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Kenyan banking sector study – Phase I

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EXECUTIVE SUMMARY

This report presents the findings of Phase 1 of the first detailed study of competition in the Kenyan Banking Sector commissioned by the Competition Authority of Kenya with the support and participation of the Central Bank of Kenya, and the Financial Sector Deepening Trust. Virtually all the licensed banks in Kenya contributed data to the study and engaged with the study team[1].

Although the banking sector overall is profitable and has been growing steadily, there has been considerable debate regarding the prevailing level of interest rates, and a commonly held view that lending rates, and the spread between lending and deposit rates in Kenya, are unreasonably high, with the burden on consumers intensified by the high levels of bank fees. A number of potential hypotheses have been presented for these outcomes including the lack of competition between banks, which is what this study seeks to address.

The analysis applies methodologies that have been developed by competition authorities around the world to study whether the market structure of the banking sector is resulting in market outcomes or practices that are to the detriment of consumers. In theory an uncompetitive market structure creates market power with the possibility that one or more firms in the market have the ability to raise prices above a competitive level.

The study thus commenced with an analysis of the composition and structure of the sector to determine the appropriate way to define the market – and to study the level of concentration within the overall and sub-segments of the market. The approach segmented the market between licensed commercial banks and micro-finance banks, and between the products that are provided to corporate, smaller businesses and retail customers that cover both deposit products (liabilities) and assets (loans). Given the data that is available, we have considered five products for the corporate, small and medium enterprises (SME) and personal market segments and for analysing concentration - two on the lending and three on the deposit side (overdrafts and term loans; and demand deposits, saving deposits and term deposits). In addition, we have examined data on three lending products – mortgages, consumer durables and credit cards. Finally we also examine geographic concentration of banks across counties.

The approach involves examining three key features of each market to determine its competitiveness:

- *Level of concentration*. If one or a few firms have a large share of the market, the market is said to be concentrated. These firms can then act independently of the other firms and may thus have the market power to raise prices above competitive levels. A

[1] The data used for the analyses presented in our report largely comes from the monthly submission by Kenyan banks to the Central Bank of Kenya (CBK). The submissions include data on loans and advances by customer segments and products; data on the geographical distribution of a bank's branches, profit and loss statements as well as balance sheets. Of the 43 commercial banks in Kenya, we have data for 33 banks as the remaining banks did not give consent to the CBK to share their submitted data for the purpose of the market inquiry. These 33 banks constitute 82.5 per cent of total deposits by commercial banks and 72.4 per cent of loans and advances. Given these large percentages, we believe that our conclusions are unlikely to be distorted due to lack of data. Since lending and deposit data at the product level was publically available for Commercial Bank of Africa, Co-operative Bank of Kenya and Chase Bank, they have been included in the concentration analysis by making appropriate assumptions where needed. Thus our concentration analysis is based on data for 36 banks. Our report focuses on data as of December 2013.

widely used measure of the level of concentration in a market is the Herfindahl-Hirschman Index (HHI), calculated as the sum of the squares of the individual market shares of all firms in a market. For example, in a market which consists of a single firm, the HHI would be 10,000. We use the United States (US) Department of Justice and the Federal Trade Commission guidelines to broadly classify markets into unconcentrated (HHI below 1500), medium (HHI between 1500 and 2500) and highly concentrated (HHI above 2500) markets. The concentration analysis is done for product markets and geographic markets.

- *Entry barriers.* Entry barriers are the constraints on firms in entering a market. A market with no entry barriers can be competitive even with high concentration since the threat of entry by new players constrains the behaviour of existing firms.

- *Countervailing buyer power.* Countervailing buyer power refers to the power that buyers, individually or as a group, may have to determine market outcomes. Even in a situation of high concentration and entry barriers, the market structure may be competitive if the buyer has the market power to match the market power of the seller through aggressive negotiations.

Having assessed the market structure for each of these segments the study proceeded to assess the interest margins earned in each product/segment, as well as a consideration of the other indications of competitive conditions, namely bank profitability.

Concentration

The Kenyan banking sector with total assets of around Kenyan Shilling (KSH) 2.5 trillion is the largest in East Africa. It currently comprises 43 licensed banks, one housing finance company, and nine licensed microfinance banks (MFBs).

With over 40 banks operating in the market the overall market appears to be competitive, and at an overall industry level, no one bank appears to be dominant in either lending or deposits. Kenya Commercial Bank had the highest share in deposits as well as in lending (13 per cent in both). Based on the market shares in deposits and lending, the respective HHIs were calculated to be 607 and 643 respectively, implying that both overall deposits and overall lending would be classified as unconcentrated per the US guidelines.

The corporate segment, the largest segment for both loans and deposits, has several players for both lending and deposits. With HHIs of 709 and 1149 for corporate lending and deposits respectively, these market segments are also found to be unconcentrated. HHI calculations for overdraft and term loans show that the markets for both these lending products are unconcentrated. On the deposit side, demand and term deposits are unconcentrated but corporate savings are moderately concentrated given the HHI of 2492. It is to be noted that corporate savings are a small fraction of total corporate deposits.[2]

The SME segment includes banking transactions with non-corporate businesses that range from relatively large entities, which are similar to those considered in the corporate segment, to

[2]Although our results largely reflect regulatory returns provided to the banks to the Central Bank of Kenya and thus should be accurate, small changes in the way that banks have classified their products can result in significant shifts in category, that may or may not be material to their customers. Thus most banks offer demand deposits, some of which pay interest, some of which have been classified according to tenure and are thus included in demand deposits. Other banks have chosen to report demand or near demand deposits that pay interest as savings accounts. Without further investigation we are unable to determine whether this classification is material to customers or competitive conditions in the segment.

fairly small businesses, which may be closer to the clientele of the microfinance sector. The HHI for SME lending and deposits is 1006 and 849 respectively. In addition to SME lending and deposits being unconcentrated, SME overdrafts and term loans are also unconcentrated, as are SME demand and term deposits. But SME savings are highly concentrated with an HHI of 3125. However, again SME savings are a small percentage of total SME deposits[3].

The personal segment is also unconcentrated with HHI of 988 and 770 for lending and deposits respectively. As with the corporate and SME segments, personal overdrafts, term loans, demand deposits and term deposits are unconcentrated. However savings accounts appear to be highly concentrated with an HHI of 3008. Unlike the corporate and SME segments, however, savings are a reasonably large proportion of total personal deposits.

Our analysis of concentration in mortgage lending, consumer durables and credit cards indicates that the latter two are highly concentrated, with one bank accounting for 63 per cent of the market in consumer durable loans. Although credit card lending appears concentrated they account for a very small proportion of total loans.

Thus the overall conclusion from the market concentration analysis supports our initial observation – with over forty banks in the market the technical measures of concentration for most products and segments do not suggest a concentrated market that would allow participants to exercise pricing power. We do however find concentration in five areas – corporate, SME and personal savings, and consumer durable loans and credit card lending. For corporate savings, the buyer power of large corporate customers makes this segment competitive despite high concentration. Although the markets for credit card and consumer durables are concentrated, this may not reflect uncompetitive market structures since there appear to be no apparent barriers to entry in these specific lending markets. It should be noted that Phase 1 did not consider the market for vehicle and asset finance.

Barriers to entry

While market shares and concentration are an important component of the market structure assessment, they are not the end of the story. Low entry barriers in a market act as a competitive constraint on incumbents if a market is concentrated. Our analysis shows that the regulatory requirements for the Kenyan banks are not very different from the requirements in comparable countries and generally could be considered less onerous: given the size of the economy, minimum capital requirements are lower and an enlightened regulatory approach has encouraged the growth of new channels for mobile payments, and microfinance banks that can form a low cost entry into the sector. Nonetheless there may still be barriers to entry that arise due to barriers to expansion – large economies of scale in the industry make it difficult for small banks to compete effectively with the big banks particularly given the importance to customers of a large branch network, which can be a costly to create.

In this light, we examined concentration at the county level because competition between banks can be local, especially in the SME and personal banking segments. The geographic market concentration analysis points to most counties being highly concentrated but these counties account for less than 10 per cent of total loans or deposits. Majority of the counties have at least 6 banks. But only a few large banks are present in most of the 47 counties; most banks have a presence in fewer than 20 counties.

[3] See the comments under footnote 2.

In Kenya the lack of inter-operability in the payment system amplifies this constraint, although the regulations that promote agency banking should make a difference. A lack of transparency in prices may also make it difficult for most consumers to shop around for the cheapest loan. However these issues are no different from those faced by the banking industry in other countries, and the CBK is aware of this and has taken steps to legislate standard interest rate disclosure rules that if effectively enforced should empower consumers to make improved decisions. More importantly, the Kenyan financial services sector is well known for its growth and dynamism. The fact of new players entering the Kenyan banking industry, in particular the entry and rapid growth of Equity Bank from a building society to one of the largest banks, strongly indicates that these barriers may not be insurmountable. As in other countries, countervailing buyer power only exists in the corporate segment.

Thus our analysis of barrier to entry suggests that although there are aspects of the banking industry that seem to result in a concentrated market in most countries[4], the market structure of the Kenyan banking industry has lower barriers to entry than most and an enlightened regulatory model promotes new entrants and new forms of competition.

Interest Rate Analysis

Given the concerns regarding lending rates and interest spread in Kenya, and the fact that there are some segments and product markets where concentration is high, we have also analysed the interest rates charged or paid by the Kenyan banks.

Whereas interest rate spreads are strongly influenced by macro-economic conditions making cross country comparisons difficult, we used World Bank data to compare the interest rate spread in Kenya with that in other countries. According to this data, the interest rate spread in Kenya was 8.2 per cent in 2012. In comparison, the average spread for 23 countries in Sub-Saharan Africa, for which data on interest rate spreads was available, was 11.2 per cent. Comparing Kenya's interest spread to that in countries at a similar stage of financial development, data for 2011 shows a 9.4 per cent spread in Kenya and an average 7.1 per cent for this group of similar countries – neither results indicating any particular cause for concern.

While the public discourse on interest rates in Kenya has focussed on aggregate spreads, a disaggregated analysis of interest rates is more appropriate to determine if the lending rates are high or the deposit rates are low. Further, differences in (i) tenor of loan/deposit and (ii) credit ratings of borrowers/safety of banks need to be considered as a determinant of pricing, not just concentration.

To assess market power in the lending and deposit markets, we analyse the spread of lending rates and deposit rates over the risk-free rate – the lending spread and deposit spread. If the lending spread for one bank is higher than for another bank with similar credit risk, this could indicate market power, all else being equal (similarly for deposit spreads). We used the yield curve in the Kenyan financial market to calculate the risk free rate for different tenors. Lending and deposit spreads for the four largest banks in a given segment-product category are compared to the spreads for the other banks in the same category to assess impact of market power.

The analysis of lending spread shows that spreads for overdraft and term loans are not higher for the top four banks compared to other banks in the corporate and SME segments (except

[4] Consumers of banking services seek safety in large banks and brands, and banks that have nationwide footprints, and the balance sheets to support their needs – be it large loans for corporates or mortgages for individuals

for the 0-3 month tenor in the SME segment). However, in the personal segment, average lending spreads for the top four banks are higher in all categories. The analysis of deposit spread shows that spreads for demand and saving deposits are not lower for the top four banks compared to other banks in the corporate segments, but they are lower in the SME and personal segments. Further, the deposit rate offered by the top four banks is lower than the average of other banks for term deposits of specific tenors across market segments.

In order to determine whether these outcomes are a result of a lack of competition in particular markets, we link spreads to concentration in each market. In markets where we observe a higher lending rate/lower deposit rate for the bigger banks, but are unconcentrated, it is unlikely that the observed interest rates are a result of a lack of competition. However, in markets where one observes such rates for the big banks along with a high degree of concentration, it is plausible that lack of competition, among other factors, is resulting in the observed rates. In these cases one needs to isolate the effect of factors such as risk and market concentration on rates in order to determine if there is anticompetitive conduct.

The table below shows that the markets on the lending side where the average lending spread for the top four banks is higher than the other banks (personal overdrafts and term loans, and SME term loans for the 0-3 month tenor) are unconcentrated. On the deposit side, in most cases the deposit rate of the top four banks on average was lower than that of the other banks. But the corresponding markets are unconcentrated except for SME and personal savings. In these two markets, a high degree of concentration could be driving the below average deposit spread. However, it is important to remember that this outcome could also be driven by the fact that the top four banks in these cases are large banks which are perceived to be safer by depositors and can therefore attract deposits despite offering lower deposit rates.

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Summary of spreads and concentration

Market segment	Product	Level of spread of top 4 banks relative to other banks	Concentration level
		Lending	
Corporate	Overdrafts	Below	Unconcentrated
Corporate	Term	Below	Unconcentrated
SME	Overdrafts	Below	Unconcentrated
SME	Term	Above	Unconcentrated
Personal	Overdrafts	Above	Unconcentrated
Personal	Term	Above	Unconcentrated
		Deposit	
Corporate	Demand	Above	Unconcentrated
Corporate	Saving	Above	Moderate
Corporate	Term	Below	Unconcentrated
SME	Demand	Below	Unconcentrated
SME	Saving	Below	High
SME	Term	Below	Unconcentrated
Personal	Demand	Below	Unconcentrated
Personal	Saving	Below	High
Personal	Term	Below	Unconcentrated

In conclusion, while the high level of concentration in some segments could be playing a role there is no clear relationship between concentration and spreads that indicates market power.

Profitability Analysis

Finally we conducted an analysis of profitability within the sector to determine whether there is evidence of super/excess profitability in the market.

An international comparison of excess returns, defined as ROE minus the cost of equity, shows that Kenya's banking sector ranks 23rd out of a sample of 117 countries, earning excess returns of 6 per cent. One can note that this would place Kenya somewhere in between Ghana and Uganda, and considering Kenya's GDP and income level this ranking does not seem abnormal.

Within Kenya, the data suggests that in 2013 small and large banks had similar net profit margins. In fact, all banks in Kenya made a positive profit in 2013 with the exception of Ecobank. In terms of ROE, smaller banks experienced lower returns in 2012 and 2013, however, the gap closed significantly in 2013. The main driver for high ROE of large banks is the higher revenues per asset (from the asset turnover) for the two years. The larger banks are likely to be considered safer, allowing them to pay lower deposit rates, while attracting greater current account and saving account deposits. These factors together would allow the large banks to earn higher ROE. Other factors that may contribute to this observed outcome are higher fees being charged by large banks and lower deposit rates paid by the large banks in the savings deposits market due to the market structure but further analysis is needed before coming to a conclusion.

Phase 1 Conclusions and policy implications

A competition market inquiry seeks to determine whether concentration in a market (and the relevant sub-markets) create conditions in which market participants can use market power to increase prices to consumers. As such it does not seek to directly answer the question as to whether consumers pay too much for their services, only whether there is a possibility that consumers are paying *too much as a result of the market power arising from a concentrated market or a market in which barriers to entry allow incumbents to exert market power, such that regulators should intervene.* The first phase of this report found little evidence that margins or profits in the banking industry are at the top or bottom of peer group country comparisons, *nor did we find evidence of high levels of concentration at an industry or sub-industry level using the standard approaches that have been adopted by competition authorities around the world*. To the contrary we find that the formal and regulatory barriers to entry into the sector are probably lower than comparator countries, which have enabled the emergence and growth of vibrant new participants in the market. We do nonetheless find evidence of concentration in some segments of the market although this may partially be the result of definitional issues and the way in which different banks have reported their products to the Central Bank – a matter that needs to be investigated further in Phase 2.

As is clear from the data presented in the main report, although the standard industry concentration measures do not suggest cause for concern, in most segments the market is dominated by between 4-5 large players and a large number of very small players. The large number of small banks in Kenya may in itself allow for some expression of market dominance although this is not picked up by the formal calculations. The fact that smaller banks are less profitable may mean that they struggle to make the investments necessary to compete and will continue to lose market share. Increasing capital requirements to reduce the number of banks is thus sometimes hypothesised as a way of increase effective competition within the sector, but needs to be approached with extreme caution as rapid consolidation can result in some very unhappy and unsustainable mergers as occurred in Nigeria.

There are nonetheless measures that can be promoted that can make the industry more competitive. In particular creating a greater degree of inter-operability within the payment system and ensuring that the prices at which the customers of smaller banks access the payments system are not disadvantageous can promote competition. Equally ensuring the depth and quality of public information on borrowers through the credit bureaus ensures that banks can compete more effectively for customers. Finally, another intervention that will enhance competition would be reducing the hurdles for customers to switch banks. Establishing an appropriate code of conduct to ensure that the bank which is losing any facility, such as the credit facility of a customer, acts with appropriate speed and diligence, and potentially outlawing early repayment penalty fees are appropriate regulatory interventions. However, further field research to confirm current practices is needed before any such intervention.

Tasks to be addressed in Phase 2

While this study has enabled us to draw broad conclusions on competition in the Kenyan banking industry, some issues remain unresolved which will be addressed in Phase 2 of the market inquiry.

- In most countries fee income can amount to up-to a third of the income banks receive, and conversely a third (or more for some consumers) of the cost of banking. The data available to us provides information on total fee but does not provide details on the services for which the fees were being charged and the magnitude of each type of fee. Understanding the range of fees and manner in which fees are determined within the banking industry has been the focus of a number of market inquiries across the world and will be applied to the Kenyan market.

- Whereas Kenya is a market leader in mobile payment services, the Mpesa service constitutes a specific category of payment service/deposit product with a very high concentration/market share. The determination of fees within the Mpesa service and between Mpesa and other payment services will need to be specifically investigated.

- Since our analysis has indicated high concentration in saving deposits, along with potential barriers to entry and expansion, the segment requires more detailed analysis. Reasons for high concentration in this market should be understood, particularly in light of the fact that the other two deposit markets – demand and term deposits – are not concentrated. As personal savings form a large part of personal deposits, and this is a segment directly affecting many consumers, Phase 2 of this inquiry will examine this segment in more detail, and in particular whether the apparent concentration is material or as a result of the way in which different banks have classified their products in their regulatory returns, or specific customer choices – namely the distribution of Government accounts.

- Phase 2 will include the examination of certain categories of lending that were excluded from the initial analysis – in particular vehicle and asset finance.

- Examining lending and deposit spreads after incorporating information on credit ratings of a bank's borrowers and the financial strength/credit rating of the bank will address the question whether spreads are driven by the underlying credit risk and maturity or by market power.

1. INTRODUCTION

1. An efficient and growing financial sector is critical for the growth and development of an economy as it provides a mechanism to channel savings into productive investment. Banks are considered to be the most important institution through which financial services are provided.

2. In Kenya too, the growth and deepening of the financial sector is considered key to the development of the economy. As part of Vision 2030, which is Kenya's development programme, the financial sector is one of the six key sectors that have been designated as economic pillars for Kenya's growth.[5] Ensuring that businesses and individuals get access to credit at a low cost is an important policy objective of the Kenyan government.

3. The banking industry in Kenya has grown steadily in the last few years.[6] This growth has been accompanied by intense discussions and debates regarding prevailing interest rates. The general perception is that lending rates and the spread between the lending and deposit rates in Kenya have been high, although clear benchmarks have not been noted. This has led to suggestions of regulation of interest rates and spreads. In addition, high fees for banking services and a lack of transparency in the fee structure have also been noted. While there has been no definitive explanation for these phenomena, a number of potential hypotheses have been presented including:

    3.1. High operational costs being passed through to consumers

    3.2. Information asymmetry in the market

    3.3. High risk profiles of individuals and business

    3.4. Lack of competition between banks

4. Competition between banks is expected to reduce the cost of credit for consumers as banks have an incentive to charge a low lending rate to attract more customers. However, this occurs only when a consumer has several options and can choose the bank which offers the lowest rate of interest for a loan, all else being the same. Similarly, banks will offer higher returns on deposits if they have to compete for deposits from consumers. If competition is not adequate, this can lead to higher lending rates and lower deposit rates, resulting in a high interest rate spread.

5. In order to better understand the extent of competition between banks in Kenya, the Competition Authority of Kenya (CAK), in partnership with the Financial Sector Deepening (FSD), Kenya, has launched a market inquiry on competition in Kenya's banking industry. Genesis Analytics has been selected by the CAK and FSD to conduct this inquiry. The objectives of this study, as per the terms of reference, are as follows:

    5.1. Assess the market structure of the sector;

    5.2. Identify potential barriers to competition, if any, and consumer protection concerns that may be alive in the sector;

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[5] http://www.vision2030.go.ke/index.php/pillars

[6] World Bank. 2013. *Reinvigorating growth with a dynamic banking sector.*

5.3. Engage the National Treasury, Commercial Banks, Microfinance Banks, Kenya Bankers Association and Association of Microfinance Institutions (AMFI). This will ascertain the extent to which there could be improvements in the conditions affecting competition and consumer protection in the sector;

5.4. The sector study will also highlight the relevant aspects that the Authority and/or relevant stakeholders may take into account, and provide alternatives to address competition issues and some proposed remedies based on international best practices, and;

5.5. Make recommendations to the Authority on any matter potentially needing legislative or regulatory attention.

5.6. Present detailed recommendations aimed at increasing competition in the banking sector.

6. The inquiry has been divided into two phases. The first phase will focus on providing a preliminary assessment of competition and consumer protection concerns in Kenya's banking industry. It will identify potential areas of concerns that can be subject to an in-depth analysis in Phase 2 of the competition market inquiry.

7. This report presents the findings of the first phase. As per the objectives, this report presents a preliminary competitive assessment of the Kenyan banking industry, and identifies if there are specific competition concerns that need to be further explored. This report intends to inform the prevailing debate regarding the Kenyan banking industry with relevant analysis and data.

8. The assessment of competition in the Kenyan banking industry is done using the standard tools of competition analysis that have also been used by regulators in other countries when conducting their own market inquiries. The report discusses the market structure of the Kenyan industry based on key indicators such as the level of concentration, barriers to entry and expansion and buyer power. It also explores the possibility of a link between high interest rate spread/profits and high concentration. These results are evaluated using internationally accepted benchmarks. This report is structured in the following way:

8.1. Section 2 provides an overview of the Kenyan banking industry

8.2. Section 3 presents a brief description of the typical approach for a competition market inquiry

8.3. Section 4 describes the market segments and products that exist in the Kenyan banking industry

8.4. Section 5 analyses the market structure of the banking industry

8.5. Section 6 discusses the interest spread in the industry

8.6. Section 7 assesses profitability of the Kenyan banking industry

8.7. Section 8 presents the conclusions and the tasks for Phase 2

8.8. Section 9 gives the policy recommendations based on the conclusions in this report.

2. OVERVIEW OF THE KENYAN BANKING INDUSTRY

9. The banking sector in Kenya currently comprises 43 licensed banks plus one mortgage finance company, and nine licensed microfinance banks (MFBs).[7] Of these 43 licensed commercial banks, 29 are locally owned banks with the remainder being international banks.[8] Three of the locally owned banks have a significant shareholding by the Government of Kenya. The banks in Kenya service a wide variety of consumers including corporates, small or medium enterprises (SMEs) and individuals. Note that Charterhouse Bank Ltd. is under statutory management. Consequently, we consider the Kenyan banking industry to currently comprise 42 operational banks and one mortgage finance company.

10. The Kenyan banking sector is one of the largest in East Africa.[9] As of December 2013, the total assets for Kenya's commercial banks were around Kenyan Shilling (Ksh) 2.7 trillion while the total loans were Ksh 1.6 trillion. The total deposits were Ksh 1.9 trillion.

Table 1: Total assets, loans and deposits in Kenyan banking industry (in Ksh Million)

Kenya Banking Industry	As of December 2013
Total Assets	2,703,394
Total Loans	1,564,635
Total Deposits	1,935,661

Source: CBK Annual report 2013. p. 28-29.

11. Kenya also has a large microfinance sector which caters to the financial needs of micro businesses and individuals. In Kenya, microfinance institutions were historically considered to be providers of credit to micro business and individuals and were not allowed to take deposits. However, since May 2008 microfinance institutions can apply for a license to become an MFB that is allowed to accept deposits. As a result these microfinance institutions are now in a position to meet a broader set of needs of their customers. This move was expected to increase competition in the banking industry, particularly for the low-income customers. As of December 2013, the net advances of the MFBs stood at Ksh 27.4 billion whereas total deposits were at Ksh 24.7 billion.[10]

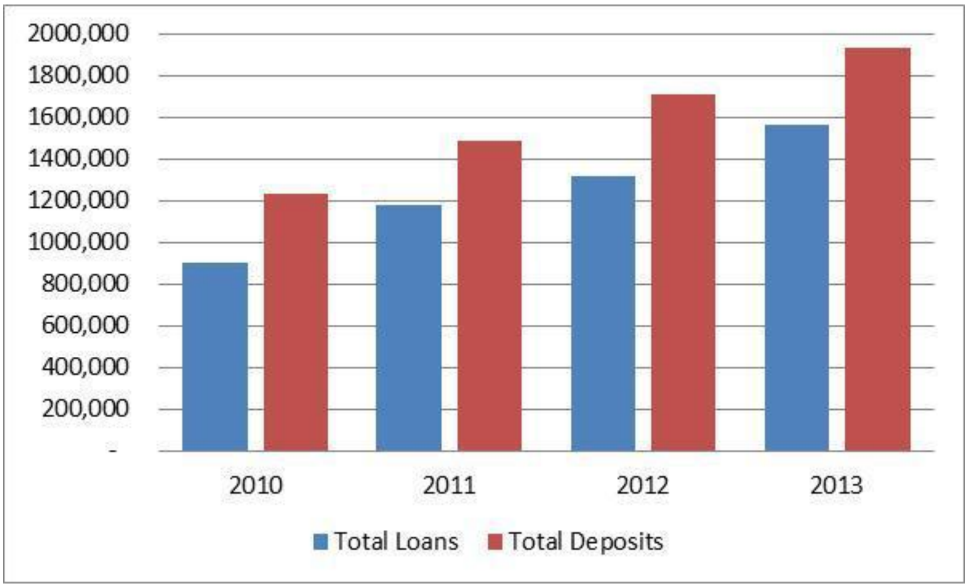
12. There are currently over 50 micro-finance institutions and also a significantly large network of over 2,200 Saving and Credit Co-operative Societies (SACCOs). These institutions have played an important role in extending financial services to a larger set of consumers. Further, Kenya has been successful in using information and communication technology (ICT) to deliver financial services to the under banked and unbanked consumers. There were 30.4 million pre-paid mobile money subscribers in Kenya as of April 2013, and the total number of deposits amounted to KSH 226 billion.[11] Most of this is accounted for by a mobile payment service namely m-pesa.

