the potential of using mobile phone platform to reach the unbanked. The same is supported by Afcul (2011) who narrates how the MPESA innovation has increased access to financial services.

Concomitant to market penetration and accessibility is customer retention and convenience and on this dimension, financial deepening seems also to enhance the competitiveness of Kenya’s sector by far and large. 66.7% and 100% of respondents agreed that mobile banking and agency banking respectively improved competitiveness in terms of customer retention to a great extent (appendix IV a & b) while all them agreed that both mobile and agency banking has made Kenyan banks convenient to customers to a very great extent (appendix IV c & d). This is as supported by Tubin (2010) who says that mobile banking has a positive impact on customer satisfaction. Furthermore, Anderson (2010) has also explained how M-banking enhances convenience among the customers. Satisfied customers are expected to remain loyal and hence customer retention.

Another important dimension of economic competitiveness that can result from financial deepening is cost reduction in terms of both operationFs and financing. All the respondents suggested that mobile banking enhances competitiveness through cost reduction to a great extent while 66.7% agreed to a reduction in operation costs resulting from information sharing which is made possible by credit referencing (appendix V a & b). Additionally, 33.3% of respondents agreed to a reduction in lending cost due to information sharing or credit referencing (appendix V c) and this could be attributable to the reduction in default rates that the respondents attributed to information sharing (appendix VI). This is in agreement with Marlon (2010) who explains how M-banking reduces transaction expenses. In addition, Tufano (2002) advances an argument on how credit reference bureaus reduces information search cost and hence lower transaction expenses.

Also considered in this study was the efficiency in credit delivery and financial cooperation as yardsticks to financial competitiveness and which can be propelled by financial deepening. While all respondents agreed that information sharing as a result of credit referencing enhanced timely delivery of credit facilities in Kenya, the extent of financial cooperation was low with 67.7% of respondents showing that mobile banking (financial deepening) only enhances financial cooperation to a very low extent.
5 CONCLUSIONS

The study focused on three indicators of financial deepening namely: Mobile banking, Agency banking, and credit referencing. The study established that Kenya has made remarkable strides in financial deepening and this has enhanced the country’s competitiveness through: Having more people access financial services (market penetration), reduction of operating and transaction costs among service providers, product diversification (cross selling), superior customer experience (convenience), and reduced loan default rates.

REFERENCES

[1] AfDB, (2010), “Africa Economic Brief”, Vol. 1. Iss.8, December 2010
[2] Afful, F.E., (2011), “Africa’s Mobile Banking Revolution: The Poor Now Have Access to Financial Services”, Mobile Money Africa
[3] Anderson, J.,(2010), “M-banking in developing markets: competitive and regulatory implications”, info, vol. 12 Iss. Pp. 18-25
[4] Berkaert, G., Harvey, C. and Lundblad, C.(2005), “Does financial Liberalisation spur growth?” Journal of Financial economics 77, 3-55
[5] Boopen, S., Shalini, T.R. and Sawkut, R., (2009), “Financial Development and Economic Growth: New Evidence From A Sample Of Island Economies”, Journal Of Economic Studies, Vol. 36 Iss: 2 Pp.124-134
[6] FSD Kenya, (2011), “Agency and Mobile Banking in Kenya”, Retrieved from http://www.fsdena.org/branchless-banking/index.php.
[7] FSD Kenya, (2010) FinAccess National Survey 2010, FSD Kenya, Nairobi
[8] George, D., and Mallery, P. (2003), “SPSS for Windows step by step: A simple guide and Reference”, 11.0 update (4th Ed.). Boston: Allyn & Bacon
[9] Garnand and Tweed (n.d.), “In pursuit of minimum acceptable response rates for mail surveys”, Work in progress, Massey University, New Zealand: Palmerston North
[10] International Telecommunication Union, World Telecommunication/ICT Indicators Database 2010, 14th Ed.
[11] Marlon, D. (2010), “The Business Case For Mobile Banking”,Sybase, Dublin USA
[12] Masoud, N. (2012), “The Impact of Financial Development on Economic Growth: Empirical Analysis of Emerging Market Countries”, Studies in Economics and Finance. Vol. 29 Iss: 3 pp.1-1
[13] Ndung’u, N.,(2011), “Agency Banking or Community Banking and Financial Intermediation: Why The Community Banking Model is Better than the Agency Banking Model for Africa”, Speech Presented at Hilton Hotel, Nairobi
[14] Odihambo, N.M., (2010), “Is Financial Development a Spur to Poverty Reduction? Kenya’s Experience”, Journal of Economic Studies, Vol. 37 Iss: 3 pp. 343-353 Porter, M.,(1985), Competitive Advantage, Free press, New York
[15] Sabana, B., (2003), “Institutional Assessment of Micro-finance Service Providers in Kenya”, DFID, Nairobi
[16] Salih, T.K., Nesilhan K., and Hasret B., (2007), “Financial Development, Trade and Growth Triangle: The Case of India”, International Journal of Social Economics, Vol. 34 Iss: 9 pp. 586-598
[17] Santos J.R.A., (1999), “Cronbach’s Alpha: A tool for assessing the reliability of scales”, Journal of Extension, Vol. 37, No. 2, Tools of Trade, 2TOT3, April
[18] Shaw, E.S.,(1973), “Financial Deepening in Economic Development”, Oxford University Press, London
[19] Tubin, G., (2010), “Setting US Mobile Banking Priorities for 2011: Opportunities Attainable in the Short term”, Delivery Channels, Needham, USA
[20] Tufano, P.,(2002), “Financial Innovation”, Unpublished Manuscript
[21] Visco, I., (2007), “Financial Deepening and the Monetary Policy Transmission Mechanism”, Bank For International Settlements Review, Basel Switzerland
Appendix I: Extent of financial deepening