[7] Information from the Central Bank of Kenya.
[8] CBK. 2013. Bank Supervision Annual Report 2013.
[9] http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-5442
[10] CBK. 2013. Bank Supervision Annual Report 2013.
[11] http://www.businessdailyafrica.com/MPesa-grows-to-biggest-bank-by-customer-deposits/-/539552/1752126/-/15r12ao/-/index.html

2.1. GROWTH IN THE INDUSTRY

13. The banking sector of Kenya has continued its growth in assets, deposits, profitability and product offering over the last few years. For example, the total loans as well as deposits in the Kenyan banking industry have almost doubled in the last five years. As Figure 1 shows, the total loans were Ksh 0.9 trillion while deposits were Ksh 1.2 trillion in 2010. Total loans have increased to Ksh 1.6 trillion while deposits have increased to Ksh 1.9 trillion in 2013.

Figure 1: Total loans and deposits in Kenyan banking industry from 2010-2013 ***(in Ksh Million)***



Source: Annual reports, Central Bank of Kenya

14. This growth has largely been attributed to financial deepening in the industry, which is supported by an industry wide branch network expansion strategy in Kenya as well as in the East African region, and the automation of services. In particular, there has been an expansion of banking services to small businesses and low-income individuals. This has led to growth in deposits, which are the main source of funds for banks in Kenya.[12] The growth in deposits is driven by the growth of deposit accounts, bank branches and agents.[13]

    14.1. *Deposit accounts.* The number of deposit accounts in commercial banks increased from 4.7 million in 2007 to 22.1 million as of October 2013.

    14.2. *Bank Branches.* The total bank branches in Kenya increased from 740 in 2007 to 1,272 in 2012.

    14.3. *Agents.* As of December 2013, the Central Bank of Kenya (CBK) had given approval to 13 commercial banks to offer banking services through agents, thereby allowing banks to use third parties to offer banking services. This helps the banks reach more customers, particularly those located in remote and sparsely populated

[12] As seen in Table 1, the customer deposits are a large proportion of total assets.
[13] World Bank. 2013. *Reinvigorating growth with a dynamic banking sector.*

areas. As of October 2013, there were a total of 22,423 agents being employed by the banks.

15. The growth in the Kenyan banking industry has been accompanied by increased competition over the last few years as a result of entry by new players and greater business and financial innovations.

16. Despite the growth, there is considerable scope for increasing penetration of banking services in Kenya. As can be seen in the data from FinAccess survey, in 2013 only 32.7 per cent of adult population in Kenya accessed financial services from institutions, including commercial banks and MFBs, that are prudentially regulated and supervised by independent statutory regulatory agencies (CMA, CBK, IRA, RBA and SASRA).[14,15] While demand side factors such as low incomes and low financial literacy contribute to this outcome, supply side factors are likely to be an important reason for the low use. These factors could be: (i) high cost of credit, (ii) lack of access to bank branches, (iii) lack of traditional collateral, such as land, (iv) stringent requirements for accounts, (v) high transaction costs, and (vi) improper risk assessment and information asymmetries.[16] However, despite these issues, Kenya has performed relatively well in terms of financial access through other formal mechanisms such as mobile phone, post bank, and microfinance institutions, etc. In 2013, 66.8 per cent of adult population in Kenya had access to some type of financing through formal mechanisms, while others used either informal mechanisms or were completely excluded.[17] Kenyans may now have better financial access than residents of most other African countries.[18]

2.2. REGULATORY ENVIRONMENT

17. The Central Bank of Kenya (CBK) is the regulator of the banking industry in Kenya. The CBK is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. The commercial banks have an industry association, Kenya Bankers Association (KBA), which works as a forum to address issues affecting the banking sector. Similarly, the micro-finance institutions are organized under the Association of Micro-Finance Institutions (AMFI) which addresses concerns of micro-finance institutions.

18. The banking industry in Kenya is primarily governed by the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the CBK.[19] In addition, the Microfinance Act, The National Payment System Act and the Kenya Deposit Insurance Act also regulate the activities of the industry players. The commercial banks are regulated primarily through the Prudential Guidelines set, and periodically updated, by the CBK. These typically cover bank license requirements, capital requirements, liquidity measures and requirements, foreign exchange limits, and prohibited business. The most recent regulations issued by the CBK are the Prudential Guidelines of 2013 which are intended to make the banking system of Kenya more sustainable and transparent.

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[14] The respective full forms are: CMA – Capital Markets Authority; CBK – Central Bank of Kenya; IRA – Insurance Regulatory Authority; RBA – Retirement Benefits Authority; SASRA – Sacco Societies Regulatory Authority.
[15] FSD Kenya and Central Bank of Kenya. *FinAccess National Survey 2013*. October 2013.
[16] http://www.imf.org/external/np/seminars/eng/2013/kenya/pdf/nju2.pdf
[17] FSD Kenya and Central Bank of Kenya. *FinAccess National Survey 2013*. October 2013.
[18] https://www.standardmedia.co.ke/business/article/2000107091/kenya-leads-african-peers-in-financial-access-report
[19] The Companies Act is also applicable to the banks for the purpose of registration of banks as a business.

19. The micro-finance banks, on the other hand are regulated through various microfinance regulations. The Microfinance Act of 2006, that became operational in May 2008, effectively allowed microfinance institutions to apply for a license for becoming an MFB that is allowed to accept deposits. The Microfinance Act enables the MFBs to "*mobilise savings from the general public, thus promoting competition, efficiency and access*".[20] It is ultimately expected that the microfinance industry will play a crucial role in deepening financial markets and enhancing access to financial services in Kenya.

20. The key difference in the requirements for MFBs and commercial banks is in the capital requirement. Microfinance banks are only required to hold KSH 20m or 60m, for community-based or nationwide banks respectively, while commercial banks are required to hold KSH 1bn. However, the core of their business must remain 'micro-focused' because they are only allowed to lend up to 30 per cent of core capital to large exposures (those that exceed 2 per cent of core capital and not more than 5 per cent of core capital). This limits the ability of microfinance providers to compete effectively for loans and advances in the high salary and corporate segments. Note that there is no regulatory restriction on who the MFBs can lend to.

21. The details for the various banking regulations are presented in Appendix A. A few recent changes in Kenya's banking regulatory landscape to be noted are:

    21.1. The introduction of deposit insurance regulations. Deposit insurance is part the financial system safety net. In Kenya, the Kenya Deposit Insurance Corporation (KDIC) provides for a deposit insurance scheme for customers of member institutions, and includes: administering the deposit insurance scheme; collecting contributions for the Fund from member institutions; and holding, managing, and applying the Fund. The Kenyan deposit insurance regulation covers (i) current accounts, (ii) saving accounts, (iii) call deposits, (iv) fixed/term deposits and (v) foreign currency deposits. Since deposit insurance regulations promote deposit protection, instill public confidence, and foster financial stability, they allow for smaller banks to compete more effectively with large banks.

    21.2. The CBK launched a credit information sharing mechanism between banks in 2010 to ensure that banks get access to credit histories of potential borrowers from other banks.[21] This has led to more efficient evaluation by banks of credit-worthiness of its customers and thus allows them to charge an interest rate that is more aligned with the possible risk in lending to a given customer. While previously, the mechanism allowed for sharing only the negative history (i.e., where a customer may have defaulted on loans), now the CBK has allowed for sharing of positive history also. This is likely to result in better pricing for customers that have a good credit history and may lead to lower average interest rates. Only two bureaus have been licensed to date including, Credit Reference Bureau Africa Limited and Metropol Credit Reference Bureau Limited.

    21.3. The minimum capital requirements in terms of the core capital was increased in the 2008 Prudential Guideline, with effect from 31 December 2012, from the previous Prudential Guidelines issued in 2000 and 2006, where capital requirements did not

[20] Central Bank of Kenya website https://www.centralbank.go.ke/index.php/microfinance-institutions
[21] DEVELOPMENTS IN THE KENYAN BANKING SECTOR FOR THE QUARTER ENDED 30th JUNE 2013. CBK.

have a conservation buffer. The minimum core capital was set at 250m Ksh and is now 1b Ksh.

21.4. Through the recent changes in the Prudential Guidelines, the CBK has requested banks to publish their total cost of credit, including interest as well as non-interest costs. This may increase price transparency and thus competition among banks going forward. Further, the Central Bank has also issued Guidelines on Consumer Protection effective from 2012[22] with the aim of promoting fair practices and transparency, fostering confidence in the banking sector, and providing efficient mechanisms for dealing with consumer grievances.

[22] Central Bank of Kenya. *Prudential Guidelines for Institutions Licensed under the Banking Act: CBK/PG/22 Consumer Protection.*

3. APPROACH FOLLOWED FOR THE MARKET INQUIRY

22. This report applies the standard framework used in market inquiries to assess competition in the Kenyan banking industry. The key element of the framework is an analysis of the market structure since that determines the incentives for banks to compete. An uncompetitive market structure raises the possibility of market power with one or more firms in the market i.e. the possibility that one or more firms in the market have the ability to raise prices above competitive level.

23. While an analysis of the overall competitiveness of an industry is the correct starting point for a competition market inquiry, it is also important to examine the market structure in different segments. The banking industry in Kenya consists of several segments in terms of customers which ought to be analysed separately. Further, market structure must also be analysed for the different types of products being offered by Kenyan banks.

24. Having determined the various levels at which the market assessment is to be carried out, one then examines three key features of the market to determine its competitiveness:[23]

    24.1. *Level of concentration.* Concentration in a market refers to the distribution of market share among the firms that are part of the market. If one or a few firms have a large part of the market, the market is said to be concentrated. These firms can then act independently of the other firms and thus have the market power to raise prices above competitive levels. In contrast, in an unconcentrated market where the market is divided up more evenly among several smaller firms, the pricing decisions of a firm are constrained by the behaviour of other firms.

    24.2. *Entry barriers and expansion.* Entry barriers are the constraints on firms in entering a market. A market with no entry barriers can be competitive even with high concentration. The threat of new entry constraints the behaviour of existing firms. If the existing firms charge a high price, then the prospect of high profits will attract new firms into the market leading to a fall in industry wide prices. Note that for new firms to compete with the incumbents there should also be no barriers to expansion.

    24.3. *Countervailing buyer power.* Countervailing buyer power refers to the power that buyers, individually or as a group, may have to determine market outcomes. Even in a situation of high concentration and entry barriers, the market structure may be competitive if the buyer has the market power to match the market power of the seller. Buyer power is exercised by the consumer by not purchasing the product if the price is high. The seller is then forced to bring down prices even if he is the only player in the market.

25. This analysis involves examining data as well as understanding the institutional details of the market to determine if there are competition concerns in a market. A market inquiry may then further probe market outcomes such as price, quantity and quality of the product with a view of relating them to the observed market structure i.e. the level of competition. In the banking industry this implies understanding how deposit rates, lending rates and

[23] Bishop and Walker. 2010. *The Economics of EC Competition Law*. Third Edition. Sweet and Maxwell. p. 62.

various banking service fees are set, and determining if there is a link between these rates and fees and the market structure. For example, if the market is found to be uncompetitive do we also observe high interest spreads or fees?

26. Finally, profitability of the players in the industry is analysed. It is important to understand the source of high profit margins, if any. For example, high profit margins in the banking industry can come from high interest spread or high non-interest income or low costs. In addition, the profitability measures have to be benchmarked to come to a conclusion about their appropriateness.

27. We follow the above framework for assessing the market structure in the Kenyan banking industry. The data used for the analysis largely comes from the regulatory returns submitted by commercial banks and MFBs to the CBK every month. The following data has been used in our analysis:

    27.1. BSM form. This form contains information about various assets and liabilities of the bank as of the end of a month, along with their breakup into various categories as specified by the CBK. From this form, our analysis uses the balance sheet data (Table A), breakup of loans by sector (Table C11-V), mortgage loans (Table D) and breakup of total loans and deposits by market segments, and different tenors (Table F(New)). The banks are required to submit the BSM returns every month.

    27.2. CBK/PR2188001. This form has the profit and loss statement of the bank, and includes data on various income and cost elements.

    27.3. *CBK/PR26B9001*. This form provides the geographical distribution of the branches of a bank. It also contains the deposits, loans and non-performing at each branch.

    27.4. *MFB Balance sheets*. The balance sheet of the MFBs contains the information about assets and liabilities of the MFBs. This includes information on total loans.

28. A limitation of our data set is that out of the 43 commercial banks, we have data for 33 banks. While CBK requested all 43 banks to share the above data for this market inquiry, only 33 banks gave consent to the CBK's request. These constitute 82.5 per cent of total deposits by commercial banks and 72.4 percent of loans and advances.[24] Given these large percentages, we believe that our conclusions are unlikely to be distorted due to lack of data. We have noted where incomplete data may affect the results and have used data from other sources or appropriate assumptions to draw conclusions about the market structure.

29. Besides the data provided to us by the CBK, we also make use of other publically available data. The analysis done in this report pertains to 2013 except if data for 2013 was not available. To check for robustness of the results, the same calculations and analyses are done for 2012 and are presented in the Appendix. If the conclusions are different from the conclusions arrived at using 2013 data, these are noted.

30. We start by discussing the various market segments and products in the banking industry.

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[24] Based on total deposits and net loans and advances in the banking industry as of December 31, 2013, as per the CBK.

4. MARKET SEGMENTS AND PRODUCTS

31. A bank serves several types of end consumers, ranging from large corporates to low-income individuals. Further, a bank typically offers several distinct products that differ by collateral requirement, time period, etc., to each consumer group. Examples of such products are mortgage loans, vehicle financing and unsecured loans on the lending side and current accounts, saving accounts, etc. on the deposits side. Thus, the banking industry is divided into several market segments based on the different consumer groups being served, and further into several products within each market segment.

4.1. MARKET SEGMENTS

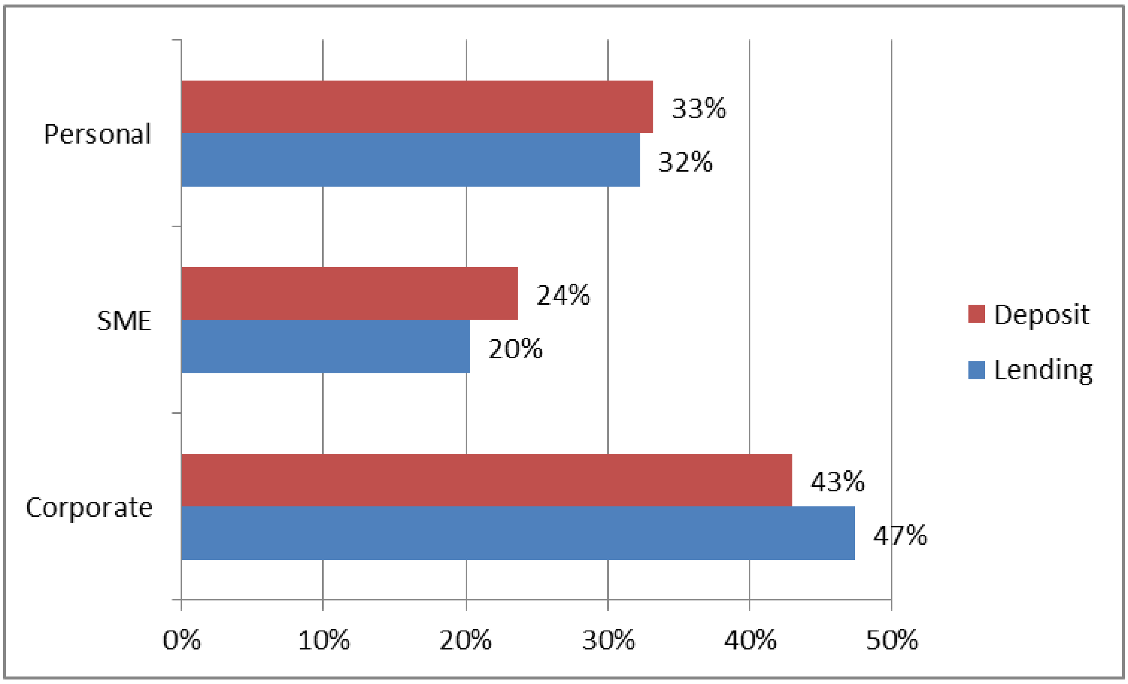
32. It is widely acknowledged that corporate banking and retail banking are distinct market segments in the banking industry. Corporate banking refers to banking services provided to large corporates. On the other hand, retail banking is defined as providing banking services to small or medium enterprises (SMEs) and individuals. As the definition suggests, retail banking can be further divided into SME banking and personal banking.

33. The logic for making the distinction between market segments is that consumers in each segment have different needs. As corporate segment customers require tailor-made and sophisticated solutions for their financial needs, it is considered distinct from the retail segment. Further, the retail segment is further divided into SME and personal as customers in one segment are different from customers in the other in terms of their characteristics as well as their banking needs. This approach follows the precedent set in market inquiries conducted in other countries. For example, several inquiries initiated in the United Kingdom (UK) relate only to the SME segment or the personal segment.[25]

34. In Kenya too, banks distinguish customers on the basis of whether they belong to the corporate, SME or personal segment. Business activities of several Kenyan banks are structured along these lines. Figure 2 below shows the distribution of lending and deposits in Kenya across corporate, SME and personal segments as of December 2013. Data has been obtained for 33 banks from Table F(New) of their BSM returns. We see that the corporate segment accounted for 47 per cent of total lending, while SMEs accounted for 20 per cent and personal banking accounted for the remaining 32 per cent. Further, 43 per cent of deposits come from the corporate segment, while 24 per cent and 33 per cent come from the SME segment and personal segment respectively. Thus, corporate segment's share in lending is greater than its share in deposits. This suggests that lending in corporate segment is made using deposits from SME and personal segment, whose share in lending is lower than share in deposits.

[25] For example, the UK Competition Commission (CC) investigation of the SME banking in 2002, CC investigation of personal current account banking in Northern Ireland in 2007, the Office of Fair Trading (OFT) review of 2007 of the SME undertakings arising from the CC's SME report in 2002 and the OFT market study of PCAs in the UK in 2008.

Figure 2: Share of corporate, SME and personal segments in the Kenyan banking industry



Source: CBK; Genesis calculations

35. Note that, in addition to the above market segments, banks also lend to each other through inter-bank transactions. However we do not consider inter-bank transactions in this report as our focus is to determine the level of competitiveness of the banking industry in products and segments which are of interest to end consumers.[26]

4.2. PRODUCTS

36. As discussed earlier, market segments can be further divided on the basis of the different lending and deposit products offered in each segment.[27] While a consumer can purchase all products from the same bank, consumers often consider different banks for different products. Banks therefore compete at the level of lending and deposit products within a particular market segment. For this reason, it is important to distinguish between different products within a particular market segment in order to assess the level of competitiveness in the Kenyan banking industry.

37. Broadly, we consider four products corresponding to each market segment, two each on the lending and deposits side.

    37.1. On the lending side we consider secured loans, i.e., loans that are backed by assets such as mortgages or vehicle financing, and unsecured loans, i.e. loans that are not backed by any asset, such as overdrafts, credit card loans or term loans.

[26] As of December 2013, lending market shares inclusive of Inter-bank transactions were: 41 per cent for corporates, 18 per cent for SMEs, 28 per cent for personal and 13 per cent for Inter-bank lending. Deposit market share inclusive of Inter-bank transactions were: 40 per cent for corporates, 22 per cent for SMEs, 31 per cent for personal and 8 per cent for Inter-bank deposits. Inter-bank lending as a proportion of total lending varies from 0 per cent to 60 per cent.

[27] Banks usually also offer other products than those related to lending and savings, such as insurance, wealth management advice, etc. These are often not seen as the main banking services and we do not consider them in this report. This approach is in line with market inquiries in other jurisdiction such as the OFT's report on entry barriers in the UK retail banking in 2010.

37.2. On the deposits side, we consider demand deposits, used primarily to make or receive payments, and saving deposits and other term deposits that give consumers a return on the deposit.

38. The above approach follows the Office of Fair Trading (OFT) market inquiry on entry barriers in retail banking.[28] Table 2 provides a description of different products in the personal and SME segments as per the OFT. As the market inquiry by the OFT was specifically for retail banking, the table does not list products in the corporate segment. However, corporate customers would be offered products similar to those offered to the SME segment, the difference being that the loans and deposits would be much larger in the corporate segment.

Table 2: Products offered by banks to various market segments and their description

Product	Description by the OFT
Personal Banking	
(i) Personal Current Account (PCA)	A PCA can be defined as an account for individual consumers, which provides the facility to hold deposits, receive and make payments using cheques, debit cards, Direct Debits and Standing Orders, to use ATMs and to make regular payments. Additionally, PCAs often have overdraft facilities.
(ii) Saving accounts and investment products	Saving accounts differ by whether or not they offer instant access, how often interest is paid, whether there are temporary bonus rates, withdrawal conditions and so on. Firms can also offer fixed rate saving bonds for a fixed term but with no access to the cash during the fixed period.
(iii) Mortgages and secured loans	A secured loan is a form of loan that is backed by an asset belonging to the borrower. The assets will be forfeited to the lender in the event of the borrower defaulting on loan repayments. The most common form of secured lending in the UK is a residential mortgage where the loan is secured on a home. Other forms of secured lending include car loans.
(iv) Credit cards and other forms of unsecured loans	Unsecured lending refers to loans that are made in the absence of collateral. If the borrower defaults, the lender does not have an asset as a security to fall back upon. Lenders generally provide unsecured loans for relatively small expenses such as purchase of computers, holiday expenses or an unexpected expense such as a medical bill. The most common form of unsecured lending is through credit cards.
SME Banking (and Corporate banking)[29]	
(i) Business Current accounts	Business Current Accounts (BCAs) are the equivalent of PCAs for business customers. As with PCAs, the main function is to make and receive payments (what are termed 'money transmission services'). Many BCAs also have overdraft facilities that can provide SMEs with short-term liquidity with funds being repayable on demand. Other features that can be offered with BCAs include debit cards and business advice.
(ii) Saving/deposit accounts	SMEs can use a number of different deposit products. These will differ by minimum and maximum amounts allowed to be deposited and limits on the amount and method of withdrawal. These accounts are not designed to handle day to day transactions but are like saving vehicles and are normally free of service charges.
(iii) Term loans and unsecured lending	Term loans are a form of unsecured lending to SMEs. Unlike overdrafts, term loans are not repayable on demand but instead have an agreed

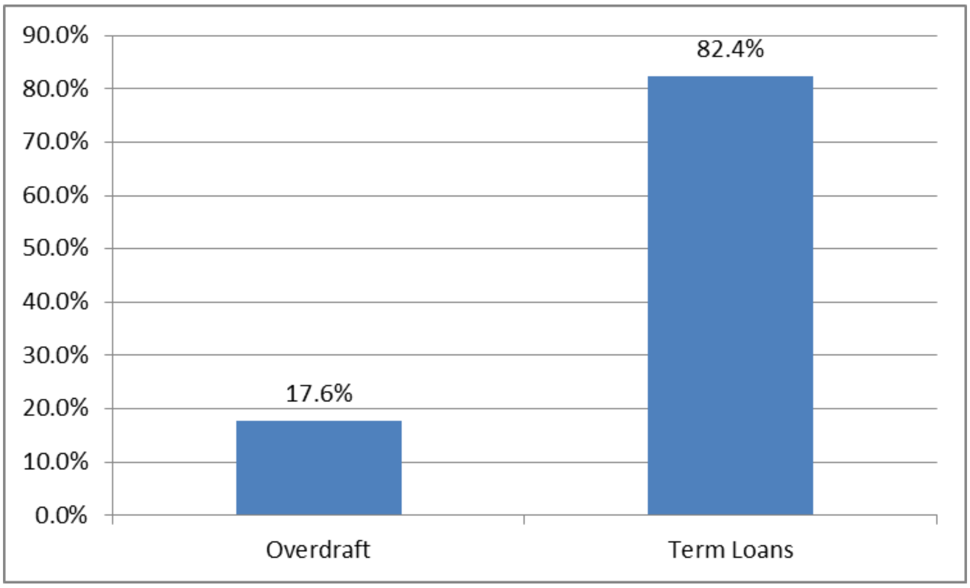
[28] OFT inquiry into barriers to entry, expansion and exit in retail banking. 2010.
[29] The OFT report only considered products for the retail banking. The products listed for SME banking by the OFT would also apply to other business segment, namely the corporate banking.

Product	Description by the OFT
	upon repayment schedule. A term loan is capable of being drawn down, repaid and redrawn at the SME's discretion. Term loans are therefore more flexible, in some respects, than overdrafts and are granted over a fixed term with a rate of interest (either a fixed or variable rate) agreed upon with the SME.
(iv) Secured lending	SMEs can obtain secured lending from providers. SMEs can use these lending sources as alternatives to overdrafts to assist with cashflow. There are a number of types of secured lending available: • Commercial mortgages: This is a mortgage provided to SMEs to purchase property for commercial purposes. • Asset financing: This is form of funding that allows SMEs to obtain funding for the purchase of assets needed to run and grow their business. Asset finance can include finance leases, operating leases and hire purchase, where the SME leases the capital asset and ownership remains with the leasing company. • Factoring: These are services used by SMEs to improve cash flow. Factoring involves the factoring provider purchasing the sales invoices of the SME, at a discount, as they arise in the normal course of trading. In return the factoring provider processes the invoices, administers the SME's sales ledger and allows the SME to draw funds on the amount owed to it. • Invoice discounting: This is an alternative way of drawing money against invoices for SMEs. The bank provides financing to the SME by purchasing its sales invoices but the SME maintains its sales ledger and collects the money from its debtors on behalf of the bank to whom the debts have been assigned.

Source: OFT inquiry into barriers to entry, expansion and exit in retail banking. 2010.

39. We show the share of various products in the banking industry. Figure 3 shows the breakup of total loans by overdrafts and term loans for the 33 banks. As described above, overdraft loans are used to provide short-term liquidity to businesses through their business current accounts. These form 17.6 per cent of total loans. The term loans category captures all other type of secured and unsecured loans described above. These have a specific time period in which they are to be repaid to the bank. These form 82.4 per cent of total loans.

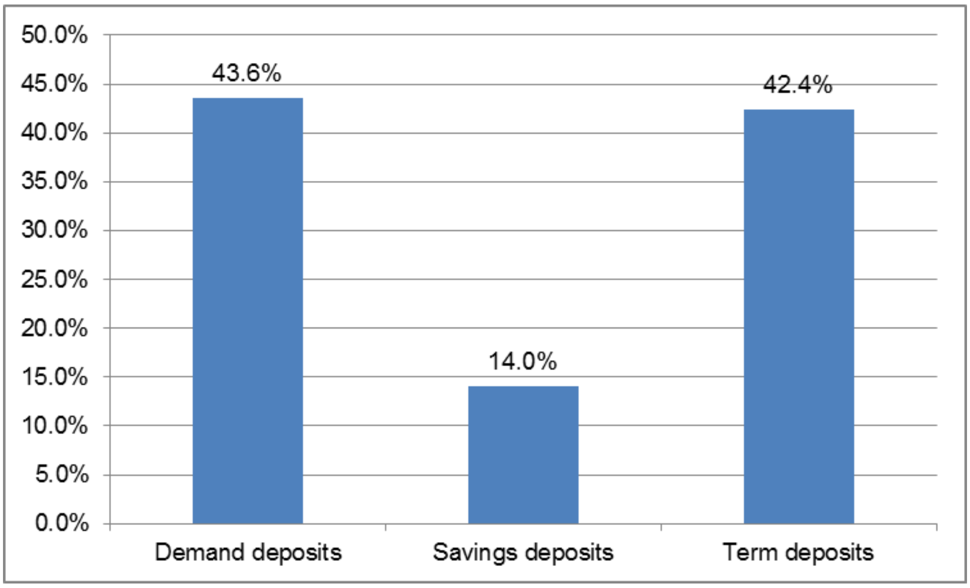
Figure 3: Share of overdrafts and term loans in the Kenya banking industry



Source: CBK; Genesis calculations

40. Similar analysis for deposit products is shown in Figure 4. We show the share of demand, saving and term deposits. The demand deposits include current account and 7-day call deposits and form 43.6 per cent of total deposits. The saving deposits are the deposits made to saving accounts and form 14 per cent of total deposits. The remaining 42.4 per cent are term deposits.

Figure 4: Share of overdrafts and term loans in the Kenya banking industry



Source: CBK; Genesis calculations

41. Thus the following segments will be considered for assessing the market structure in the Kenyan banking industry:

    41.1. Corporate banking

    41.2. SME banking

41.3. Personal banking

42. Further, the following distinct products can be considered within each of these market segments:[30]

    42.1. Demand deposits

    42.2. Saving deposits and other interest bearing deposit instruments

    42.3. Secured lending

    42.4. Unsecured lending

[30] Note that given the data constraints, we do not analyse all the product markets listed.

5. ANALYSIS OF MARKET STRUCTURE

43. This section presents our analysis of the market structure in the Kenyan banking industry. We follow the approach described above to assess the extent and nature of competition in the Kenyan banking industry.

5.1. MARKET CONCENTRATION

44. Competition between banks depends on the number and quality of options that a consumer has when considering a banking product or service. In general, one would expect a greater degree of competition in a market where there are several banks, each having a low market share (i.e., a market with a low level of concentration), than in a market which is concentrated in the hands of a few players. Thus, an important part of this inquiry involves the assessment of the level of concentration in the different banking segments and products described above.

45. A widely used measure of the level of concentration in a market is the Herfindahl-Hirschman Index (HHI). The HHI is calculated as the sum of the squares of the individual market shares of all firms in a market. For example, in a market which consists of a single firm, the HHI would be 10,000[31] while in a market containing a large number of very small firms the HHI would be close to zero. Thus the HHI measure varies from 0 to 10,000, with a higher HHI index reflecting a more concentrated market. The HHI has also been used in other market inquiries to measure concentration.[32]

46. The US Department of Justice (DOJ) and the Federal Trade Commission (FTC) generally classify markets into three types based on their HHI:[33]

    46.1. Unconcentrated markets. HHI below 1500

    46.2. Moderately concentrated markets. HHI between 1500 and 2500

    46.3. Highly concentrated markets. HHI above 2500

47. In this market inquiry we follow the guidelines as set out by the DOJ and FTC in drawing conclusions regarding the level of concentration in a particular market/product segment.

48. Our concentration analysis is primarily based on the loans and deposits data provided in the BSM returns. While the total loans and deposits are available in three tables of the form, we use Table F(New) that reports detailed data disaggregated by segments and tenor of loan or deposit.[34] Our conclusions rely on the data submitted by the banks to CBK, which has been cross-checked, corrected and filled in using the best information that is publicly available.

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[31] Square of the market share of the monopoly firm (100 per cent).
[32] For example, the UK CC market inquiry into the SME sector calculates HHI for several relevant markets, Liquidity management, General purpose business loans, Other lending and Other deposits for England & Wales, Scotland and Northern Ireland. It finds the HHI for Liquidity management to be above 2000, and considers these values to be indicative of relatively concentrated markets.
[33] Available at http://www.justice.gov/atr/public/guidelines/hmg-2010.html. Accessed on 21 June 2014.
[34] Table A reports aggregate loans and deposits as part of the bank's balance sheet. In addition, detailed data on loans and deposits by segments is presented in Table F of the BSM form. We use disaggregated data from Table F in cases where the data is unavailable in Table F(New).

49. For the purpose of this market inquiry, we consider the 42 operational commercial banks and the housing finance company that are licensed by the CBK to be the Kenyan banking industry. The 33 banks listed in Table 3 gave consent to the CBK to share their lending and deposit data, total and by market segment and product, for the purpose of this market inquiry.

Table 3: Banks that gave consent

S. No.	Bank
1	Bank of Africa (K) Ltd
2	Bank of Baroda (K) Ltd
3	Barclays Bank of Kenya Ltd
4	Citibank N.A. Kenya
5	Consolidated Bank of Kenya Ltd
6	Credit Bank Ltd
7	Development Bank of Kenya Ltd
8	Diamond Trust Bank (K) Ltd
9	Dubai Bank Ltd
10	Ecobank Kenya Ltd
11	Equity Bank Ltd
12	Family Bank Ltd
13	Fidelity Commercial Bank Ltd
14	Giro Commercial Bank Ltd
15	Guaranty Trust Bank Ltd
16	Guardian Bank Ltd
17	Gulf African Bank Ltd
18	Habib Bank A.G. Zurich
19	Habib Bank Ltd
20	Housing Finance Co. of Kenya Ltd
21	I&M Bank Ltd
22	Imperial Bank Ltd
23	Jamii Bora Bank Ltd
24	Kenya Commercial Bank Ltd
25	K-Rep Bank Ltd
26	Middle East Bank (K) Ltd
27	National Bank of Kenya Ltd

S. No.	Bank
28	NIC Bank Ltd
29	Oriental Commercial Bank Ltd
30	CFC Stanbic Bank (K) Ltd
31	Standard Chartered Bank (K) Ltd
32	Trans - National Bank Ltd
33	Victoria Commercial Bank Ltd

50. For 8 remaining banks, in Table 4, total deposits and loans have been obtained from their annual reports.[35]

Table 4: Banks for which total deposits and loans were obtained from publically available sources

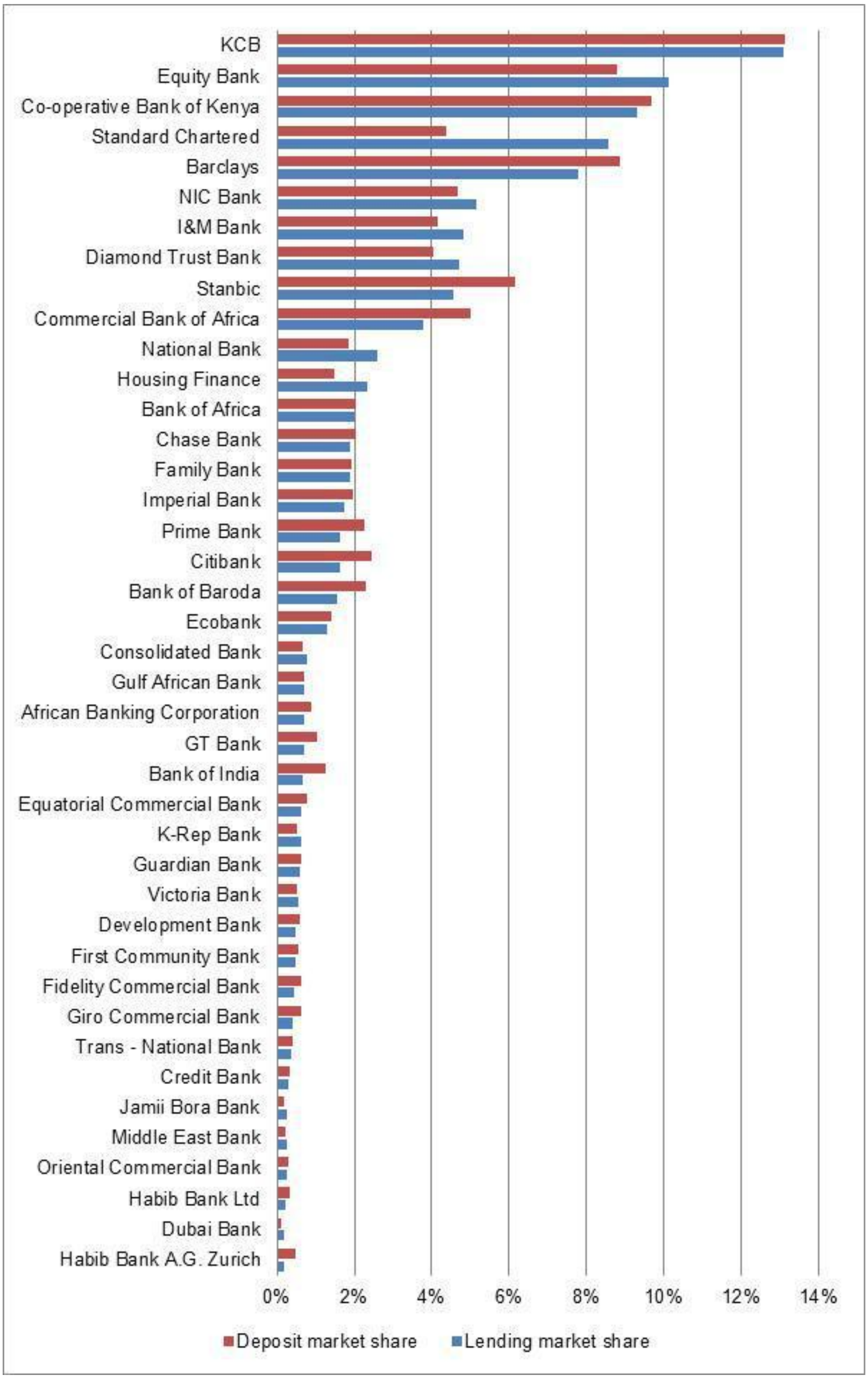
S. No.	Bank
1	African Banking Corporation Ltd
2	Bank of India
3	Chase Bank Ltd
4	Commercial Bank of Africa Ltd
5	Co-operative Bank of Kenya Ltd
6	Equatorial Commercial Bank Ltd
7	First Community Bank Ltd
8	Prime Bank Ltd

51. No data is publicly available for Paramount Universal Bank Ltd and UBA Kenya.

52. The market share of each bank (except Paramount and UBA) in the Kenyan banking industry for 2013 is presented in Appendix B. Figure 5 below graphically depicts these market shares in lending and deposits, excluding inter-bank transactions. The market shares are calculated using total lending and deposits from Table F(New) of the BSM returns for the 33 banks listed earlier[36] and from the financial statements of 8 banks.

[35] The data in annual reports is as of December 2013 except for Bank of India which is as of September 2013 and Chase Bank which is as of December 2012.
[36] However since some relevant information had not been filled in Table (F) new for Dubai Bank, Imperial Bank and Consolidated Bank, the total lending and deposits for Dubai Bank, total lending for Consolidated Bank, and total deposits for Imperial Bank as of December 2013 were taken from Table F of the BSM returns for these banks.

Figure 5: Market share in total lending and deposits



Source: CBK; Bank financial statements; Genesis calculations

Note: Data for Bank of India is as of September 2013 and for Chase Bank which is as of December 2012.

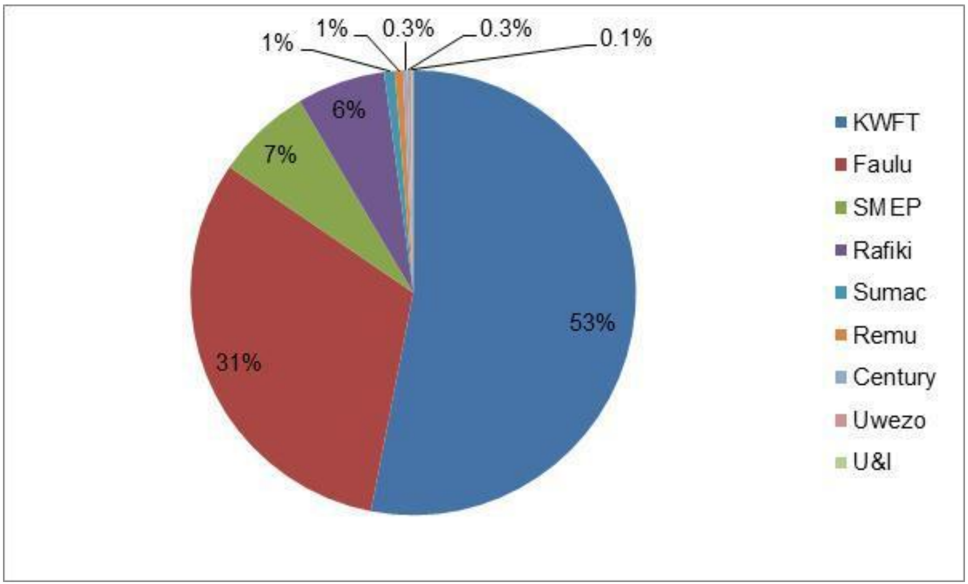
53. As can be seen from Figure 5, KCB had the highest share in deposits as well as in lending (13 per cent in both) as of December 2013. No one bank is dominant in either the lending or the deposit side of the market. Based on the market shares in deposit and

lending, the respective HHIs are 607 and 643 respectively, implying that both overall deposits and overall lending would be classified as unconcentrated per the US guidelines.

54. Commercial banks may also face competition from microfinance institutions, particularly in the retail segment. While all microfinance institutions can offer loans, the CBK has given licences to nine MFBs to accept deposits. These banks may exercise a competitive constraint on commercial banks.

55. Figure 6 shows the market share of MFBs based on the total loans given by them as of December 2013. It shows that the MFB sector is dominated by KWFT and Faulu.

Figure 6: Market share of MFBs based on total loans issued by them



Source: CBK; Genesis calculations

56. We compare the loans and advances given by MFBs to the total loans and advances made by commercial banks. For this purpose, we do not include the loans given by commercial banks to the corporate segment as they are not comparable to the MFB loans in terms of customers or size of loan. Table 5 below shows total loans made by MFBs and loans of commercial banks in the retail segment as of December 2013.

Table 5: Comparison of loans by MFBs and by the commercial banks

Loans	Amount (KSH ‘000)
MFBs	28,148,138
Commercial banks – SME segment	256,732,667
Commercial banks – Personal segment	408,900,632

Source: CBK; Genesis calculations

57. The value of MFB lending is only 4.2 per cent that of the loans given by commercial banks. Thus, the size of the MFB sector is relatively small compared to the commercial banking sector. As a result, while MFBs may exercise a competitive constraint on some of the smaller banks (the total loans advanced by these MFBs as of December 2013 was greater than the total SME and personal loans advanced by the smallest 14 banks for

which we have data)[37], they are not a competitive constraint on the industry as a whole. Thus we will not include them in this analysis and this exclusion will not distort the competitive assessment we seek to undertake.

58. While we see that at an overall level lending and deposits are unconcentrated, analysing concentration at an overall level can be misleading. This is because banks compete at the level of specific market segments and products, and overall levels of concentration are not informative about the level of competition in particular segments. Thus, to get a true picture of the state of competition in the Kenyan banking industry it is important to analyse the level of concentration in different consumer segments and product categories. We present the results of this analysis next.

5.1.1. Concentration in different market segments and products

59. In section 4 we described the various market segments and products in the banking industry. We now look at the level of concentration in the various market segments as well as in the different lending and deposit products within those segments. We will analyse concentration in each market segment (i.e., corporate, SME, and personal) and each product within the market segment. Note that based on the data, the products we can consider are overdrafts and term loans[38] on the lending side and demand deposits, saving deposits and term deposits on the deposit side. The underlying data for these analyses is presented in Appendix B. We are unable to consider secured and unsecured lending as product categories because of data constraints.

60. The following analysis presents results on concentration for each product within each market segment. Product-wise data has been obtained from Table F(New) of the BSM returns for the 33 banks which consented to share data. Note that data on deposits by segment is not available for Imperial Bank and Dubai Bank since the relevant fields in Table F(New) of their BSM returns were empty. Additionally, deposit data for banks is not separated by segment even in Table F of the BSM returns.[39]

61. We also consider data for three additional banks, namely CBA, Co-operative Bank and Chase Bank, in the concentration analysis since product-wise lending and deposit data was publically available for these banks. Including these banks would give us a more accurate picture of the industry. For these three banks we have assumed that their market share for each product market within a segment is the same as their share in the overall product market. Thus our concentration analysis is based on data for 36 banks. While the segment wise analysis does not include the other 5 banks for which total deposits and loans are available, our conclusions regarding concentration will not be affected since these banks are small banks.[40]

62. The analysis considers foreign and local currency transactions together, but excludes inter-bank transactions, while calculating concentration. Note that the analysis relies on each bank's classification of its loans and deposits into one of three market segments,

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[37] Loans advanced by those 14 banks as of December 2013 amounted to KSH 25 billion.
[38] Aggregation of loans of different tenors. Excludes overdrafts and inter-bank lending. Includes both secured and unsecured types lending.
[39] Data for lending obtained from Table F for Dubai Bank and Consolidated Bank is, however, divided into segments and has been used in our analysis.
[40] Theoretically, in markets such as SME overdrafts and personal overdrafts, due to the small size of these markets the concentration level can increase upon including the remaining small banks if these small banks if these segments account for a large proportion of the activity of those banks. However, in practice, this is unlikely.

i.e., corporate, SME, and personal. However the criteria for classifying customers into each market segment varies from bank to bank.[41] Despite this, we believe that the analysis would still be useful to provide evidence on the level of concentration in each market segment.

63. We also analyse concentration in credit card lending, consumer durable loans and mortgages. For the 33 banks which have provided data information on these products is available from their respective BSM returns. For analysing concentration in credit card lending, we take into account publicly available information on the value of such loans for CBA and Co-operative Bank. We also present concentration measures for residential mortgages for all 43 banks using data from the CBK's Bank Supervision Annual Report 2013 to supplement our analysis of concentration in mortgage lending for 33 banks.

64. The following sections present our analysis of the level of concentration in various segments and product categories of the Kenyan banking industry.

5.1.1.1. Corporate banking

65. The corporate banking segment in Kenya deals with large business entities, and customers in this segment are serviced primarily by bank branches in Nairobi and Mombasa. In terms of both lending and deposits, the corporate segment is the largest segment in the Kenyan banking industry.[42] This segment accounted for 47 per cent of all lending and 42 per cent of all deposits as of December 2013.[43] Consequently, a competitive corporate segment is vital to ensure a competitive banking industry.

66. Figure 7 and Figure 8 below show the market shares of different banks based on value of corporate lending and corporate deposits respectively as of December 2013.[44]

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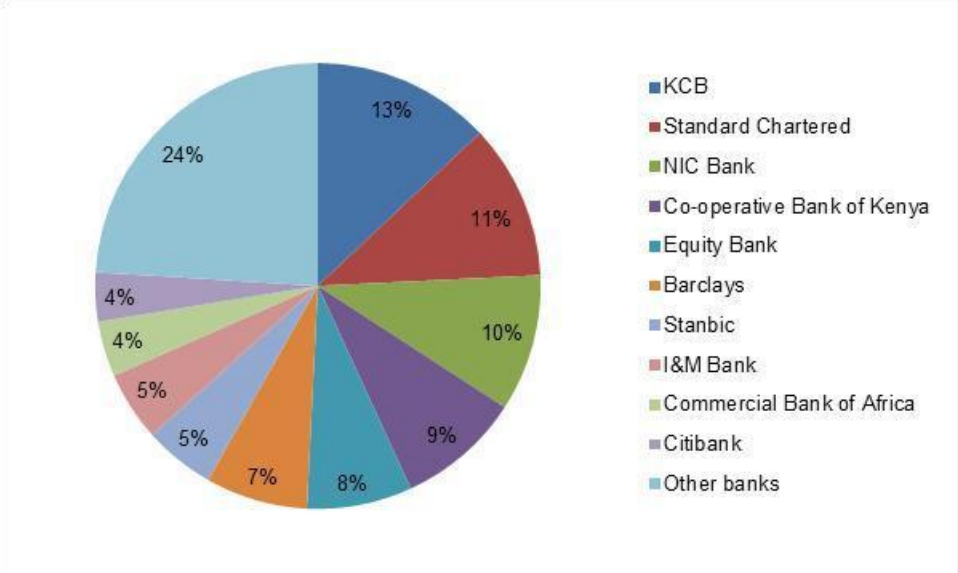
[41] The division between corporate and SME banking is often made by banks in terms of turnover of the business entity such that all entities larger than the turnover threshold are considered as corporates while those below the turnover threshold are considered as SME. Other metrics such as loan size, number of employees, etc. may also be used by banks. The criteria differ between banks such that a large bank may consider a business entity, SME, while a small bank may consider the same entity corporate. The extent of such discrepancies is likely to be less for similarly sized banks. There may also be some issues of classification between SME and personal for microfinance sector. A loan given to microfinance customer may be used for the person's business or for personal use.

[42] Note that, as in the earlier section, we do not consider Inter-bank transactions when calculating the share of market segments.

[43] Calculated for 33 banks for which we have received the BSM returns. The deposit calculations, however, excludes Dubai Bank and Imperial Bank since their deposits by market segment are not available.

[44] As noted, the analysis of corporate concentration is based on banks submission of to the CBK, where varying definitions of corporate segments may have been used by the banks.

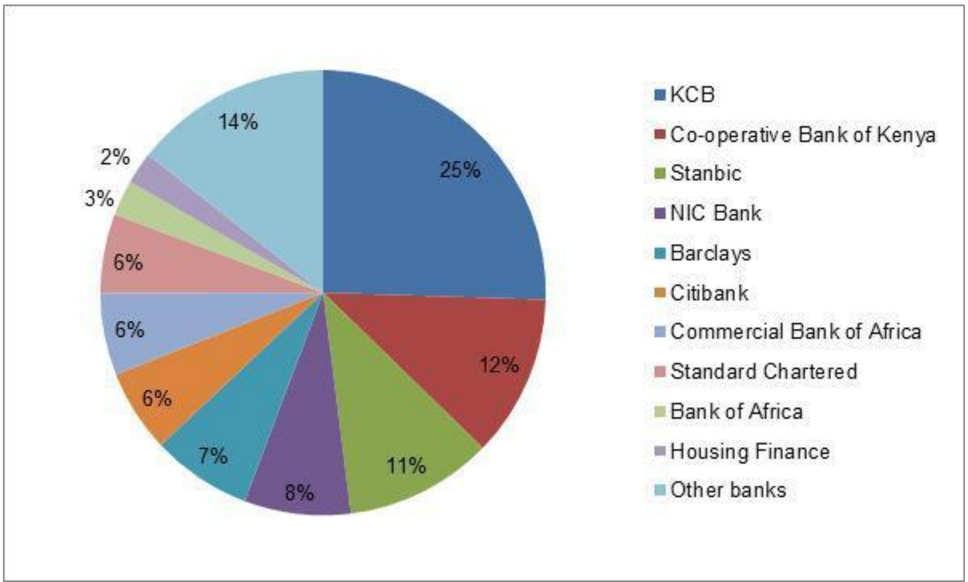
Figure 7: Market share in corporate lending



Source: CBK; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 3 per cent

Figure 8: Market share in corporate deposits



Source: CBK; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 2 per cent

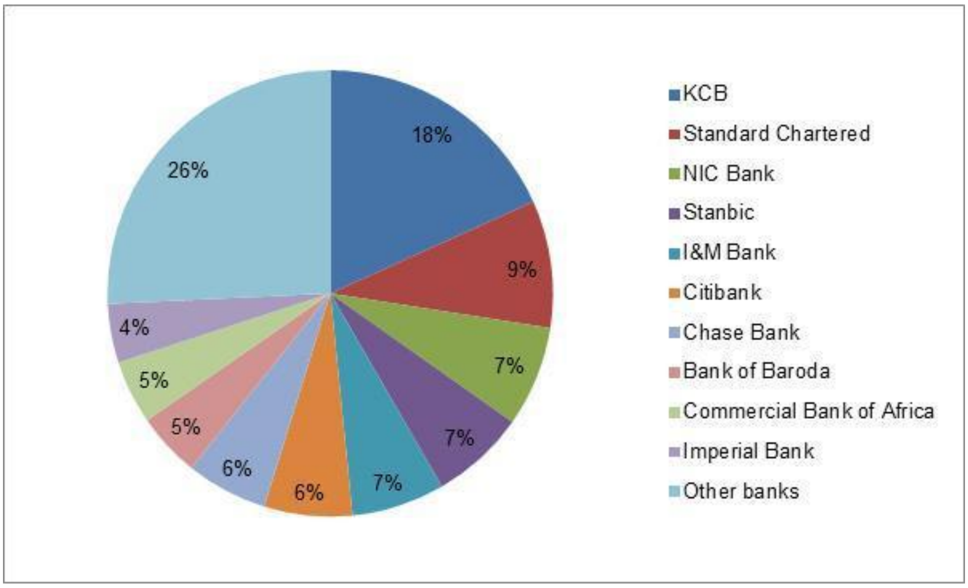
67. As can be seen from the two figures, the corporate segment on the whole has several players for both lending and deposits. The HHI for corporate lending is calculated to be 709, which indicates an unconcentrated market. Similarly corporate deposits are unconcentrated with an HHI of 1149. We next look at the level of concentration in the markets for specific products within the corporate segment.