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| Yes       | 3       | 100.0              |

a. Bank offers mobile banking services

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| Yes       | 2       | 66.7               |
| No        | 1       | 33.3               |

b. Bank has agencies

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| Yes       | 1       | 33.3               |
| No        | 1       | 100.0              |

Total 3 100.0

Source: Research data, 2012

Appendix II: Effect of financial deepening on market penetration and diversification

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a moderate extent | 2 | 66.7 | 66.7 |
| To a very great extent | 1 | 33.3 | 100.0 |

Total 3 100.0

a. Mobile banking has enhanced Kenyan banks’ market penetration

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a very low extent | 1 | 33.3 | 33.3 |
| To a low extent | 1 | 33.3 | 66.7 |
| To a very great extent | 1 | 33.3 | 100.0 |

Total 3 100.0

b. Agency banking has enhanced Kenyan banks market penetration

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a moderate extent | 2 | 66.7 | 66.7 |
| To a very great extent | 1 | 33.3 | 100.0 |

Total 3 100.0

c. Mobile banking has enabled Kenyan banks to diversify their products through cross selling

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a very low extent | 1 | 33.3 | 33.3 |
| To a low extent | 1 | 33.3 | 66.7 |
| To a very great extent | 1 | 33.3 | 100.0 |

Total 3 100.0

Source: Research data, 2012

Appendix III: Effect of financial deepening on accessibility of financial services to customers

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a moderate extent | 2 | 66.7 | 66.7 |
| To a very great extent | 1 | 33.3 | 100.0 |

Total 3 100.0

a. Mobile banking has enhanced Kenyan banks accessibility to customers
| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a great extent | 1 | 33.3 | 33.3 |
| To a very great extent | 2 | 66.7 | 100.0 |
| Total | 3 | 100.0 | |

b. Agency banking has enhanced Kenyan banks accessibility to customers

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a very great extent | 2 | 100.0 | 100.0 |
| Total | 2 | 100.0 | |

Source: Research data, 2012

Appendix IV: Effect of financial deepening on Customer retention and Convenience

a. Mobile banking has enhanced Kenyan banks customer retention

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a moderate extent | 1 | 33.3 | 33.3 |
| To a great extent | 1 | 33.3 | 66.7 |
| To a very great extent | 1 | 33.3 | 100.0 |
| Total | 3 | 100.0 | |

b. Agency banking has enhanced Kenyan banks customer retention

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a great extent | 1 | 50.0 | 50.0 |
| To a very great extent | 1 | 50.0 | 100.0 |
| Total | 2 | |

c. Mobile banking has made customer banks more convenient to customers

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a very great extent | 3 | 100.0 | 100.0 |
| Total | 3 | 100.0 | |

d. Agency banking has enhanced Kenyan banks convenience to customers

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a very great extent | 2 | 100.0 | 100.0 |
| Total | 2 | 100.0 | |

Source: Research data, 2012
Appendix V: Effect of financial deepening on financial institutions cost of operations and lending in Kenya

a. Mobile banking has reduced Kenyan banks cost of operations

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a great extent | 2 | 66.7 | 66.7 |
| To a very great extent | 1 | 33.3 | 100.0 |
| Total | 3 | 100.0 |

b. Information sharing has reduced Kenyan banks operation costs

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| Disagree | 1 | 33.3 | 33.3 |
| Fairly agree | 1 | 33.3 | 66.7 |
| Strongly agree | 1 | 33.3 | 100.0 |
| Total | 3 | 100.0 |

c. Information sharing has led to low lending costs in Kenyan banks

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| Strongly disagree | 2 | 66.7 | 66.7 |
| Fairly agree | 1 | 33.3 | 100.0 |
| Total | 3 | 100.0 |

Source: Research data, 2012

Appendix VI: Effect of Financial deepening on loan default rates

Information sharing has led to reduced default rates in Kenyan banks

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| Fairly agree | 1 | 33.3 | 33.3 |
| Strongly agree | 2 | 66.7 | 100.0 |
| Total | 3 | 100.0 |

Source: Research data, 2012

Appendix VII: Effect of financial deepening on inter-bank financial cooperation and efficiency of credit delivery

a. Mobile banking has enhanced Kenyan banks financial cooperation with other financial institutions

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| To a very low extent | 1 | 33.3 | 33.3 |
| To a low extent | 2 | 66.7 | 100.0 |
| Total | 3 | 100.0 |

b. Information sharing has led to timely credit delivery among Kenyan banks

| Frequency | Percent | Cumulative Percent |
|-----------|---------|--------------------|
| Agree | 2 | 66.7 | 66.7 |
| Strongly agree | 1 | 33.3 | 100.0 |
| Total | 3 | 100.0 |

Source: Research data, 2012
Authors’ Biography

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