Concentration in corporate lending products

68. Available data enables us to calculate market share of products within corporate lending - (i) overdrafts (ii) term loans.

69. Overdrafts form 30 per cent of corporate lending[45], and are an important source from which corporates get their working capital. The market share of the different banks within corporate overdrafts is presented in Figure 9 below.

Figure 9: Market share in corporate overdraft lending



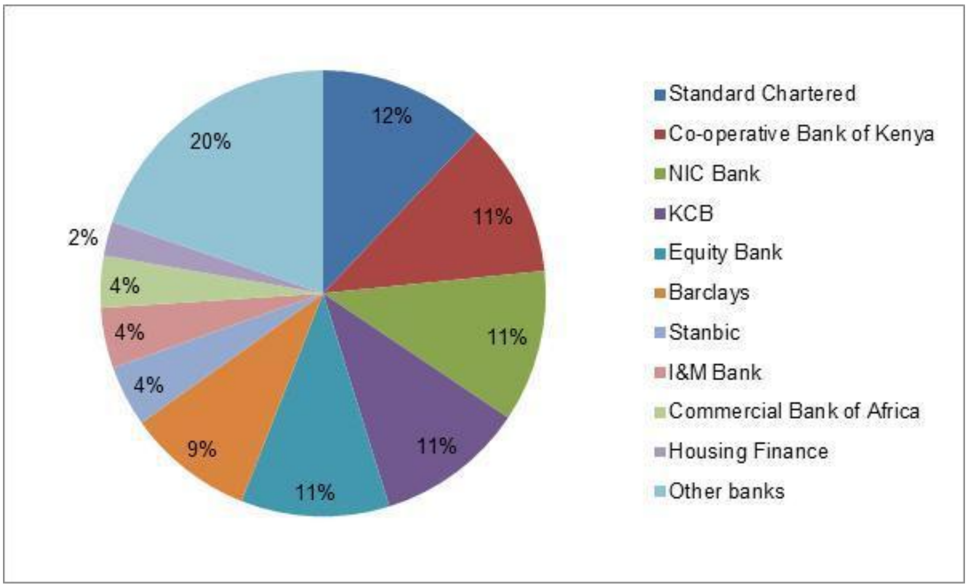
Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 4 per cent

70. The HHI of the corporate overdraft lending is 767, implying that the market for overdraft lending is unconcentrated. This can also be observed from Figure 9 which suggests that the corporate overdraft lending is provided by a number of banks and no one bank seems to dominate.

[45] Calculated for 33 banks for which we have received the BSM returns.

Figure 10: Market share in corporate term loans



Source: CBK; Bank financial statements; Genesis calculations

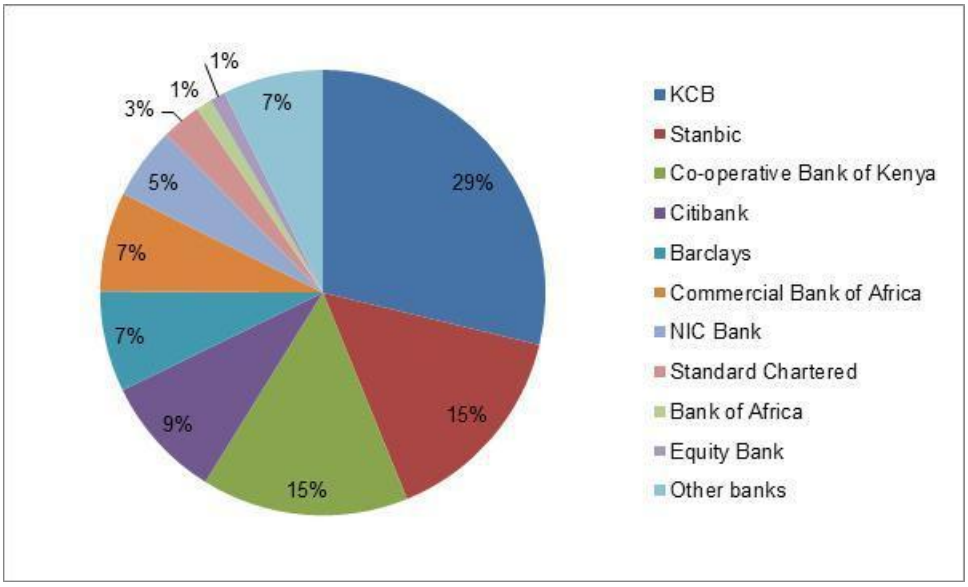
Note: The share of individual banks within 'Other 21 banks' is not greater than 2 per cent

71. Figure 10 above depicts the share of different banks in the market for corporate term loans. In the corporate segment, term loans make up 70 per cent of corporate lending.[46] With an HHI of 797 the market for such loans is unconcentrated.

Concentration in corporate deposit products

72. We similarly assess the level of concentration in the markets for different types of deposit products in the corporate segment (i) demand deposits, (ii) saving deposits, (iii) term deposits[47] as of December 2013.

Figure 11: Market share in corporate demand deposits



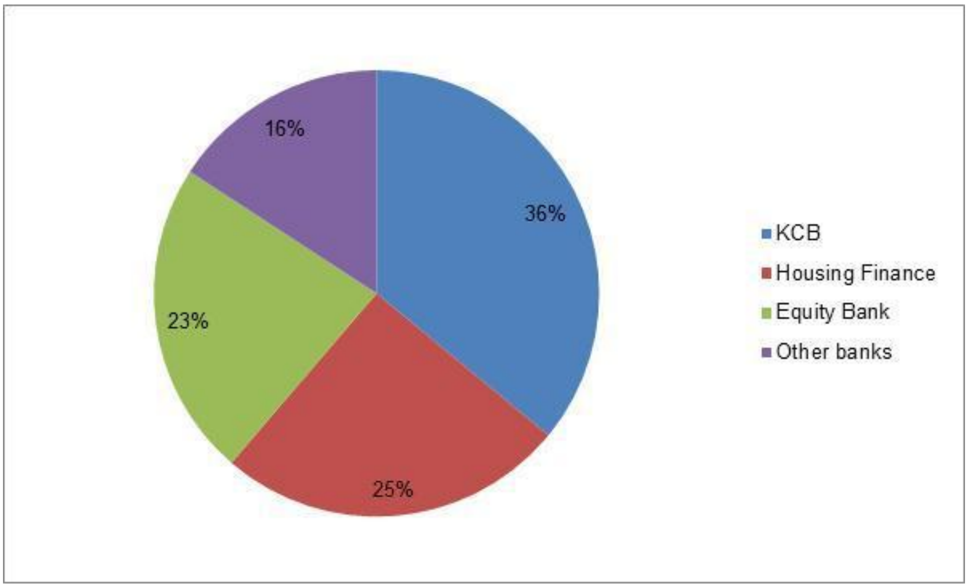
[46] Calculated for the 33 banks for which we received the BSM returns.
[47] Aggregate for deposits of different tenors. Excludes demand, saving deposits and inter-bank.

Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 1 per cent

73. Demand deposits make up 54 per cent of corporate deposits.[48] With an HHI of 1508 the HHI for this product falls in the moderately concentrated category but since the number is just above the cut-off and will likely show as unconcentrated on including the missing banks, we consider it an unconcentrated market. The top four banks in this product category have 68 per cent market share.[49]

Figure 12: Market share in corporate saving deposits



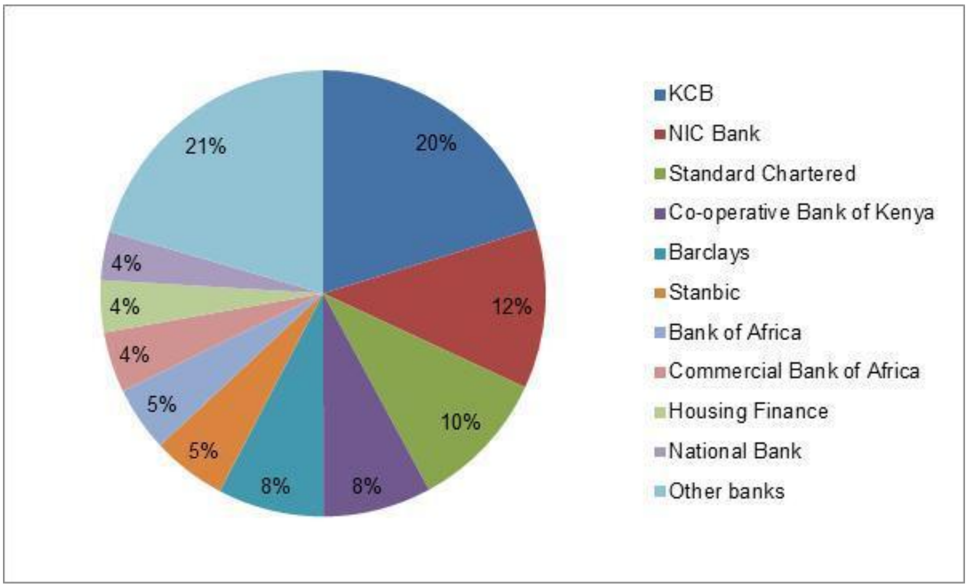
Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 3 per cent

74. Figure 12 displays the share of different banks in corporate saving deposits. This market is moderately concentrated, with an HHI of 2492. The three largest banks have a cumulative market share of 84 per cent. These deposits comprise 3 per cent of corporate deposits.[50]

[48] Calculated for the 33 banks for which we received the BSM returns.
[49] In 2012, the HHI for corporate demand deposits is 1711 and the market share of top four banks is 68.3 per cent. See Appendix C.
[50] Calculated for the 33 banks for which we received the BSM returns.

Figure 13: Market share in corporate term deposits



Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 3 per cent

75. Figure 13 shows the market shares of various banks in corporate term deposits. An HHI of 907 makes this market unconcentrated. These deposits constitute 43 per cent of corporate deposits.[51]

76. Note that KCB's high share in corporate deposits is a result of the fact that it classifies government deposits as corporate deposits. These in turn account for a large share in KCB's corporate deposits.

5.1.1.2. SME banking

77. The SME banking segment includes banking transactions with non-corporate businesses. These can range from relatively large entities, which are similar to those considered in the corporate segment, to fairly small businesses, which may be closer to the clientele of the microfinance sector. The SME segment comprised of 20 per cent of total lending and 24 per cent of total deposits in the Kenyan banking industry as of December 2013.[52]

78. Figure 14 and Figure 15 below depict the market shares of banks in SME lending and deposits respectively as of December 2013.[53]

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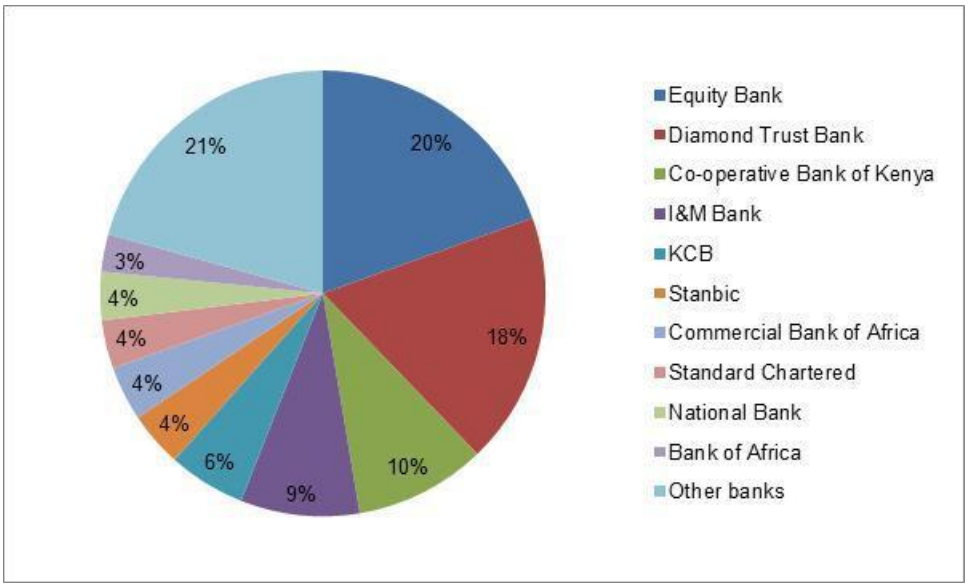
[51] Calculated for the 33 banks for which we received the BSM returns.
[52] Calculated for the 33 banks for which we received the BSM returns.
[53] As also discussed above, the analysis of SME concentration is based on banks submission of to the CBK, where varying definitions of SME segment may have been used by the banks.

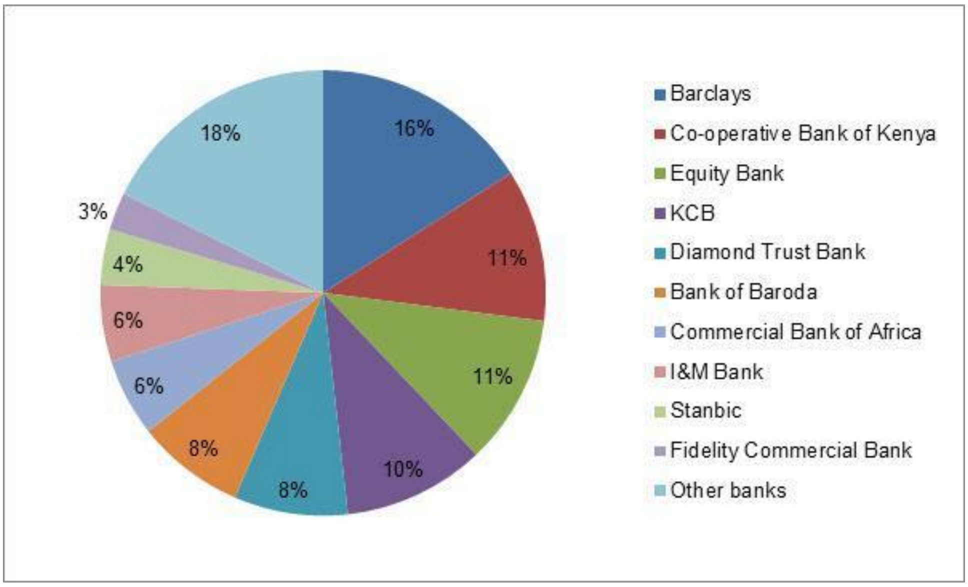
Figure 14: Market share in SME lending



Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 2 per cent

Figure 15: Market share in SME deposits



Source: CBK; Bank financial statements; Genesis calculations

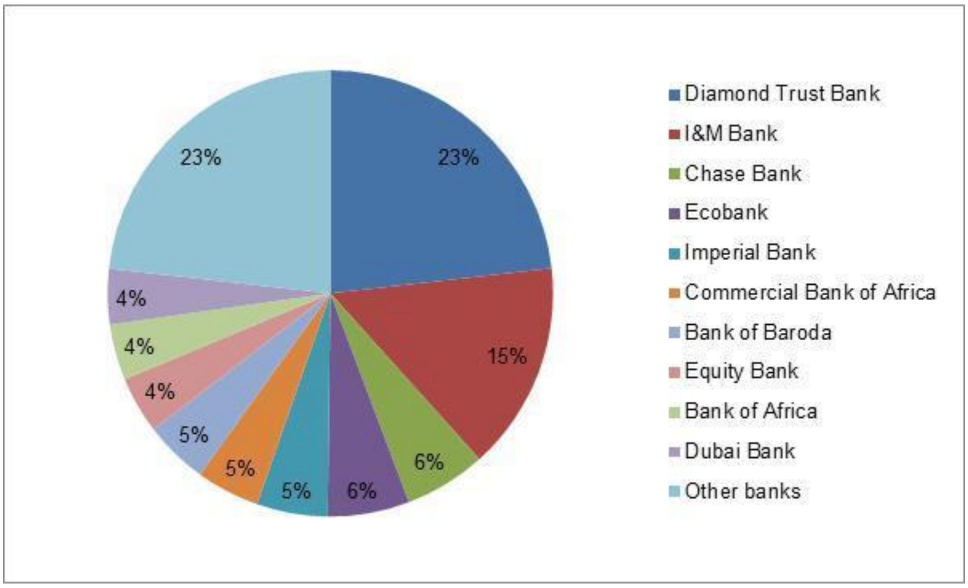
Note: The share of individual banks within 'Other banks' is not greater than 2 per cent

79. The figures show that on an overall basis both lending and deposit markets in the SME segment are fragmented. As of December 2013, the market share of the top four banks was 57 per cent in lending and 48 per cent in deposits. The HHI based on the above market shares is 1006 and 849 for SME lending and deposits respectively, and thus both can be characterised as unconcentrated. We next consider the concentration in different lending and deposit products in the SME segment.

Concentration in SME lending products

80. The products considered for the SME segment are the same ones considered for the corporate segment. We consider the level of concentration in overdraft lending first.

Figure 16: Market share in SME overdraft lending

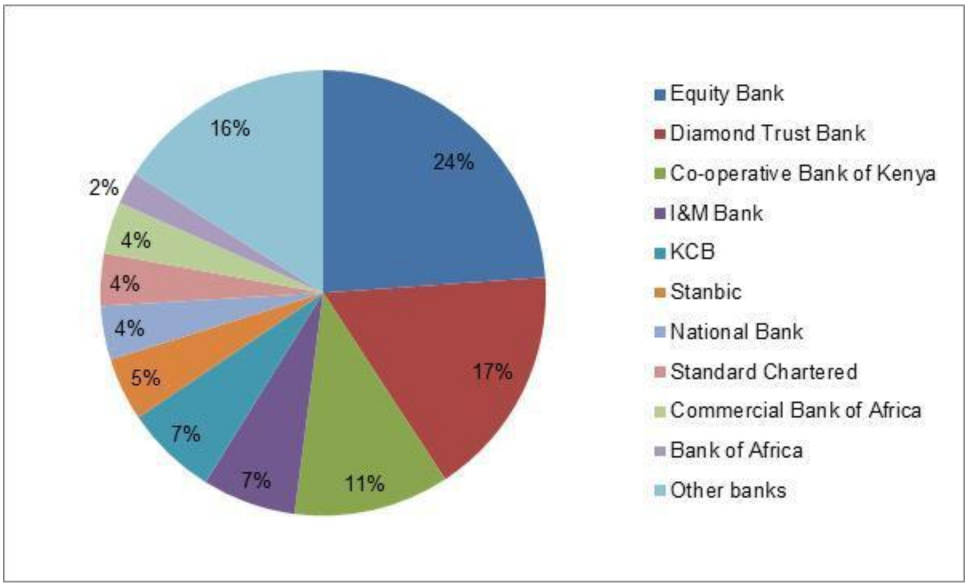


Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 4 per cent

81. The share of the different banks in SME overdraft lending is depicted in Figure 16. Overdraft lending comprises 23 per cent of total SME lending.[54] With an HHI of 1004 this market is unconcentrated.

Figure 17: Market share in SME term loans



Source: CBK; Bank financial statements; Genesis calculations

[54] Calculated for the 33 banks from which we have received the BSM returns.

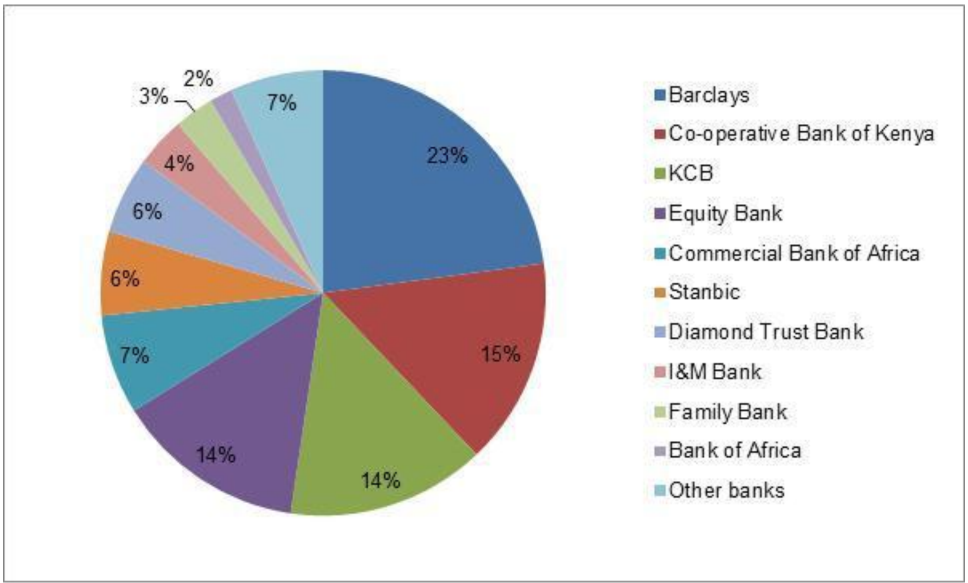
Note: The share of individual banks within 'Other banks' is not greater than 2 per cent

82. Share of different banks in SME term loans is depicted in Figure 17. Such lending comprises 77 per cent of SME lending, and with an HHI of 1164 can be characterised as unconcentrated. The top four banks have a combined market share of 59 per cent.[55]

Concentration in SME deposit products

83. A similar exercise has been done for deposit products within the SME banking segment. The products considered are the same as those considered for the corporate segment. We first consider concentration levels in demand deposits and saving deposits.

Figure 18: Market share in SME demand deposits

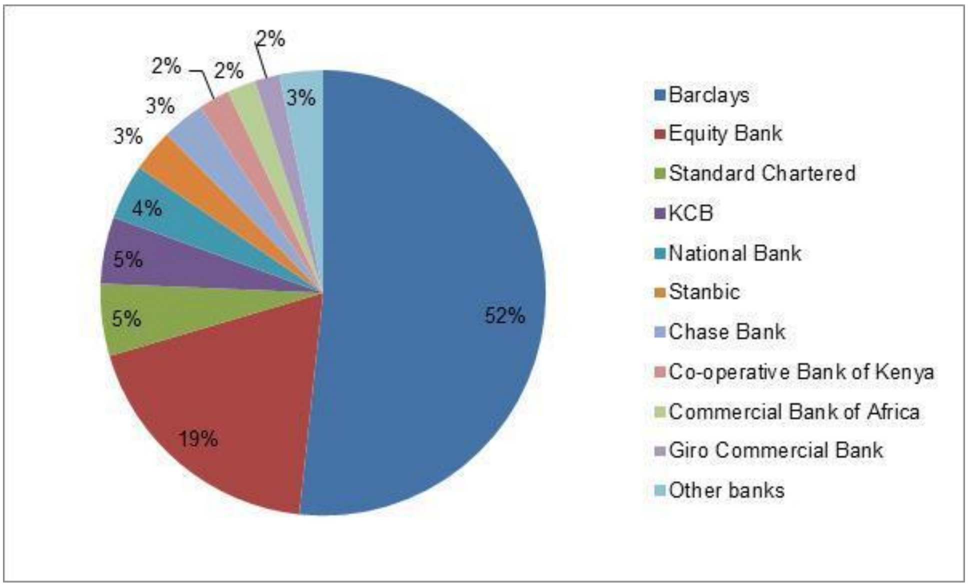


Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 1 per cent

[55] Note that in 2012, the HHI in the SME term loan market is estimated to be 1537 and the market share of top four banks is 46.3 per cent. See Appendix C.

Figure 19: Market share in SME saving deposit



Source: CBK; Bank financial statements; Genesis calculations

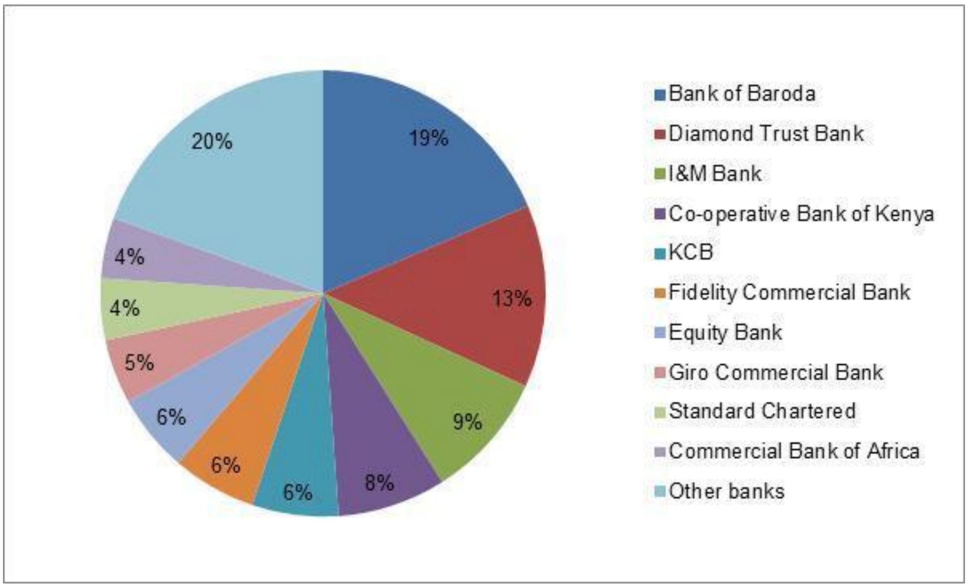
Note: The share of individual banks within 'Other banks' is not greater than 1 per cent

84. Demand deposits make up 48 per cent of SME deposits.[56] Figure 18 above depicts the share of banks in SME demand deposits. We note that while Barclays has more than 20 per cent of the market, banks such as KCB and Equity Bank also have close to 15 per cent of the market. Further, there are a number of other banks that accept demand deposits. With an HHI of 1298, this market can be considered unconcentrated. The top four banks in this category have a market share of 66 per cent.

85. Figure 19 shows the share of different banks in SME saving deposits. Saving deposits account for only 10 per cent of SME deposits.[57] As can be observed, more than half such deposits are with Barclays, and as a result the HHI of this segment is 3125, making it highly concentrated. This result seems highly improbable and is likely the result of some minor difference in the way Barclays has classified items relative to other Banks.

[56] Calculated for the 33 banks for which we have their BSM returns.
[57] Calculated for the 33 banks for which we have their BSM returns.

Figure 20: Market share in SME term deposits



Source: CBK; Bank financial statements; Genesis calculations

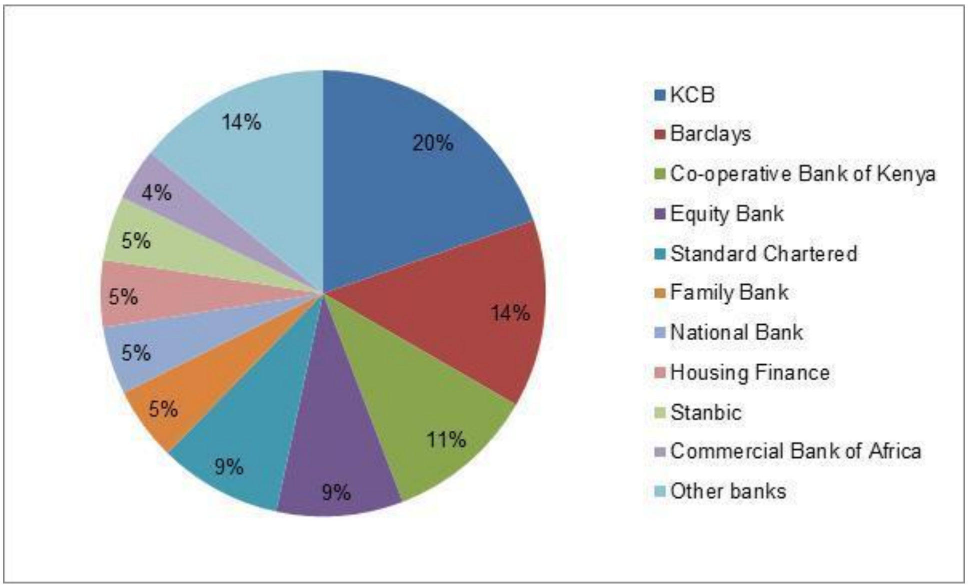
Note: The share of individual banks within 'Other banks' is not greater than 3 per cent

86. Figure 20 above depicts the share of banks in SME term deposits which accounts for 42 per cent of SME deposits. The market for SME term deposits is unconcentrated with an HHI of 882.

5.1.1.3. Personal banking

87. We now analyse concentration in the third market segment, namely personal banking. Figure 21 and Figure 22 below show the market shares of banks in personal lending and deposits as of December 2013.

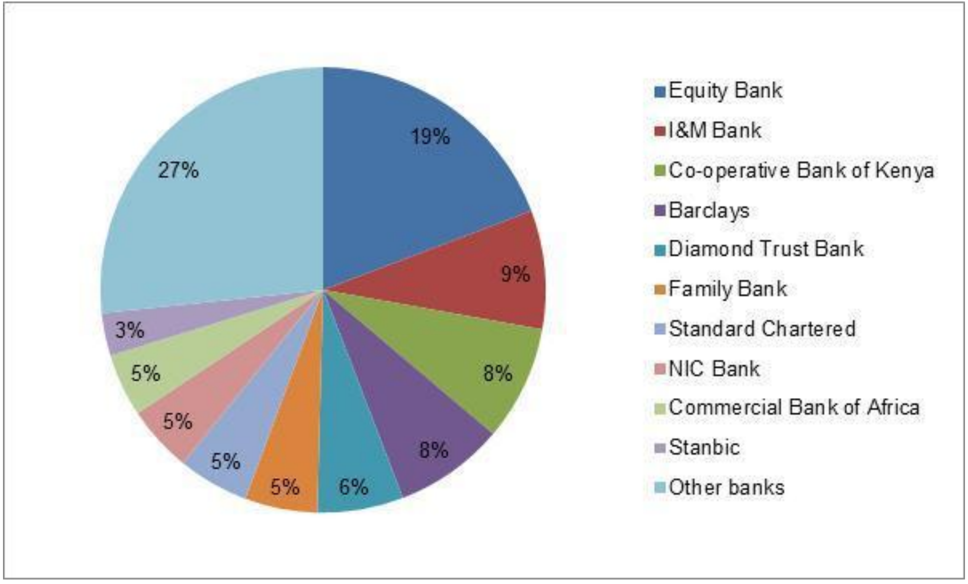
Figure 21: Market share in personal lending



Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 3 per cent

Figure 22: Market share in personal deposits



Source: CBK; Bank financial statements; Genesis calculations

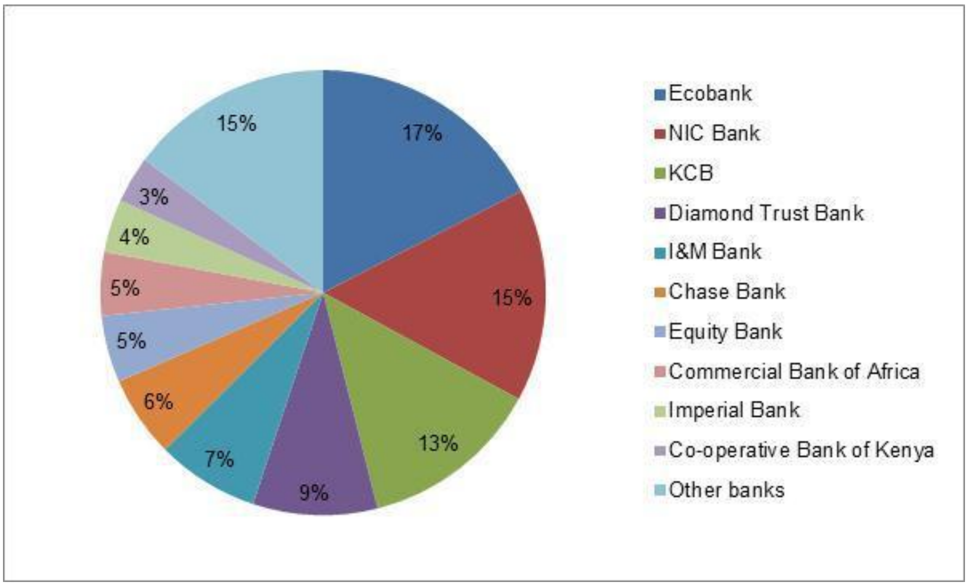
Note: The share of individual banks within 'Other banks' is not greater than 3 per cent

88. The cumulative market share of the top four banks is 54 per cent in lending and 44 per cent in deposits. The HHI is 988 and 770 for lending and deposits respectively, implying that overall personal lending and deposits are unconcentrated.

Concentration in personal lending products

89. Similar to our analysis of lending products for the corporate and SME segments, we now present our analysis of personal lending product categories.

Figure 23: Market share in personal overdrafts

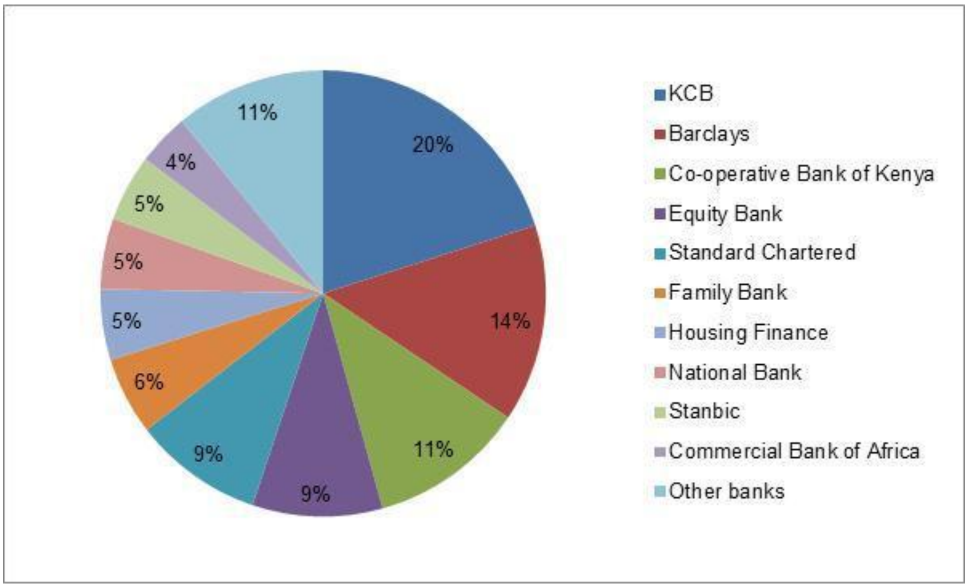


Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 3 per cent

90. Figure 23 above depicts the market share of the different banks in personal overdrafts. Overdrafts comprise 6 per cent of personal lending.[58] With an HHI of 982, personal overdraft lending is unconcentrated.

Figure 24: Market share in personal term loans



Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 2 per cent

91. Figure 24 shows the market share of different banks for personal term loans. Term loans make up 94 per cent of personal lending.[59] With an HHI of 1047 the market for personal term loans is unconcentrated.

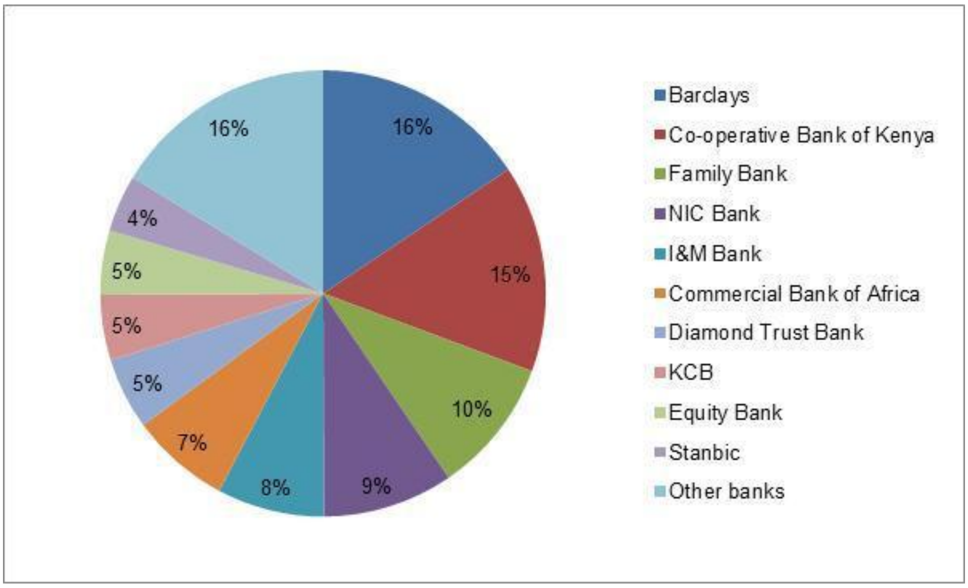
Concentration in personal deposit products

92. Similar to the analysis in prior sections, we now look at concentration in deposit products.

[58] Calculated for the 33 banks for which we have received the BSM returns.

[59] Calculated for the 33 banks for which we have received the BSM returns.

Figure 25: Market share in personal demand deposits

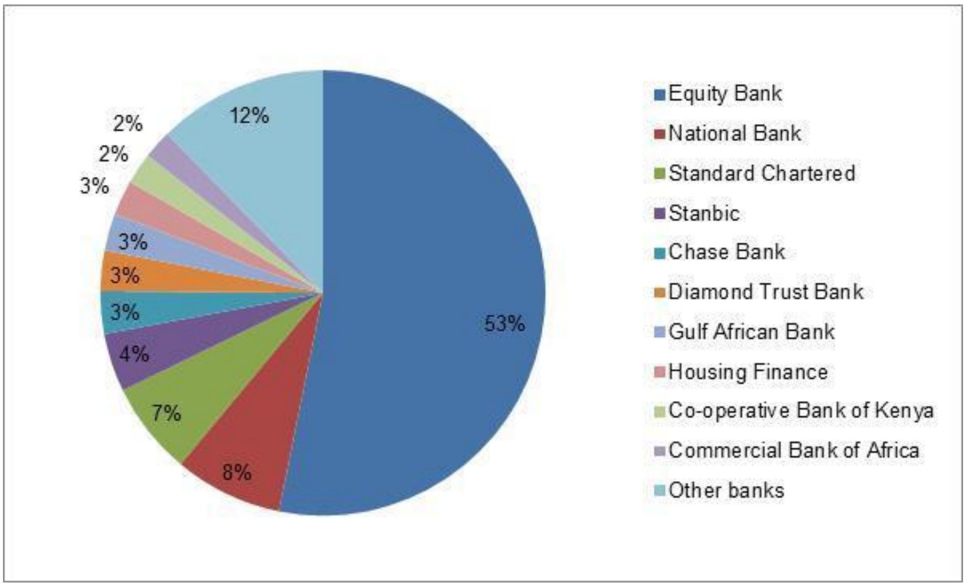


Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 3 per cent

93. Figure 25 above shows the share of various banks in personal demand deposits as of December 2013. With an HHI of 884, this market can be considered as unconcentrated. Demand deposits comprise 26 per cent of personal deposits.[60]

Figure 26: Market share in personal saving deposits



Source: CBK; Bank financial statements; Genesis calculations

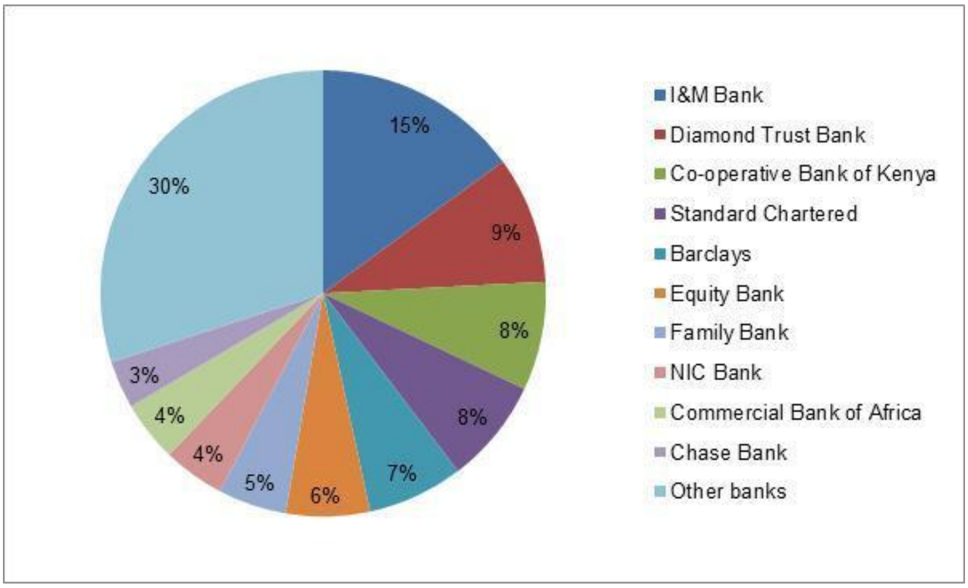
Note: The share of individual banks within 'Other banks' is not greater than 2 per cent

94. Figure 26 above shows the share of different banks in personal saving deposits. Personal saving deposits account for 32 per cent of personal deposits,[61] and this market is highly

[60] Calculated for the 33 banks for which we have received the BSM returns.
[61] Calculated for the 33 banks for which we have received the BSM returns.

concentrated, with an HHI of 3008. Further analysis is required on what this means – it may mean that whereas most of the banks have classified their transactional accounts as demand deposits Equity has classified their transactional product as a saving product.

Figure 27: Market share in personal term deposits



Source: CBK; Bank financial statements; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 3 per cent

95. Term deposits comprise 42 per cent of personal deposits, and with an HHI of 647, this market can be said to be unconcentrated.

5.1.1.4. Some specific lending products

96. For some lending products data was available only on an aggregate basis and not by market segment. These products are (i) mortgage loans, (ii) consumer durable loans and (iii) credit cards. We analyse the concentration in these products in this section.

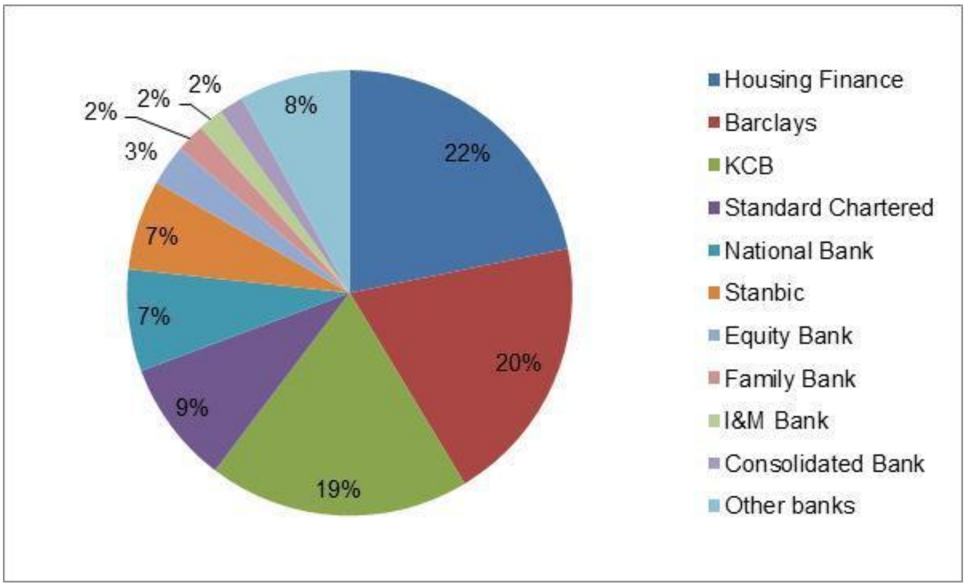
Mortgage loans

97. Mortgage loans are an important category of secured loans for the banking industry. However, banks in Kenya face some challenges in operating in this product market. As this is primarily long term lending, typically for 20 years, the banks would require long-term financing to fund the sector. Often banks in Kenya struggle to attract long-term deposits. As of December 2013, 99.75 per cent of total deposits with the 33 banks for which we have mortgage loans data were for 5 years or less.[62] Other sources of long term funding such as equity or loans by donor agencies also have limited scope. Figure 28 shows the market shares for the banks based on the value of total mortgage loans as of December 2013. The top four banks account for 70 per cent of such loans. It is clear from the figure that the market is characterised by the presence of a number of evenly placed players. With an HHI of 1423, the mortgage loans market is unconcentrated, which will likely reduce further if one considers the other banks active in this market. Mortgage loans

[62] Excluding interbank transactions

for the 33 banks accounted for 13 per cent of their total loans outstanding as of December 2013.

Figure 28: Market share in mortgage loans



Source: CBK; Genesis calculations

Note: The share of individual banks within 'Other banks' is not greater than 1 per cent

98. Another source of mortgage data is CBK's Annual Bank Supervision Report for 2013, which contains information on residential mortgages for each bank. Analysis of that data shows that the residential mortgage market is also unconcentrated with an HHI of 1471.

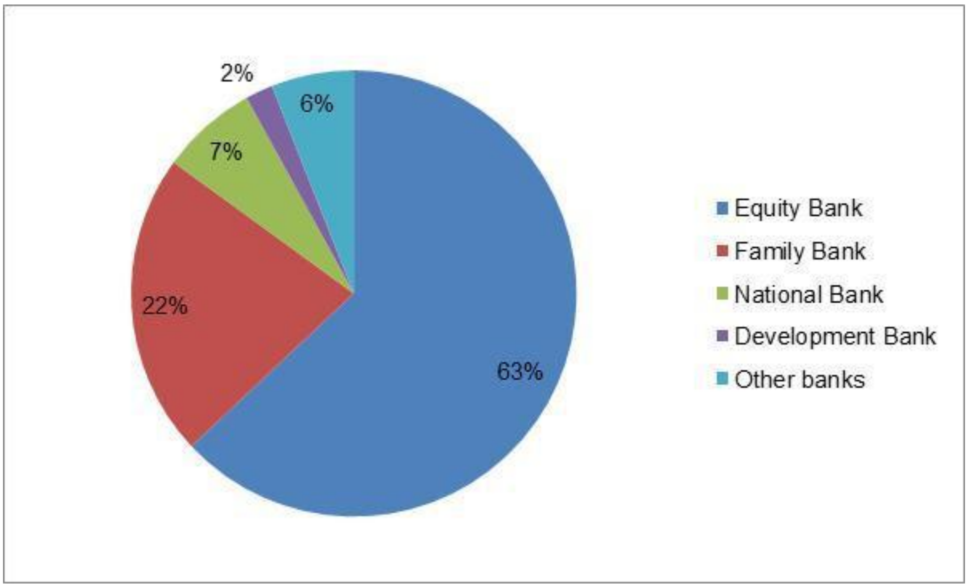
99. Note that while the above analysis is done only for commercial banks, other important sources of competition in the mortgage market are microfinance institutions and SACCOs. Anecdotal evidence suggests that these institutions are active in disbursing mortgage loans in Kenya. While mortgage lending by these institutions together may be a large proportion of total mortgage lending, individually they are likely to be small, further reducing the concentration measure noted above. However, we do not have the data to calculate the HHI after including these institutions.

Consumer durables loans

100. Another important category of loans in the personal banking segment is consumer durables. Figure 29 shows the market shares for banks based on loans and advances given for consumer durables using data for the 33 banks for which we have this data. Consumer durable loans appear to be dominated by Equity Bank, and nearly 85 per cent of the market is served by Equity Bank and Family Bank. With an HHI of 4467, consumer durables is highly concentrated. Consumer durable loans, as a proportion of total loans is 4.3 per cent as of December 2013.[63] Data on consumer durable loans by the remaining 10 banks would be needed to come to a definitive conclusion regarding concentration in this market.

[63] Note the consumer durables in Dubai Bank's December 2013 BSM returns was blank so for calculating market shares and share of consumer durables in total loans we have assumed that consumer durable loans outstanding were the same as in May 2013, i.e. KSH 481,432,000.

Figure 29: Market share in consumer durable loans

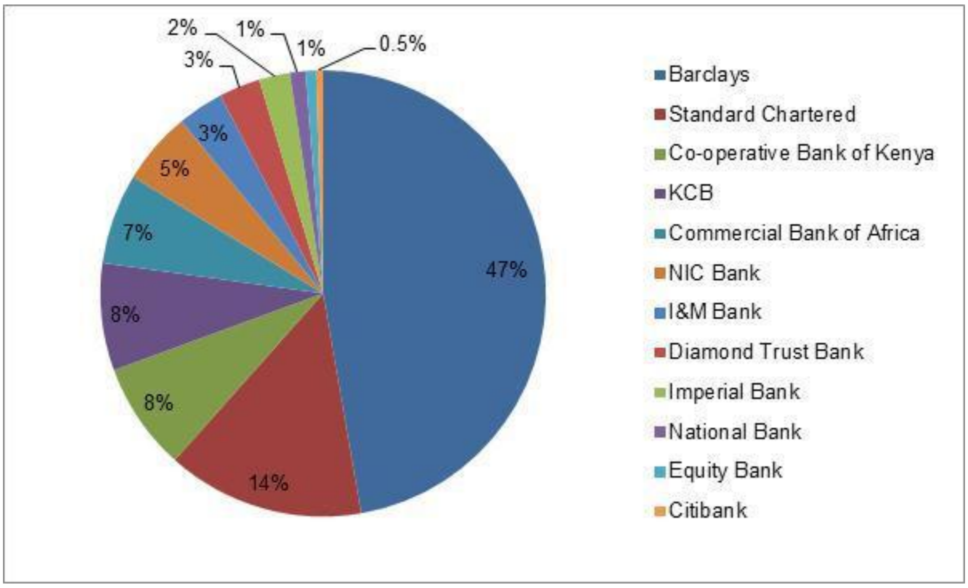


Source: CBK; Genesis calculations

Credit cards

101. Credit cards form 0.4 per cent of total lending. In Figure 30 below, we show the market share based on the total credit card amount utilised as of December 2013. It can be seen that Barclays is the largest player with a market share of 47 per cent. With an HHI of 2658, the market is highly concentrated but as noted above the share of this market is insignificant.

Figure 30: Market share in credit cards amount utilised



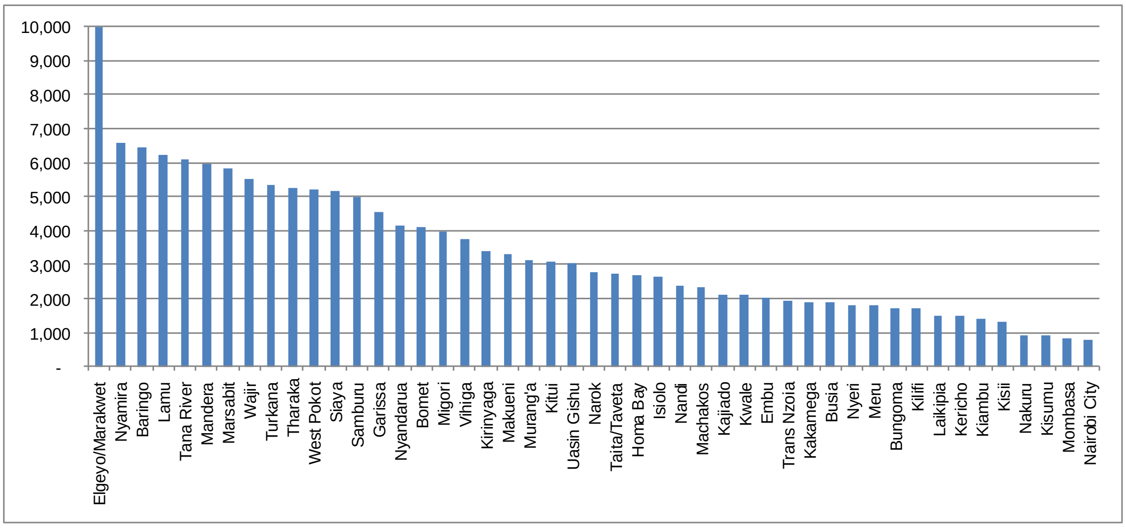
Source: CBK; Bank financial reports; Genesis calculations

5.1.2. Concentration in counties in Kenya

102. While the preceding concentration analysis has been done for entire geography of Kenya, it is also important to analyse concentration levels within the different counties. This is because competition between banks can be local, especially in the SME and personal banking segments. If a particular county has high concentration, then it may a reflect lack of competition between banks in that county.[64] This would be detrimental to consumers as it may not be viable for them to go to banks in another county. Note that because of data constraints this analysis has been done only for overall lending and deposits, the most aggregated categories, for the 33 banks which have given consent.

103. Figure 31 below shows the distribution of Kenya's 47 counties according to the level of HHI in those counties, calculated from market share of banks in overall lending.[65] The HHI ranges from 781 for Nairobi City to 10,000 in Elgeyo/Marakwet. On the basis of lending HHI, only 8 counties can be classified as unconcentrated, while 12 can be classified as moderately concentrated. Bank lending is highly concentrated in 27 counties in Kenya. These 27 counties, however, accounted for only 8 per cent (KSH 101 billion versus a total of KSH 1.2 trillion) of total lending by banks as of December 2013.[66]

Figure 31: Lending HHI by county



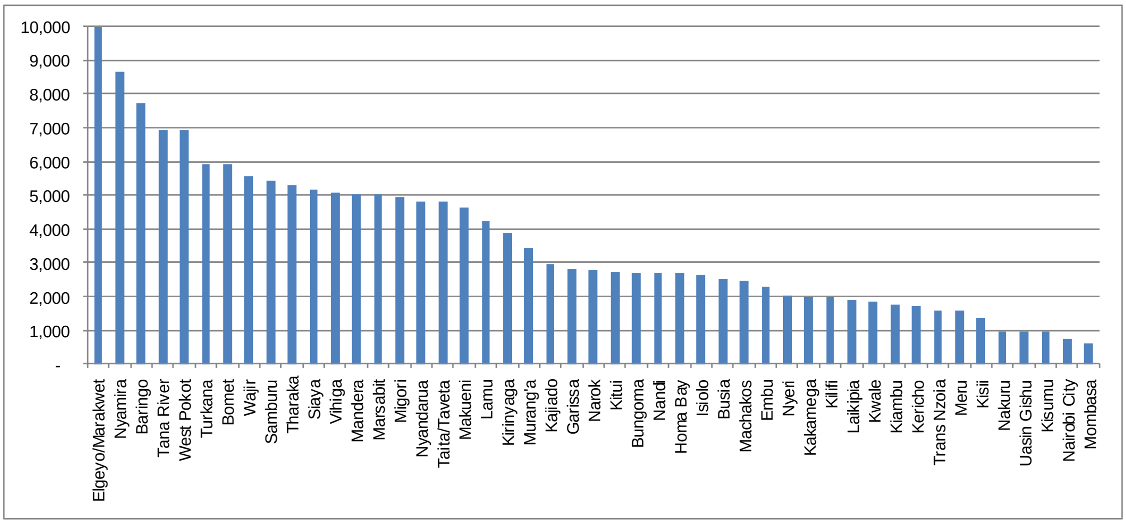
Source: CBK; Genesis calculations

104. Similarly, Figure 32 shows the distribution of counties according to the level of HHI in those counties, calculated from market share of banks based on deposits. The HHI ranges from 611 for Mombasa to 10,000 in Elgeyo/Marakwet. On the basis of HHI, only 6 counties can be classified as unconcentrated, while 11 can be classified as moderately concentrated. Therefore, deposit taking is highly concentrated in 30 counties in Kenya. Of these 30 counties, 26 are also highly concentrated on the lending market side. However,

[64] Note this analysis has been done for 33 banks. As such, all HHI numbers are overestimates and provide an upper bound on the level of concentration in a county.
[65] See Appendix B for the lending as well as deposit market HHI by county.
[66] Moderately concentrated counties had 6.4 per cent of total lending. Unconcentrated counties had 85.6 per cent of total deposits.

deposits in these 30 counties comprised only of 5.3 per cent of total deposits as of December 2013.[67]

Figure 32: Deposit HHI by county



Source: CBK; Genesis calculations

105. It is to be noted that the counties that are most unconcentrated in both lending and deposits, Kisumu, Nairobi City, and Mombasa have among the highest urbanisation rates in Kenya.[68] In contrast, counties with the lowest urbanisation levels such as Tharaka Nithi, Narok, and Pokot are highly concentrated. Therefore there does seem to be a relationship between concentration and the level of urbanisation in the county. However, this relationship is not perfect. For example, counties such as Kisii are unconcentrated despite having a level of urbanisation slightly more than 20 per cent, while counties like Migori are highly concentrated despite being approximately 30 per cent urban.

106. Geographic market concentration depends on the number of banks operating within a county. For example, in the 27 counties where lending is highly concentrated, on average there are 4 banks, while in the remaining 20 counties, on average there are 13 banks. This suggests that limited geographic reach of banks, in terms of the number of counties they are operating in (which depends on the reach of their branch and agency network etc.), is one reason why some counties are highly concentrated. Table 6 shows the number of counties a bank operates in, its total number of branches and sub-branches, agencies, and ATMs for the 33 banks for which we have data in order to illustrate the geographic reach of each. It is clear that KCB, Equity Bank, Barclays have the greatest geographical reach in terms of the number of counties they operate in, while most banks are in fewer than 20 counties.

Table 6: Geographic reach of Kenyan banks in terms of branches and sub-branches, agencies and ATMs

Bank	Number of counties present in	Branches and sub-branches	Agencies	ATMs

[67] Deposits in moderately concentrated county comprised of 8.4 per cent of total deposits. Deposits in unconcentrated counties comprised of 86.2 per cent of total deposits.
[68] http://siteresources.worldbank.org/INTAFRICA/Resources/257994-1335471959878/Kenya_County_Fact_Sheets_Dec2011.pdf

Bank	Number of counties present in	Branches and sub-branches	Agencies	ATMs
Kenya Commercial[69]	46	176	6410	347
Equity Bank	44	160	8149	520
Barclays[70]	36	118	0	225
Family Bank	24	70	670	118
National Bank	24	57	3	109
K-Rep	23	36	0	33
Diamond Trust Bank[71]	17	46	460	37
Standard Chartered	17	37	3	98
Bank of Africa	12	29	0	29
Ecobank[72]	11	25	0	60
Consolidated Bank	11	17	28	18
Transnational Bank	10	16	0	16
Stanbic	9	23	0	41
Jamii Bora Bank	8	21	0	0
Housing Finance	8	14	0	12
NIC	7	26	0	24
Imperial Bank	7	25	0	16
I&M Bank	7	21	0	29
Fina Bank	7	14	0	11
Bank of Baroda	7	10	0	0
Credit Bank	7	10	0	3
Gulf African Bank	5	13	0	8
Oriental Commercial Bank	5	8	0	0
Fidelity Bank	4	10	0	7
Guardian Bank	4	8	0	0
Giro Bank	3	7	0	0
Habib Bank Limited	3	3	0	0
Dubai Bank	2	4	0	0
Habib A.G. Zurich	2	4	0	0
Citibank	2	2	1	0
Middle East Bank	2	3	0	1
Development Bank Limited	1	2	0	0

[69] In addition, KCB has 534 pay-points.
[70] In addition, Barclays has 28 prestige centres.
[71] In addition, DTB has 1 pay-point.
[72] In addition, Ecobank has 1 pay-point.

Bank	Number of counties present in	Branches and sub-branches	Agencies	ATMs
Victoria Bank	1	2	0	0

Source: CBK

5.1.3. Conclusion

107. With 43 banks, the Kenyan banking industry is unconcentrated at an overall level. The preceding analysis has helped us identify product markets of the Kenyan banking industry that are highly concentrated. We find that all the lending side markets (with the exception of credit cards and consumer durables) and most deposit side markets are not concentrated. The deposit side markets that are moderately or highly concentrated (saving deposits for all segments) have a small share in total deposits, with the exception of personal savings.

108. Our analysis has also identified the extent of banking concentration in different counties in Kenya. While we note that a majority of counties are highly concentrated in terms of both lending and deposits, the share of those counties in overall lending and deposits is low. We observe that the high level of concentration seems to occur because of the limited geographic reach of most banks. The next section discusses the potential barriers to entry and expansion, some of which could be resulting in the observed high geographic concentration.

5.2. BARRIERS TO ENTRY AND EXPANSION

109. This section aims to understand the possible entry barriers and the barriers to expansion that may exist in the banking industry in Kenya, or in particular market segments or product categories within this industry. These barriers can arise from either regulatory requirements or characteristics of the products and consumer preferences. We discuss both these factors below.

5.2.1. Entry barriers from regulatory requirements

110. Requirements put in place by the regulator that banks must adhere to can result in entry barriers for new potential entrants and thus decrease competitive pressure on incumbents. Regulation may impose entry barriers through, for instance, the requirement to have a minimum amount of capital at the outset and the requirement to demonstrate fit and proper criteria of solvency, integrity and competence.

111. The OFT in its market inquiry into entry barriers in the retail banking industry considered the following regulatory requirements and processes for analysing barriers to entry: *(i) obtaining authorisation from the FSA to be able to accept deposits and offer mortgages (ii) obtaining a consumer credit licence from the OFT to offer credit to customers, and (iii) ongoing regulatory requirements faced by firms to offer retail banking services, such as capital and liquidity requirements, money laundering regulations and consumer protection*

regulations.[73] Based upon its analysis, and responses of banks, the OFT found that there weren't any significant entry barriers due to the above regulatory requirements.

112. In Kenya, to offer retail banking products a firm typically needs to be authorised by the CBK. This requires:

- obtaining authorisation from the CBK to be able to accept deposits and offer mortgages and
- meeting on-going regulatory requirements faced by firms to offer retail banking services, such as capital and liquidity requirements, money laundering regulations and consumer protection regulations.

113. In order to obtain authorisation, a potential entrant is required to apply for a banking licence. The requirements of a license are, however, not onerous and not likely to be significant barriers to entry. The on-going regulatory requirements such as the capital requirements of KSH 1bn is not particularly onerous, especially given that there are 43 banks in the industry. Further, it is lower or similar to the capital requirements in similar countries as noted in Table 7. Kenya is following a similar Basel regulatory regime as other similar African countries.

Table 7: International comparison of regulatory requirements to run/start-up a bank

Country	Type of bank	Minimum capital requirement (USD)[1]	GDP (USD millions)[2]	Capital requirement relative to GDP (%)	Minimum capital adequacy ratio[2]
Nigeria	International	307.3	522,638	0.06%	15%
	Commercial	153.7	522,638	0.03%	10%
	Regional	61.5	522,638	0.01%	10%
Ghana	Commercial	39.9	47,929	0.08%	10%
South Africa	Commercial	23.2	350,630	0.01%	10%
Kenya	**Commercial**	**11.4**	**44,101**	0.03%	**12%**
Uganda	Commercial	9.5	21,483	0.04%	12%
Tanzania	Commercial	9.0	33,225	0.03%	12%
	Community	1.2	33,225	0.00%	
Botswana	Commercial	0.6	14,788	0.00%	15%

Source: 1) World Bank, 2014, 2) Respective Central Bank websites, 2014

Notes: Capital adequacy ratios exclude any conservation buffers

114. Given this it is unlikely that regulatory requirements can be seen to be overly burdensome on potential entrants, and therefore are unlikely to be considered significantly higher entry barriers into the banking sector in Kenya relative to other markets

115. That the Kenyan regulations do not create a significant entry barrier was also confirmed in interviews with some banks. Further, the ensuing comparison of Kenyan regulations with other countries also confirms that Kenya does not impose particularly stringent conditions on banks.

[73] OFT inquiry into barriers to entry, expansion and exit in retail banking. 2010.

5.2.2. Other barriers to entry and expansion

116. Besides regulations, there can be other barriers to entry in the banking industry. Banking is characterised by economies of scale. Therefore, successful entry hinges on the ability of the entrant to achieve the minimum scale that makes its operations profitable. The barriers for a potential entrant to expand rapidly can thus become an important part of the entry decision. If there are significant barriers to expansion, it is possible that an entrant would not able to achieve the minimum scale of operations, thereby discouraging entry.

117. Barriers to expansion can also reduce the constraint that smaller banks have on large banks. Even if a small bank charges a lower price than a larger bank, if it is unable to expand in order to serve customers of larger bank then the actual competition between large and small banks is reduced.

118. There have been suggestions that there are several constraints on the small and medium banks in competing with the large banks in Kenya. The problem is particularly acute in relation to attracting deposits, as large banks tend to get a large share of the deposits at a low cost.[74] To achieve growth in lending, a bank needs to attract deposits. Similar issues have been voiced by stakeholders in our consultation process. Three factors are important in determining the ability of bank to expand:

    118.1. Branch network

    118.2. Branding

    118.3. Ability of customers to switch banks

119. We discuss each of these factors and how it can create a barrier to expansion for entrants and other small banks. It is important to note that this issue is not unique to Kenya. Regulators in other countries have also identified similar constraints on small banks. For example, while the OFT's market inquiry discussed above did not find entry barriers from regulation, it did find other barriers to enter and expand in the retail banking. In particular, the OFT also considered the three factors listed above in analysing barriers to expansion.

Branch and ATM Network

120. Widespread branch and ATM networks are an important pre-requisite to achieve growth in the retail segment, despite the increasing role of ICT in banking. Establishing a branch network can be a costly and time consuming process and can, therefore, act as a barrier for a bank to expand its business, particularly in the SME and retail segment where potential customers may be in small towns and rural areas.[75] Similarly, it is important for consumers that they are easily able to access an ATM to make payment transactions. From our consultation process, we understand that often small banks can face high costs from having to create a network of ATMs from scratch, due to lack of interoperability in payment systems between large and small banks.[76] There is a large difference in the ATM network of different banks in Kenya, as shown in Table 6. Large banks such as Equity bank, KCB and Barclays have much bigger number of ATMs than smaller banks.

[74] World Bank. 2013. *Reinvigorating growth with a dynamic banking sector.*
[75] Bank interviews.
[76] This has also been observed by other parties, for example see Daily Nation, 19 February 2014, *Committee to probe bank rates a wise move; now demystifying its operations.*

Thus, if there is limited interoperability between these banks and a small bank, while the payment systems among the large banks is interoperable, then this can give the large banks an advantage over small banks. This can also happen if the fee charged by between banks for use of their ATM network is high.

121. The OFT in its market inquiry also found that branch network can be a barrier to expand for certain banks:

"For providers who seek to achieve a large-scale retail banking presence rapidly, an extensive branch network with associated customer base appears to be an essential prerequisite. Without such a network, they will be unable to effectively compete against the major incumbents. In contrast, for those providers who favour a more organic growth path or who choose to focus on a particular consumer segment, the lack of an extensive branch network in the short-term will not necessarily pose a barrier to expansion".

122. In Kenya the regulators have proactively tried to address this through the introduction of Agency banking which significantly reduces the cost of developing a network of branches.

Branding

123. Branding can play a role in enabling expansion in any industry. This is true for the Kenyan banking industry as well. Some banks have indicated that branding is particularly important for attracting deposits as Kenyan consumers are often hesitant to deposit money with smaller and less established banks unless there is a significant differential in the interest rate paid by large and small banks. This could be due to perceived risks of depositing money in smaller banks. This can negatively affect the interest costs of small banks and can create a barrier for the banks to expand. The negative impact of lack of branding can exist in all three market segments.

124. The OFT also found that brand value plays an important role in affecting consumers choices such that consumers are hesitant in switching to an unknown brand. This can be a barrier to expand for smaller banks particularly because they may not be able to make the investments needed to create the level of brand awareness that large banks have.[77]

Ability of customers to switch banks

125. A prominent constraint on expansion for small and medium banks is low switching by account holders. For instance, the OFT review of barriers to entry, expansion and exit in retail banking[78] found that the greatest barrier to entry was convincing holders of personal current account and SME customers to switch their accounts.[79] According to the OFT, the low inclination for clients to switch made it difficult for new entrants to achieve the necessary economies of scale required to cover the initial large fixed costs. The OFT further found that low switching rates may be a barrier to entry in other banking markets owing to the fact that current accounts may be linked to the availability of other products such as loans, and that consumers lack of appetite for switching may not incentivize banks to raise the standard of their services in order to retain their clients. Similar studies in South Africa found that the level of switching between bank accounts was lower for

[77] OFT inquiry into barriers to entry, expansion and exit in retail banking. 2010.
[78] Review of barriers to entry, expansion and exit in retail banking, Office of Fair Trading, November 2010. http://www.publications.parliament.uk/pa/jt201314/jtselect/jtpcbs/27/27v_we20.htm
[79] The research showed that historically switching was slightly higher for mortgages and credit cards.

customers having a large number of debit orders.[80] In fact, banks wishing to enter the market have to provide guarantees to customers that they will manage the cost of moving their debit orders by contacting all the companies that have been granted a debit order by the consumer.

126. Data suggests that in Kenya many customers are multi-banked, and the use of debit orders is not widespread so that the switching constraints noted above are less applicable. Instead a more important constraint to switching accounts is likely to be the linking of the provision of credit to holding a current account with an institution that is providing the credit. Whereas banks can thus compete for the current account, by offering an equivalent loan, early redemption / pre-payment fees can inhibit such switching, as can a slow or complex process of closing a credit facility. Establishing an appropriate code of conduct to ensure that the bank which is losing any facility acts with appropriate speed and diligence, and potentially outlawing early repayment penalty fees are appropriate regulatory interventions. However, further field research to confirm current practices is needed before any such intervention.

127. Another important factor for switching is consumers being able to calculate the price being charged to them and compare the prices charged by different banks. Price competition in the banking market requires consumers to switch to another bank in response to higher deposit rates or lower lending rates, and lower non-interest fees.

128. In Kenya, lack of price transparency in financial products has been an area of concern. Retail customers are often not able to calculate the full cost of borrowing, in terms of interest and fees, because banks do not share full information with the customers. This in turn affects their ability to compare rates and fees of different banks, and switch in response to rate and fee differentials. As a result of reduced switching, there is limited competitive constraint imposed by one bank on another. This can be an entry barrier as a new bank may struggle to attract customers from existing banks. Note that the OFT found in its market inquiry that the rate of switching in retail banking in the UK was low, and noted price transparency as one factor behind low switching rates.[81]

129. This reduced switching due to lack of transparency, however, may not be applicable to corporate customers who are better informed and financially more savvy. We understand that they compare interest rates of different banks and switch in response to small interest differentials. Through the recent changes in the Prudential Guidelines, the CBK has requested banks to publish their total cost of credit, including interest as well as non-interest costs, and this may increase price transparency and thus competition among banks going forward. Banks would need to provide clear details regarding all aspects of a deposit or loan such as the nature of the interest rate, the method of calculating interest, the repayment schedule etc. These changes are discussed in detail in Appendix A. Another on-going initiative of the CBK is the Kenya Banks Reference Rate (KBRR), which was introduced to make the industry more transparent and competitive. The KBRR, which will be the base rate for all commercial banks' lending, is expected to enhance

[80] A Debit Order is an authority granted to a company to debit a customer's account on a monthly basis for a service that has been provided.
[81] The OFT has implemented several measures to improve price transparency to increase switching rates. OFT inquiry into barriers to entry, expansion and exit in retail banking. 2010.

transparency regarding the cost of credit as banks and mortgage finance companies will have to explain any deviation of their lending rate from the KBRR to their borrowers.[82]

130. To conclude, the analysis of barriers to entry has shown that there are insignificant barriers to entry in the Kenyan industry. This is particularly because of relatively lower requirements of minimum capital to enter by the CBK, and is evidenced by a large number of banks existing in the industry. However, there may be barriers to expansion for small banks, particularly in the SME and personal market segments, due to issues such as need for extensive branch network, importance of branding and the lack of price transparency. Potentially, these barriers may reduce competition in the market if it is also concentrated. We would examine these issues in the section 5.4.

5.3. BUYER POWER

131. We now turn to the third factor for assessing market structure, namely buyer power. Buyer power reflects the ability of the buyer to ensure a competitive price. This happens when the buyer can credibly threaten to reduce demand upon an increase in price by either deferring purchase or by turning to an alternative supplier.

132. In the banking industry, the degree of buyer power differs by market segment, as the consumer group in each segment has different characteristics. In the corporate segment, since the value of both loans and deposits are very large, the customers typically have large countervailing buyer power. Our interviews suggest that corporates typically consider 5-6 banks before borrowing or depositing money, and negotiate aggressively to get the best deal. As corporates are likely to be the most sophisticated and informed consumer group, they are also sensitive to all price elements -interest rates and fees.

133. On the other hand, customers in the SME and personal segments are unlikely to have significant buyer power vis-à-vis banks because of their smaller size. Further, our interviews with banks suggest that SMEs and individuals typically do not compare the interest rates between banks before choosing a bank. The important factors for them are easy access to credit and good service.

5.4. CONCLUSIONS ON MARKET STRUCTURE

134. We have analysed the key factors that determine the market structure of the Kenyan banking industry. Based on these factors, we now conclude on the competitive structure of different market segments and products. We first consider the market segments on an overall basis, and then discuss products within these segments. We also present our conclusions on other lending products and overall geographic market concentration.

Market segments

135. Analysis of market structure for the corporate, SME and personal market segments suggests that at an overall level, each of these segments is competitively structured.

136. Table 8 shows the HHI for the lending and deposit markets. This shows that these markets are unconcentrated at an overall level for all the three market segments.

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[82] Central Bank of Kenya. Banking Circular No. 4 of 2014.

Table 8: Concentration summary for market segments

Market segment	Lending	Deposit
Corporate	709	1,149
SME	1,006	849
Personal	988	770

Source: Genesis' Calculations

Note: Green refers to unconcentrated, yellow refers to moderately concentrated and red refers to highly concentrated markets

137. We have also not found any significant barriers to entry for new banks. An analysis of the regulatory environment has confirmed that Kenya does not have strict or onerous regulatory requirements to open a new bank which may prevent entry. This is supported by the fact that the Kenyan banking industry consists of 43 banks and 9 MFBs. Thus, entry of new banks is likely to be determined by the economic factors such as the potential profits.

138. Note that there can be some barriers to expansion for a small bank in Kenya in the form of need for a branch/ATM network and the high cost of doing so, the important role of branding, and the low likelihood of customers switching between banks because of lack of transparency in prices. All of these may create constraints for a small bank to induce customers of large banks to switch, and this barrier to expansion may result in barrier to entry given the economies of scale in the banking industry.

139. While these barriers may be noted by many as a matter of concern for the SME and personal segments of the Kenyan banking industry, the fact that the market segments are unconcentrated indicates that these issues do not appear to be leading to an uncompetitive market structure in these segments. Further, the barriers to expansion may not be insurmountable as shown by Equity bank. It is understood that from being a very small player, Equity bank expanded rapidly by establishing a bigger branch network than most other banks. Currently, Equity bank is one of the largest banks in Kenya.

140. Another aspect to consider is the buyer power to counteract market power of banks, if any, exists. It appears that buyer power may exist in the corporate segment but not in the SME and personal segments. However, since the latter segments are unconcentrated, the lack of buyer power does not appear to be leading to uncompetitive market structures in the SME and personal banking markets.

141. While these results are at an overall market segment level, we have also analysed specific product markets within these segments.

Products markets within market segments

142. Table 9 presents our concentration results for various product markets considered.

Table 9: Concentration summary for products within market segments

Lending products	HHI	Deposit products	HHI
Corporate		**Corporate**	
Overdrafts	767	Demand deposit	1,508
Term loans	797	Saving deposit	2,492
		Term deposits	907
SME		**SME**	
Overdrafts	1,004	Demand deposit	1,298
Term loans	1,164	Saving deposit	3,125
		Term deposits	882
Personal		**Personal**	
Overdrafts	982	Demand deposit	884
Term loans	1,047	Saving deposit	3,008
		Term deposits	647

Source: Genesis' Calculations

Note: Green refers to unconcentrated, yellow refers to moderately concentrated and red refers to highly concentrated markets

143. A concentration analysis of overdraft and term loans shows both lending product markets to be unconcentrated across the three market segments. On the deposit side, a significant amount of deposits in the corporate and SME segment is in the form of demand deposits. The market for demand deposits for all three market segments is unconcentrated with HHIs of 1,508 and 1,298 and 884 respectively.[83] Term deposits are also unconcentrated across the three segments.

144. High concentration is observed in the saving deposits market. The HHI for saving deposits in corporate, SME and personal segment is 2,492, 3,125, and 3,008 respectively. Even though corporate savings are concentrated, the presence of buyer power in the corporate segment diminishes the market power of individual banks making it likely that market outcomes in this category do not reflect market power of banks. Further, note that saving deposits are a significant proportion of total deposits for only the personal segment. In the personal segment saving deposits, Equity Bank has a market share of 53.2 per cent while the next player is National bank with a market share of only 7.9 per cent.

Specific lending products

145. Table 10 shows that mortgage lending is unconcentrated. However, the concentration analysis for consumer durables shows high concentration, with an HHI of 4,467. Equity bank is the market leader in the consumer durables market with a share of 63 per cent. Credit card loans, in terms of loans outstanding, is also concentrated with an HHI of 2,658.

Table 10: Summary of concentration results for specific lending products

[83] Note that technically our results classify the corporate demand deposit market as moderately concentrated, as the HHI at 1508 is just above the threshold of 1500. However it is likely that this number will be below the threshold if data for all other banks were included.

Specific lending products		HHI
Credit cards		2,658
Consumer durable loans		4,467
Mortgage loans		1,423

Source: Genesis' Calculations

Note: Green refers to unconcentrated, yellow refers to moderately concentrated and red refers to highly concentrated markets

146. While the concentration is high for consumer durables, it is unclear if there are any particular barriers in expansion that have resulted in such a scenario. It is possible that the high market share of Equity bank in consumer durables is because of it being an early mover in this category, and their special focus on these products. For example, while Equity bank has a high market share (63 per cent) in consumer durables, its market share for mortgages is only 3 per cent. This could be because Equity bank has focussed on the market for consumer durables lending. Indeed, consumer durables loans constitute around 24 per cent of Equity bank's total loans. It is also to be noted that the lack of competition in these categories is unlikely to significantly affect overall market outcomes as consumer durables loans are only 4.3 per cent of total loans. Similarly, credit card loans are 0.4 per cent of total loans.

147. While the consumer durables and credit card markets are concentrated and there is no countervailing buyer power for these lending products as they are likely to be used by individual consumers, there is no particular barrier to expansion that is likely to exist in these markets.

Geographic markets

148. In terms of geographic market concentration, while it is true that a majority of counties in Kenya are highly concentrated in terms of both lending and deposits, the share of those counties in overall lending and deposits is low. Given data limitation we are unable to analyse if this concentration is true for particular product categories or for all products. The high level of concentration seems to occur because of the limited geographic reach of most banks. Given the economies of scale and the costs associated with expanding branch and ATM network, barriers to expansion are likely to have resulted in the observed geographic market concentration.

149. In conclusion, the market structure of the Kenyan banking industry is largely competitive. The main exception to this is the saving deposits (corporate, SME and personal) categories, where high concentration has been observed. These deposits attract a low rate of interest and therefore can give a cost advantage to banks. In addition on the lending side, markets for credit card and consumer durables are concentrated. However, this may not reflect uncompetitive market structures since there appear to be no apparent barriers to entry in these lending markets. Finally, majority of the counties in Kenya have high levels of concentration but the share of these counties in overall lending and deposits is low.

6. INTEREST SPREAD ANALYSIS

150. Concerns have been voiced in some quarters regarding high lending rates charged by banks in Kenya, and a high interest spread between the lending and deposit rate in the country. Given that there are some segments and product markets where concentration is high, we now analyse the interest rates charged or paid by the banks in Kenya.

6.1. INTERNATIONAL COMPARISON

151. We start with comparing the interest rate spread in Kenya with that in other countries. This is done using the data on interest rate spreads compiled by the World Bank. In this data set, the interest rate spread is calculated as the interest rate charged by banks on loans to private sector customers minus the interest rate paid by commercial or similar banks for demand, term, or saving deposits. According to this data, the interest rate spread in Kenya was 8.2 per cent in 2012.[84] Interest rate spreads in 2012 ranged from -2.8 per cent for Belarus to 49.5 per cent for Madagascar. In terms of relative positions, Kenya had 34th highest spread in 2012. Comparing Kenya to 23 countries in Sub-Saharan Africa region for which data on interest rate spreads was available, we find that Mauritius had the lowest spread at 2.4 per cent, while Madagascar had the highest spread at 49.5 per cent, and the average spread was 11.2 per cent.[85] Of these 23 countries, Kenya had the 10th highest spread in 2012.[86] It is to be noted, however, that the terms and conditions attached to lending and deposits differ by country and this, therefore, limits the comparability of these spreads.

152. While the comparison of Kenya to other countries is helpful for understanding the position of Kenya's banking sector vis-à-vis the banking sector in other countries, the performance of Kenya's banking sector is better evaluated by using a more appropriate benchmark of spreads in countries that are at a similar level of financial development. One reason for the divergence in the interest rate spreads across countries would be the difference in the level of financial sector development. A developed financial sector has lower transaction costs and more efficient resource allocation.[87] As the interest rate spread can be considered as a measure of how efficiently the financial sector acts as an intermediary between borrowers and lenders, one would expect it to be lower in countries that have well-functioning financial sectors relative to countries which do not.[88]

153. We use a standard measure of financial development, the ratio of '*bank deposits to GDP*', to identify countries at a similar level of development to Kenya. As of 2011, Kenya's bank deposits to GDP stood at 42.5 per cent. We consider all countries for which deposits to GDP is between 40 per cent and 45 per cent to be comparable to Kenya. Table 11 presents various measures describing the banking sectors of all such countries, including Kenya.[89] Note that all data, including that for spread, has been taken for 2011 for comparability.

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84 Kenya's spread in 2011 was 9.4 per cent.
85 In 2011, Mauritius had the lowest spread among Sub-Saharan countries at 1.8%, and Madagascar had the highest at 41.9%.
86 Kenya had the 10th highest spread (of 23 countries) in 2011 as well
87 http://data.worldbank.org/about/world-development-indicators-data/financial-sector
88 http://data.worldbank.org/about/world-development-indicators-data/financial-sector
89 In our conversation with KBA officials, we were told that the banking sector in Ghana and Uganda can be considered as similar to that of Kenya's. We therefore note that the spread for Kenya in 2011 (9.4%) was higher than

Table 11: Key banking sector indicators for Kenya and comparable countries

Country	Bank Deposits to GDP (%)	Spread (%)
Honduras	44.1	10.4
Papua New Guinea	43.1	9.9
Bolivia	41.4	9.5
Kenya	**42.5**	**9.4**
Samoa	44.7	7.7
Serbia	41.9	7.4
Algeria	42.4	6.3
Bosnia & Herz.	44.5	4.6
Qatar	44.6	3.7
Hungary	44.8	2.1
Average	**43.4**	**7.1**

Source: World Bank data. Spread data is as of 2014 while Bank Deposit to GDP data is as of November 2014

154. From Table 11 we can see that, as of 2011, Kenya's spread (9.4%) was the 4th highest among these countries.[90] The average spread among these 10 countries stood at 7.1 per cent.

6.2. INTEREST SPREAD ANALYSIS FOR KENYAN BANKS

155. The previous section compared the interest spreads in the Kenyan banking industry to benchmarks spreads from other countries to determine if the Kenyan banking industry as a whole had spreads which were very different. A further issue to be considered is how spreads within Kenya vary across banks or groups of banks. For this we now look in detail at the interest rate regime in the Kenyan banking industry.

156. While the public discourse on interest rates in Kenya has focussed on aggregate spreads, a disaggregated analysis of interest rates is more appropriate to determine if the lending rates are high or the deposit rates are low. However, when performing a disaggregated analysis of interest rates, one cannot simply analyse average deposit rates and average lending rates. One needs to take into account (i) the term structure of the loans and deposits; (ii) the credit risk of the borrowers, as both will affect the interest rates. Further, the credit risk of the banks will also influence the deposit rates. Below we present a discussion of relevant factors to consider for an appropriate interest rate analysis.

Term structure of the loans and deposits

157. A core function of a bank is asset and liability management. In other words, banks accept deposits with the length of maturity (or tenor) of those deposits being determined by market supply of funds; and lend out with the tenor of loans being based upon market demand for funds. A bank will therefore not necessarily be able to match the deposits received against the loans demanded for each tenor. Since the standard banking practice is to take shorter term deposits and lend those funds for longer terms, referred to as

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that of Uganda's (8.8%). Data on spread for Ghana was unavailable. We also note that the ROE for Kenyan banks in 2011 (23.1%) was higher than Ghana's (17.2%) but lower than that of Uganda's (27.1%)

[90] Kenya's spread, at 8.2%, was the 4th highest in 2012 as well.

maturity transformation, a bank's focus is to ensure there are adequate deposits to fund its longer term loans.

158. Due to various financial risks and uncertainties, the interest rate paid/received on deposits/loans will be a function of the instrument tenor. Normally, a shorter tenor will attract lower interest rates and a longer tenor will attract higher interest rates. Individuals will demand a high rate on the longer term deposits they place with banks to compensate for various uncertainties over this time period, such as inflation, the probability of the bank defaulting etc. and for not being able to access their money for a period of time. The bank will also charge lending rates based on similar uncertainties; however as this is the asset side, the probability of the borrower defaulting will be a key determinant of the lending rates.

159. Thus when analysing deposits and lending rates, one must review the rates by tenor, thereby removing the effect of differences in rates caused by maturity transformation.

160. The interest rate spread by tenor and market segment is presented in the table below.

Table 12: Lending – deposit by tenor for the Corporate segment

Corporate segment	Overdraft[91]	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4 average	14.8%	8.2%	7.4%	8.3%	7.9%	9.5%
Other banks average	15.5%	7.7%	8.2%	9.4%	10.7%	10.0%
Number of banks	19	25	25	14	7	5

Source: Genesis' calculations

Top 4 banks are taken as per market share in corporate lending. These are KCB, Standard Chartered Bank, NIC Bank and Equity Bank

Table 13: Lending – deposit by tenor for the SME segment

SME segment	Overdraft	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4 average	16.7%	10.8%	9.2%	8.6%	8.8%	9.6%
Other banks average	18.7%	10.5%	11.4%	11.0%	12.7%	12.6%
Number of banks	18	20	19	12	10	7

Source: Genesis' calculations

Top 4 banks are taken as per market share in SME lending. These are Equity Bank, DTB, I&M Bank, and KCB

Table 14: Lending – deposit by tenor for the Personal segment

Personal segment	Overdraft	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4 average	21.1%	13.2%	11.4%	10.8%	10.0%	10.0%
Other banks average	18.6%	9.9%	9.5%	10.0%	8.2%	9.3%
Number of banks	23	22	23	18	12	9

Source: Genesis' calculations

[91] Overdraft spread for all three tables presented here has been calculated by subtracting the saving deposit rate from the overdraft lending rate.

Top 4 banks are taken as per market share in personal lending. These are KCB, Barclays, Standard Chartered Bank and Equity Bank.

Credit ratings (riskiness) of Borrowers

161. While the above data is illustrative, in order to draw meaningful conclusions on the magnitude of the interest rate spread, one must take into account the riskiness of borrowers. As alluded to earlier, the credit ratings of the borrowers will affect the lending rates; higher lending rates will be charged to high risk borrowers. The credit ratings of the banks will also affect the deposit rates offered by the banks; riskier banks will offer higher deposit rates.

162. We do not currently have data on the credit risk on individual borrowers, or borrower categories, for any bank. Specific credit data on the borrowers would allow us to determine whether the high lending rate of a bank or its interest spread is due to the risk of the underlying borrowers or due to excess profit margins coming from market power. While one can argue that banks are making large profits because their spreads are high, if that is indeed the case, further analysis into the composition and riskiness of their lending portfolio may show high riskiness of borrowers. In this scenario, it is possible that this profit is being driven by lending to risky borrowers, who run a large risk of defaulting and wiping out the expected or actual profits. While the NPL ratio (ratio of non-performing loans to total loans) is a measure correlated with average credit risk, the aggregate NPL ratio may not necessarily present the full picture on the risks faced by a bank. Firstly, while the aggregate NPL for a bank may be low compared to other banks, it may still be giving loans to risky borrowers in particular market segments or for particular products compared to the other banks. Secondly, it is possible that the NPL ratio is low for a bank even though it is lending to risky borrowers, if those loans given to high risk borrowers have not yet turned into non-performing loans.

163. In the absence of credit risk information, one can analyse the lending and deposit rates for Kenyan banks as a spread against the Kenyan yield curve. The yield curve is constructed using published inter-bank rates up to one year and published government bonds rates up to 30 years. The curve effectively reflects the prevailing risk free rate. Therefore the spread between the lending rate and the yield curve would approximate the average credit rating for the borrowers. The spread between the deposit rate and the yield curve would approximate the riskiness of the bank; however, it must be noted that the deposit rate would normally be below the yield curve as the bank would offer a lower deposit rate than the rate it would lend at to its borrowers (which would be on or above the yield curve). A larger deposit to yield curve spread would signify a lower credit risk of the bank. In many instances banks will offer zero rates on its current and demand deposits.

164. One would expect bigger banks to be lending to better quality borrowers, and thus be charging lower lending rates; one would also expect the bigger banks to be offering lower deposit rates as they are a safer credit risk for borrowers.

165. One the other hand, one would expect smaller banks to be charging higher interest rates as they may be lending to “riskier” individuals and offering higher deposit rates as these banks have a lower credit rating than the big banks and must offer higher rates to attract depositors.

166. Due to lack of data, we have not analysed the credit risk of the borrowers for different banks within each market segment and tenor. We can, however, comment on the overall quality of a bank's borrowers by observing the ratio of its non-performing loans to total loans. As of December 2013, this ratio for the top four banks in the Kenyan banking industry (on the basis of value of total loans) i.e., KCB, Equity Bank, Standard Chartered and Barclays on average was 4.6 per cent. The average for the remaining 29 banks for which we have this data was 8.2 per cent, highlighting the fact that bigger banks tend to have better quality borrowers at an aggregate level.

167. The above discussion on tenor and credit risk does not imply that the other operating costs faced by banks are not relevant in determining the lending rate. In the long run, a bank would want to charge an interest rate such that it covers for its operational costs, in addition to a earning a profit margin. This margin would be adjusted by a bank according to the risks noted above but also according to the level of competition it faces. Margins are expected to be lower where competition faced by a bank is intense compared to a situation where the bank does not face any competition. We analyse the margins of Kenyan banks and their profitability in Section 7.

168. Our objective is to assess if banks which have a higher market share are charging a higher lending rate or offering lower deposit rates than other banks, and to assess if so, whether this outcome is being driven by lack of competition. We undertake this analysis for lending and deposit products in the three segments for the 33 banks for which we have interest rate data. The products on the lending side and overdrafts and term loans (split by tenor), and the products on the deposit side are demand deposits, saving deposits and term deposits (split by tenor). We examine the lending rate/deposit rate over the risk free rate for all these markets, and compare average interest rates of the largest four banks by market share in each market to the average interest rates of the other banks. We then tie our observations on interest rates to our observations on market concentration to identify areas of concern in the Kenyan banking industry.

6.2.1. Analysis of lending and deposit rates

169. As explained above, a comparison of overall lending rates and deposit rates across banks which have different profiles of loans and deposits in terms of tenor is not correct. We compare the average interest rates by tenor for the top four banks and other banks in each market.[92] Only local currency transactions are used as it is observed that interest rates for local currency transactions differ significantly from foreign currency transactions and therefore can affect the results. This is also justified as this analysis allows us to find if lending rates are high or deposit rates are low for local transactions. In lending we consider the categories of overdrafts, and loans with tenor 0-3 months, 3-12 months, over 1-2 years, over 2-5 years and over 5 years. In deposits we consider the categories of demand deposits, saving deposits, and deposits with tenor 0-3 months, 3-12 months, over 1-2 years, over 2-5 years and over 5 years. Data on interest rates for 31 banks has been obtained from Table F (New) of CBK's BSM returns; Dubai Bank and Consolidated Bank lending rates have been obtained from Table F instead.

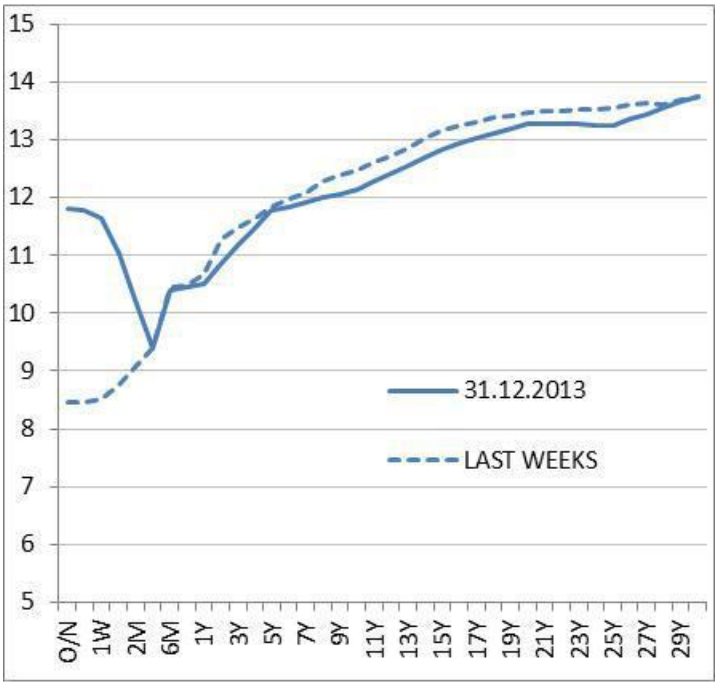
170. To assess market power in the lending and deposit markets, one can analyse the spread of lending rates and deposit rates over the risk-free rate – the lending spread and deposit

[92] When identifying the top 4 banks in the different tenor buckets of term loans and deposits, we consider the overall market share of banks in overall term loans and deposits respectively.

spread. These spreads measure the average risk premium being charged and paid by the banks respectively. If a bank charges greater premium than another bank for borrowers with similar credit risk, this is an indicator of lending rates being too high, all else being equal. Similarly, if a bank is offering a lower risk adjusted rate than other similar banks, this is an indicator of too low deposit rates.

171. We use the yield curve in the Kenyan financial market depicted in Figure 33 to calculate the risk free rate for different tenors (average of o/n and t/n[93], 0-3 months, 3-12 months, 1-2 years, 2-5 years and over 5 years). The information has been sourced from Kenya Commercial Bank and Commercial Bank of Africa. For less than 1 year, the yield curve maps the money market interest rates, obtained from Bloomberg, while for maturities greater than 1 year, the government bond yields supplied by Nairobi Stock Exchange have been used. Bond issues extending up to 30 years were considered.

Figure 33: Yield curve for the Kenyan banking industry in December 2013



Source: KCB and CBA banks: Bloomberg less than 1 year; NSE government bonds greater than 1 year

172. To calculate the lending spread and the deposit spread we subtract the risk free rates for the different tenors from the lending and deposit rates for these tenors. Note that for overdrafts, as well as saving and demand deposits we subtract the average of the o/n t/n rate.

173. We first present the lending spread for the Kenyan banking industry in Table 15. The lending spread has been calculated for each market segment being considered. The spread is lowest in the corporate segment at 5 per cent while the spreads for SME and personal segments both are 8.0 per cent respectively. This reflects the fact that lending to corporate customers has lower risk compared to retail customers. Interestingly, the credit risk appears to fall with greater tenor, which is counterintuitive. This is possible if longer

[93] O/N is the overnight rate while T/N is the interest rate between tomorrow and the next day. Both are short-term interest rates.

tenor loans reflect secured loans like mortgages and therefore have lower risk despite having a longer tenor.

Table 15: Lending spread in the Kenyan banking industry for local currency transactions

	Overdraft /Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years	Overall
Corporate	6%	6%	5%	5%	5%	2%	5%
Business/ SME	10%	8%	9%	7%	7%	5%	8%
Personal	11%	8%	9%	6%	8%	4%	8%
Overall	8%	6%	7%	6%	7%	4%	7%

Source: Genesis' calculations

174. We now present results of tenor wise analysis of lending spread for the corporate, SME and personal segment. Appendix D shows the spread by bank.[94]

174.1. *Corporate.* Table 16 presents the results for the corporate segment. Average lending spread for the top four banks is lower than for other banks in all tenors.

174.2. *SME.* Table 17 shows that the average lending spread is either lower or same for the top four banks as for the other banks in all but one tenor.

174.3. *Personal*. Table 18 shows average lending spreads for the personal segment. The average lending spread for the top four banks in each category is higher than for other banks in all tenor categories.

Table 16: Lending spread in the corporate segment

Lending	Overdraft	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4 average	5.4%	6.7%	5.4%	5.2%	4.2%	1.7%
Other banks average	8.7%	7.3%	6.7%	6.3%	5.7%	3.7%
Number of banks	25	28	28	28	28	26

Source: Genesis' calculations

Table 17: Lending spread in the SME segment

Lending	Overdraft	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4 average	10.0%	**9.5%**	7.0%	5.5%	4.8%	4.3%
Other banks average	11.8%	9.3%	10.0%	9.1%	8.5%	5.7%
Number of banks	26	24	25	26	25	21

Source: Genesis' calculations

[94] Appendix E contains this exercise for 2012.

Table 18: Lending spread in the personal segment

Lending	Overdraft	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4 average	**12.2%**	**11.0%**	**9.4%**	**8.7%**	**7.6%**	**5.1%**
Other banks average	11.1%	8.8%	7.3%	6.0%	5.1%	0.9%
Number of banks	27	25	27	28	29	28

Source: Genesis' calculations

175. The analysis of lending spread shows that, with the exception of the 0-3 month tenor in the SME segment, average spreads for overdraft and term loans are not higher for the top four banks compared to other banks in the corporate and SME segments. However in the personal segment average lending spreads for the top four banks are higher in all categories. Note that these results hold true even when we compare top three or top five banks with the remaining banks.

176. We now present results of tenor wise analysis of the spread of deposit rates over the risk free rate (deposit spread) for the corporate, SME and personal segment. The detailed data on deposit spread for each bank is presented in Appendix D.[95]

176.1. *Corporate.* Table 19 presents the average deposit spread for the corporate segment. We see that in the tenors 0-3 months, 3-12 months and 1-2 years the average deposit rate of the top four banks in term deposits is lower than the average for other banks.[96]

176.2. *SME.* Table 20 shows that in the SME segment the average deposit spread is lower for the top four banks as compared to the average for other banks in all deposit categories.

176.3. *Personal*. Table 21 shows that in personal demand and saving deposits, and personal deposits of over 5 years, the average deposit spread is lower for the top four banks.

Table 19: Deposit spread for corporate segment[97]

Deposit	Demand	Saving	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4 average	-5.0%	-5.2%	**-2.7%**	**-2.7%**	**-5.2%**	-2.7%	-5.7%
Other banks average	-7.1%	-7.1%	0.5%	-1.5%	-2.3%	-6.5%	-5.7%
Number of banks	28	22	27	27	15	8	4

Source: Genesis' calculations

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[95] Appendix E contains this exercise for 2012.
[96] The average of the top 3 in savings, -7.0 per cent, is lower than the average of the others, -6.7 per cent.
[97] The deposit spread was calculated as the difference in the local currency deposit rate (obtained from the BSM form of the banks for each segment) and the risk free rate (as in Appendix D). This was done separately for each tenor. The spreads were then averaged for top 4 and other banks. The spreads are negative since deposit rates are generally lower than the risk free lending rate we calculated.

Table 20: Deposit spread for SME segment

Deposit	Demand	Saving	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4 average	**-8.4%**	**-7.2%**	**-1.1%**	**-1.8%**	**-3.1%**	**-5.3%**	**-7.0%**
Other banks average	-7.5%	-6.5%	-0.6%	-1.6%	-2.6%	-3.0%	-4.2%
Number of banks	26	19	24	22	12	10	6

Source: Genesis' calculations

Table 21: Deposit spread for personal segment

Deposit	Demand	Saving	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4 average	**-8.0%**	**-8.0%**	-0.8%	-2.0%	-2.8%	-3.3%	**-6.9%**
Other banks average	-7.9%	-6.5%	-1.2%	-2.3%	-4.3%	-3.6%	-6.8%
Number of banks	27	27	27	26	19	12	9

Source: Genesis' calculations

177. Average deposit spreads for demand and saving deposits are not lower for the top four banks compared to other banks in the corporate segments, but they are lower in the SME and personal segments. Further, the average deposit spread of the top four banks is lower than the average of other banks for term deposits of specific tenors across market segments.

178. It is to be noted that the preceding analysis has limitations in that factors such as the inherent heterogeneity across banks, which directly influences the deposit rate, and the variation in riskiness of their customers, as well any security applied (e.g. real estate, other assets, etc.), both of which directly influence the underlying lending rate, have not been adjusted for in our comparison. Therefore, at least some of the difference in the rates charged/offered by the top four banks and those charged/offered by the remaining banks is driven by such factors.

6.3. LENDING AND DEPOSIT SPREADS AND CONCENTRATION

179. In the preceding section we noted the particular product categories where the average lending (deposit) spread of the top four banks by market share in that product-segment was observed to be higher (lower) than corresponding spread of other banks.

180. In order to determine whether these outcomes are a result of lack of competition in particular markets, we tie the results of the preceding section to our results on market concentration. In markets where we observe a higher lending spread/lower deposit spread for the bigger banks, but is unconcentrated, it is unlikely that the observed interest rates are a result of a lack of competition. However, in markets where one observes such spreads for the big banks along with a high degree of concentration, it is plausible that lack of competition, among other factors, is resulting in the observed rates. In these cases we will need to isolate the effect of factors such as risk and market concentration on rates in order to determine if there is anticompetitive conduct.

181. Table 22 below illustrates our findings on both, interest spreads and concentration.[98] Note that we have considered term loans/deposits of different tenors together since market share and concentration has been analysed for term loans/deposits as a whole. We see that the markets on the lending side where the average lending spread of the top four banks is higher than the other banks (personal overdrafts and term loans, and SME term loans over the 0-3 month tenor) are unconcentrated. Further, there are instances in corporate, SME, and personal term deposits where the deposit spread of the top four banks on average was lower than that of the other banks, but the corresponding markets are unconcentrated. Similarly, the markets for SME and personal demand deposits are also unconcentrated. Low deposit spreads of the top four banks seen here could be a result of the fact that they are perceived to be safer by customers and hence can attract deposits at a cheaper rate than other banks.

182. We note, however, that there are two markets which are highly concentrated and have an average deposit spread of the top four lower than that of the average deposit spread of other banks. These are SME and personal saving deposits. In these two markets, a high degree of concentration could be driving the below average deposit spreads. However, it is important to remember that this outcome could also be driven by the fact that the top four banks in these cases are banks like Equity Bank, KCB, Standard Chartered etc. which are perceived safer by depositors and can therefore access deposits despite offering lower deposit rates. Therefore, while the high level of concentration could be playing a role, in order to determine the impact of concentration on deposit rates one would need to understand these markets further.

[98] Given the data constraints concentration analysis is based on data for 36 banks (including publically available data for CBA, Co-operative Bank of Kenya, and Chase Bank) while the interest spread analysis is based on data from the BSM form for 33 banks.

Table 22: Summary of spreads and concentration

Market segment	Product	Level of spread of top 4 banks relative to other banks	Concentration level
		Lending	
Corporate	Overdrafts	Below	Unconcentrated
Corporate	Term	Below	Unconcentrated
SME	Overdrafts	Below	Unconcentrated
SME	Term	Above	Unconcentrated
Personal	Overdrafts	Above	Unconcentrated
Personal	Term	Above	Unconcentrated
		Deposit	
Corporate	Demand	Above	Unconcentrated
Corporate	Saving	Above	Moderate
Corporate	Term	Below	Unconcentrated
SME	Demand	Below	Unconcentrated
SME	Saving	Below	High
SME	Term	Below	Unconcentrated
Personal	Demand	Below	Unconcentrated
Personal	Saving	Below	High
Personal	Term	Below	Unconcentrated

Source: Genesis' calculations

7. PROFITABILITY ANALYSIS

183. Profitability is also an indicator of competition between banks. Persistently high profits are often considered to show lack of competition. Within this section we explore the profitability of Kenyan banks using two approaches: (i) financial ratio analysis for Kenyan banks, and (ii) comparison of profitability across different countries.

7.1. FINANCIAL RATIO ANALYSIS FOR KENYAN BANKS

184. Financial ratio analysis is considered to be the industry standard when assessing profitability and conducting a financial statement analysis. Some of the ratios included in such an analysis are:

184.1. Net Interest Income (NII) margin – This is calculated by dividing net interest income (NII) by the total interest earning assets of a bank. It is a measure that reflects net interest earnings relative to the assets that generate this earning. It can also be interpreted as the interest rate earned by a bank minus the interest rate paid out

184.2. Non-interest revenue (NIR) margin – This is defined as the ratio of total fees and commissions earned by a bank to total deposits. This ratio shows the average rate that a bank charges/earns on the average deposit in fees and commissions.

184.3. Operating cost to income ratio – This is obtained by dividing a bank's operating costs to its total revenue. A relatively high ratio shows cost inefficiencies.

184.4. Return on equity (ROE) – This is calculated as the ratio of total profit after tax to shareholders' equity. This ratio gives an indication of the return that shareholders obtain from their capital investment. A relatively high ratio for larger banks is an indication of supernormal returns and potentially an indication towards an uncompetitive market. ROE is one of the most important ratios for assessing profitability and thus it is essential to understand the drivers of this ratio. In this section we will use *DuPont analysis*[99] to decompose the relevant components of ROE and to help identify why certain banks are more profitable than others. The DuPont identity states that ROE is a product of:

184.4.1. Net profit margin – This is defined as profit after tax divided by total revenue. This ratio shows what percentage of revenue is retained as profits by banks.

184.4.2. Total asset turnover – This is defined as total revenue divided by total assets. This ratio shows the revenue generated per asset.

184.4.3. Financial leverage – This is defined as total assets divided by total equity. This ratio shows the extent to which ROE is driven by larger liabilities.

184.5. Mathematically, this can be depicted as:

$$ROE = \frac{Profit\ after\ tax}{Equity} = \frac{Profit\ after\ tax}{Revenue} \times \frac{Revenue}{Assets} \times \frac{Asset}{Equity}$$

[99] http://www.jeffersonholmes.com/Analyse-Profitability.pdf

185. The data to calculate these ratios comes from the *CBK/PR2188001* form, which gives the detailed income statement for banks, and Table A of the BSM form, which gives the balance sheet statement for these banks. Note that we do this analysis only for the banks which gave consent to the CBK to share their data. For the purposes of comparison, banks were ranked according to their asset size and segmented into top four banks and other banks on this basis. Banks with missing data have been omitted from the analysis.[100] The top four banks for this analysis are KCB, Equity Bank, Standard Chartered Bank, and Barclays bank.[101]

186. We begin by analysing NII margins. The NII margin, which is calculated by dividing net interest income by the total interest earning assets of a bank, is a measure that can be used to compare the interest rate margins that banks are actually receiving. A higher margin relative to another bank indicates a higher net income per unit asset. This ratio is also an indication of the average interest a bank makes of its assets after paying its interest expenses. Table 23 below shows NII margin data for the Kenyan banking sector:

Table 23: NII margin for Kenyan banks in 2012 and 2013

	2012	2013
Top 4 banks (A)	9.6%	9.5%
Other banks (B)	6.3%	6.4%
Difference (A – B)	***3.3%***	***3.1%***

Source: CBK

Notes: Ecobank has been excluded from the analysis as the bank is undergoing a restructuring. Individual bank ratios can be found in Appendix F and Appendix G

Top 4 includes KCB, Equity Bank, Standard Chartered and Barclays

187. From the above data it is clear that the top four banks are earning a higher net interest margin than other banks. Two potential explanations exist for this observation; (i) the top four banks have a lower interest expense than the smaller banks or (ii) they are charging higher interest rates on their loans. We can explore this further by comparing the average deposit and lending rates for the banks. The data suggests that higher NII margins for top four banks is primarily being driven by cheaper cost of funding:[102]

187.1. As of December 2013, the average deposit rate offered by the top four banks was 3 per cent, compared to 6 per cent of the other banks.[103] This implies a gap of 3 per cent. Since larger banks are on average paying less interest on their deposits these banks have a cheaper cost of funding. In addition, the top four banks have a higher CASA ratio of 65 per cent versus 40 per cent for other banks.[104] Note that this ratio

[100] Banks excluded are; Co-operative Bank of Kenya Ltd, Commercial Bank of Africa Ltd, Chase Bank Ltd, Prime Bank Ltd, Bank of India, African Banking Corporation Ltd, Equatorial Commercial Bank Ltd, First Community Bank Ltd, Paramount Universal Bank Ltd and UBA Kenya Ltd

[101] For analysing profitability, we used the income statement (*CBK/PR2188001* form) as of December 2012 and December 2013 for banks for which it was available as of that date. For other banks, we extrapolated linearly from the latest profitability statement available to estimate values as of December. This was done for Equity Bank for 2012 whose latest available income statement available was as of November 2012. For 2013, such extrapolation was done for Credit Bank, DTB, Equity Bank, Gulf African Bank and Imperial Bank, whose latest income statement available was as of November 2013, and for Guardian Bank, whose latest income statement available was as of September 2013.

[102] Note that the difference between the average lending and deposit rate would not correspond exactly to the NII margin, as the NII margin is based on all interest-bearing assets, and not just loans. This includes assets such as deposits with the CBK, government and government securities.

[103] The average deposit rate is a simple average of the local currency interest rates offered on deposits by the top 4 banks

[104] Excludes Ecobank. This has been calculated cumulatively for foreign and local currency for all market segments, and excludes interbank transactions.

is calculated by us as the ratio of total demand deposits and saving deposits to total deposits.

187.2. Further, in 2013 the top four banks charged 0.7 per cent more than the other banks on the average loan. Thus, in comparison to deposits, the higher lending rate is expected to contribute only marginally in getting high NII margins. Further, although the top four banks are charging higher interest rates on the average loan, it is not possible to conclude that this is anti-competitive. The risk profile of their borrowers would need to be analysed in relation to the other banks, as riskier borrowers justify a higher lending rate.

188. We now analyse NIR margins. Table 24 below presents the NIR margins. The non-interest revenue includes service charge fee, commission fee, and other income such as income from foreign exchange transactions. From the table below, one can observe that the larger banks are charging more than smaller banks. This is to be expected as they offer more security of deposits, better convenience and reach (in terms of branch and ATM network) and lastly purely due to branding. In addition smaller banks are also considered riskier than the larger banks and thus they would need to charge lower fees and commissions than larger banks to attract deposits.

Table 24: NIR margin for Kenyan banks in 2012 and 2013

	2012	2013
Top 4 banks (A)	5.6%	5.4%
Other banks (B)	3.7%	3.5%
Difference (A – B)	***1.9%***	***1.9%***

Source: CBK; Genesis' Calculations

Notes: Ecobank has been excluded from the analysis as the bank is undergoing a restructuring. Individual bank ratios can be found in Appendix F and Appendix G

189. Even though larger banks may be justified in charging higher fees, one needs to establish if they have a reasonable NIR margin. For this exercise one would need to consider the individual risk profiles of all the banks and determine the respective risk premiums associated with the banks. This would allow us to determine if the difference in NIR margin of larger (more secure) banks and smaller banks is reasonable.

190. Operating cost to income ratio looks at a bank's operating costs relative to its total revenue. A lower ratio implies lower cost incurred per unit revenue earned. In principle, one would expect larger banks to have lower ratios due to economies of scale. However, larger banks also have a larger infrastructure which gives rise to larger operating costs. It must also be noted that economies of scale act as a barrier to entry/growth for smaller firms and thus this ratio is essential in understanding the level of market power in the market. Table 25 below presents these results.

Table 25: Cost to income ratio for Kenyan banks in 2012 and 2013

	2012	2013
Top 4 banks (A)	52.3%	53.3%
Other banks (B)	55.8%	53.5%
Difference (A – B)	***-3.5%***	***-0.3%***

Source: CBK; Genesis' Calculations

Notes: Ecobank has been excluded from the analysis as the bank is undergoing a restructuring. Individual bank ratios can be found in Appendix F and Appendix G

191. In both the years, the top four banks had lower cost to income ratio than the other banks. However, the gap narrowed significantly in 2013. Furthermore, in 2013 larger banks also saw a decline in their costs per branch of KSH 1.2m while smaller banks saw an increase of KSH 2.3m (after excluding Ecobank).

192. Finally we analyse ROE for the Kenyan banks. Table 26 below shows the results for net profit margin and ROE in the Kenyan banking sector.

Table 26: Net profit margin and ROE for Kenyan banks in 2012 and 2013

	Net profit margin		ROE	
	2012	2013	2012	2013
Top 4 banks (A)	33.3%	32.7%	24.5%	22.3%
Other banks (B)	30.0%	32.8%	17%	18.2%
Difference (A – B)	***3.4%***	***-0.1%***	***7.6%***	***4.1%***

Source: CBK; Genesis' Calculations

Notes: Ecobank has been excluded from the analysis as the bank is undergoing a restructuring. Individual bank ratios can be found in Appendix F and Appendix G

193. It is observed that in 2013 the large banks cumulatively saw a decline in profitability while the smaller banks saw an increase in profitability through higher profit margins and higher return to equity. In 2013, small and large banks had similar net profit margins. In fact, all banks in Kenya made a positive profit in 2013 with the exception of Ecobank. In terms of ROE, smaller banks experienced lower returns in 2012 and 2013, however, the gap closed significantly in 2013.

194. Using a DuPont analysis we now decompose ROE into its components to determine the source of the difference in ROE for the top four banks and other banks. In 2013, the top four banks and the other banks both had approximately the same net profit margin which is one of the three drivers of ROE as shown in the table above. Another driver of ROE, financial leverage, was in fact in lower for the top four banks compared to other banks (Table 27). However, the top four banks did have higher asset turnover (larger revenues per unit asset) and this resulted in higher ROE compared to other banks. Higher revenues per unit asset are consistent with the fact that larger banks have greater NII and NIR margins, as noted above.

Table 27: Financial leverage and asset turnover for Kenyan banks in 2012 and 2013

	Financial leverage		Asset turnover	
	2012	2013	2012	2013
Top 4 banks (A)	6.06	5.74	12%	12%
Other banks (B)	6.92	7.02	8%	8%
Difference (A – B)	***(0.86)***	***(1.27)***	***4%***	***4%***

Source: CBK; Genesis' Calculations

Notes: Ecobank has been excluded from the analysis as the bank is undergoing a restructuring. Individual bank ratios can be found in Appendix F and Appendix G

195. The potential reasons for higher revenues per asset, and thus higher ROE, for larger banks, are as follows:

195.1. *Higher CASA ratios.* As previously mentioned, the top four banks have higher CASA ratios thus they have a large source of cheaper funding contributing to greater NII. The top four banks, on average have 65 per cent of their deposits from current or savings accounts, while the corresponding ratio for other banks is only 39 per cent.[105] This confirms that a higher CASA ratio is indeed an important factor for the higher ROE observed for top four Kenyan banks.

195.2. *Higher lending rates.* The analysis done in section 6 shows that the top four banks do not consistently have higher lending rates than other banks for all market segments. Further, since all lending markets are found to be unconcentrated, a difference in lending rates charged by banks is unlikely to be due to market power. An analysis of the risk profile of bank obligors can be done for the segments where the top four banks have higher lending rates to explore this issue further. In any event, the higher lending rates charged by large banks are unlikely to be systematically resulting in higher ROE for these banks. To the extent that they do contribute to higher ROE for any bank, this is not a consequence of lack of competition.

195.3. *Lower deposit rates.* The analysis in section 6 also shows that, in general, the large banks have lower deposit rates than other banks, especially for demand deposits and savings deposits. The need to further investigate the savings market has already been noted. One explanation for the observed differential in deposit rates is the fact that larger banks are likely to be considered safer and customers are more willing to accept lower deposit rates in return for greater security for their deposits. For example, the top four banks have lower deposit rates than other banks in the demand deposits and term deposits markets, even though they are unconcentrated. Thus, while lower deposit rates can explain the higher ROE for large Kenyan banks, this is not a result of lack of competition except potentially in the savings market.

195.4. *Higher fee.* While we do not have the data to analyse this factor in detail, the higher NIR margins do show that the top four banks are able to earn greater fee revenue compared to other banks. This could be because of high fee rates due to perception about greater safety of funds in large banks vis-à-vis the smaller banks, and quality of service. However, this issue needs to be further investigated as higher fee for large banks could also result from inadequate competition.

196. The above analysis shows that the factors that appear to be driving the profitability of large banks are higher CASA ratio, and the fact that they are perceived to be safer than smaller banks by depositors. However, further analysis of the savings deposits market and the fees charged by banks needs to be done to determine if lack of competition could also be responsible for high profitability. Note that while our analysis of profitability is done at an overall level, an analysis of profitability at market segment level (i.e. corporate, SME, personal) would have further shed light on the segments that are more profitable than others. However, this analysis is dependent upon the banks' ability to allocate costs by segments. Further since a large part of these costs are likely to be common, any allocation of these into particular segments may be arbitrary.

197. Based on the preceding analysis one is able to make several observations with regards to the Kenyan banking sector profitability and identify areas for further analysis. Table 28 below summarises the main findings and next steps to assess profitability at a more granular level

[105] For December 2013.

Table 28: Profitability summary

Ratio	Is the ratio more favourable for top 4 banks	Possible reasons	Areas for further analysis
NII margin	Yes	Mainly coming from larger banks having lower average deposit rates. This is due to them having a higher CASA ratio. Also, the large banks have marginally higher average lending rates.	An assessment of the ***risk profile of the bank obligors*** and the ***risk profile of the individual banks*** is recommended to determine if the rates charged by banks' are justified by the risk. An analysis of the savings market is recommended
NIR margin	Yes	Larger banks are less risky than smaller banks, offer better services and offer more reach (ATM and branch)	Individual bank infrastructure costs, service levels and risk profiles should be assessed to determine a reasonable NIR margin that can be charged
Cost to income	No[106]		
Net profit margin	No		Profitability analysis by segment would help understand if larger banks were earning supernormal profits in some segments of the market
Return on equity	Yes	Larger banks earn higher revenues thus allowing them to experience higher ROE. This appears to be a function of the fact that the larger banks have high NII and NIR margins.	A revenue, cost and profitability analysis at a segment (corporate, SME, personal) level for each bank is recommended

Source: Genesis' calculations

7.2. INTERNATIONAL COMPARISON

198. We now employ another standard method of assessing profitability which has been used in several market inquiries. A common methodology used to analyse profitability in general is the return on capital employed (ROCE). This is a ratio of the operating profits of the firm with its capital employed, which consists of equity and long-term debt. The ROCE is then compared with the weighted average cost of capital (WACC), which is calculated by considering the cost of equity as well as cost of debt. WACC represents the return that the firm needs to make to adequately reward its investors. However, in the banking industry, since a majority of debt would come from its customers and not investors, a standard measure of profits for the banking industry is the ROE, which is the ratio of income with the total equity of the bank. This can be compared to the banks' cost of equity. For example, the UK CC in its market inquiry into the SME sector computed the return on equity for each bank. The ROE was compared to a benchmark of the cost of equity by the UK CC. It was found that the largest four banks were making excess profits of £726 million per year on average.[107]

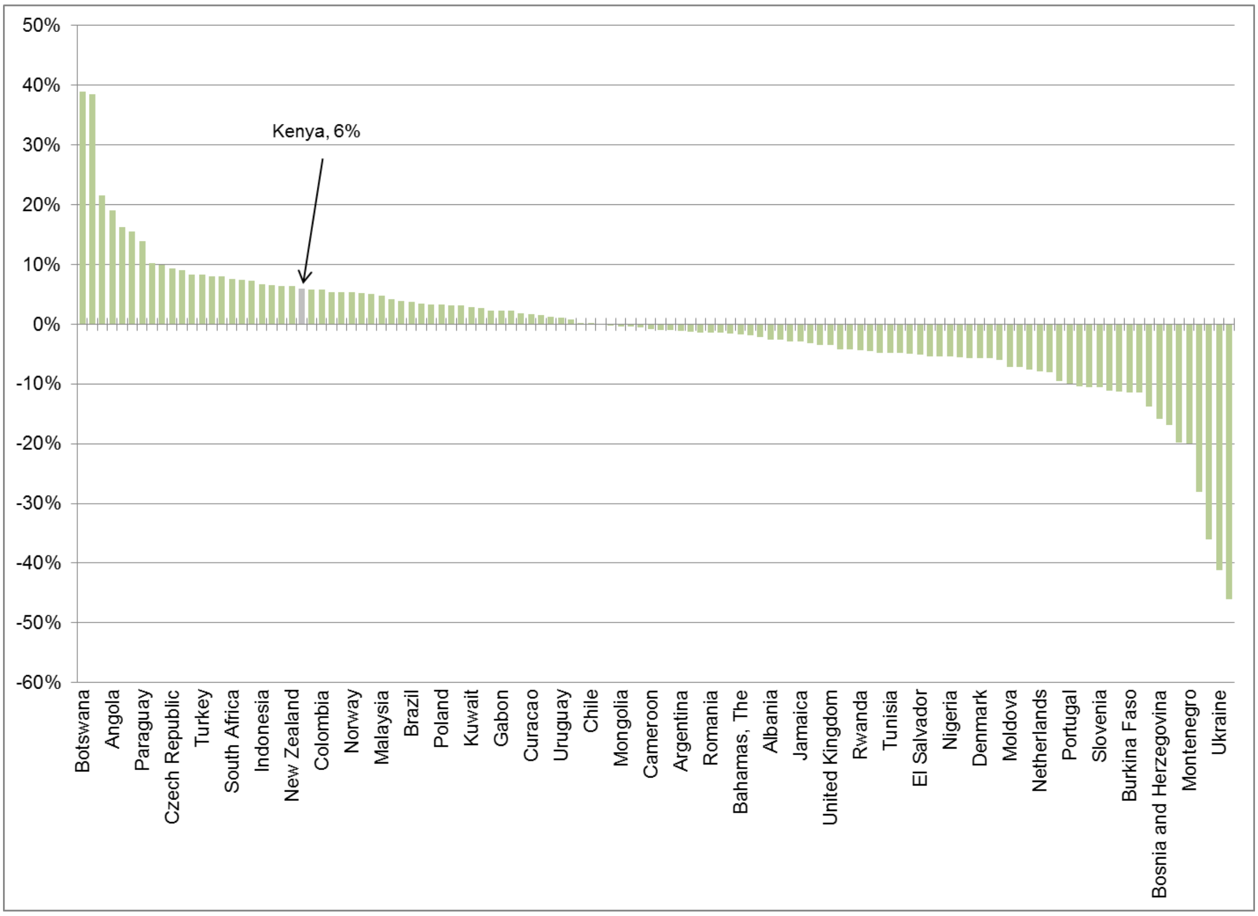
[106] Note that the cost to income ratio for top 4 banks is only marginally lower than the other banks.
[107] UK CC market inquiry into the SME segment. 2002.

199. We calculate the ROE of various banking sectors around the world and compare it to the average cost of equity which we calculate. The difference between the ROE and cost of equity is referred to as excess returns. A banking sector is considered to be more profitable the larger its positive excess returns are.

200. As per most recent World Bank data (2011 data available as of November 2013), the ROE for Kenya was 23.1 per cent. Data for other countries shows that ROE of the banking sector ranged from -54.4 per cent for Cyprus to 39.9 per cent for Botswana. In terms of relative positions, Kenya had the 27th highest ROE in 2011. If one only looked at countries in Sub-Saharan Africa, Nigeria had the lowest ROE at 0.9 per cent, while Botswana had the highest ROE at 39.9 per cent. The average was 19.8 per cent for all these countries taken together. In terms of relative ranking, Kenya had the 13th highest ROE (of 40 countries in the Sub-Saharan region) in 2011.

201. When one considers excess returns, which is defined as *ROE* minus *the cost of equity*,[108] we note that Kenya's banking sector ranks 23rd out of a sample of 117 countries, earning excess returns of 6 per cent. The ROE taken is the average for 2007-11 and the countries considered in this sample had available data for all five years. The figure below shows this sample of countries ranked by their excess returns. One can note that this would place Kenya somewhere in between Ghana and Uganda. Considering Kenya's GDP and income level this ranking does not seem abnormal.

Figure 34: Excess returns for 117 countries



Source: World Bank data 2013; Genesis calculations

[108] The methodology used to calculate the cost of equity is shown in Appendix H.

8. CONCLUSIONS AND PHASE 2 TASKS

202. A competition market inquiry seeks to determine whether concentration in a market (and the relevant sub-markets) creates conditions in which market participants can use market power to increase prices to consumers. As such it does not seek to directly answer the question as to whether consumers pay too much for their services, only whether there is a possibility that consumers are paying too much as a result of the market power arising from a concentrated market or a market in which barriers to entry allow incumbents to exert market power, such that regulators should intervene.

203. This market inquiry for the Kenya banking industry has analysed the industry from three key perspectives (i) concentration in the market which reflects the competitive constraint placed by the existing players in the market on each other (ii) barriers to entry and expansion that reflect competitive constraints from potential entrants into the market and (iii) customer buyer power that reflects constraints imposed on banks due to the bargaining power of their customers. With 43 banks, at an overall level customers in Kenya have many options to choose from for their banking needs. The HHI for the industry as a whole, on the lending or deposit side, is low indicating that no individual bank or small group of banks has a large market share to exert market power. However, one needs to examine the concentration at the level of each product market to fully understand competition in this industry. We have considered customer segments - corporate, SME and personal - as markets for our competition analysis and further examined product markets within each segment. The concentration analysis shows that all product markets except corporate savings, SME savings and personal savings are unconcentrated.

204. A review of the regulatory requirements for Kenyan banks indicates these requirements are not very different from the requirement in comparable countries and generally cannot be considered to be onerous. There may be barriers to entry that arise due to barriers to expansion – there are large economies of scale in the industry which make it difficult for small banks to compete effectively with the big banks. Establishing a branch network can be a costly and time consuming process and can, therefore, act as a barrier for a bank to expand its business, particularly in the SME and retail segment where potential customers may be in small towns and rural areas. Branding also creates an advantage for the big banks. However these issues are no different from those faced by the banking industry in other countries. More importantly, the Kenyan financial services sector is well known for its growth and dynamism. The fact of new players entering the Kenyan banking industry, in particular the entry and rapid growth of Equity Bank from a building society to one of the largest banks strongly indicates that these barriers may not be insurmountable. In addition, some banks may be relatively small, in terms of deposits and lending, due to their own strategic choices and may choose to target a specific niche market. Further, as in other countries, countervailing buyer power only exists in the corporate segment.

205. An examination of the market for three lending products that cut across segments – mortgage lending, credit cards and consumer durables – shows that credit card lending and consumer durable lending are concentrated. However, no particular barriers to entry have been found for these markets. It is also to be noted that these markets form a small proportion of total lending. The geographic market concentration analysis points to most counties being highly concentrated but the vast majority of lending and deposits are in urban areas where many banking options are available

206. For the products where the market structure is competitive, lack of competition cannot be considered a reason for too low deposit rates or too high lending rates. Of the three markets where the concentration is high, for corporate savings we do not observe the four largest banks paying an average deposit rate lower than that paid by other banks. This is not surprising given that corporate customers are financially savvy and are able to effectively negotiate with the banks thus negating any market power the banks may have because of high market share. For SME and personal savings, which are highly concentrated, an alternate explanation for the observed low deposit rates paid by big banks is the fact the customers are willing to take a low rate because the large banks are safe banks and less likely to fail.

207. Finally, an assessment of industry wide profitability indicates that the industry has profitability similar to that observed in comparable countries. While larger banks in Kenya do have a higher return on equity, this is likely coming from their lower cost of funding (larger CASA ratio) and not because interest rates for large banks within a market segment are different from those for other banks.

208. While this study has enabled us to draw broad conclusions on competition in the Kenyan banking industry, some issues remain unresolved which will be addressed in Phase 2 of the market inquiry.

209. To begin with, fees charged by banks have not been considered in our assessment. In most countries fee income can amount to up-to a third of the income banks receive, and conversely a third (or more for some consumers) of the cost of banking. The debate regarding the Kenyan banking industry has also noted high fees being charged by Kenyan banks, in particular the large banks. Understanding the range of fees and manner in which fees are determined within the banking industry has been the focus of a number of market inquiries across the world and will be applied to the Kenyan market.

210. Whereas Kenya is a market leader in mobile payment services, the Mpesa service constitutes a specific category of payment service/deposit product with a very high concentration/market share. The determination of fees within the Mpesa service and between Mpesa and other payment services will need to be specifically investigated.

211. Phase 2 will include the examination of certain categories of lending that were excluded from the initial analysis – in particular vehicle and asset finance

212. Further analysis of the savings deposit market: Since our analysis has indicated high concentration in saving deposits, along with potential barriers to entry and expansion, one needs to examine this segment in more detail. Reasons for high concentration in this market should be understand, particularly in light of the fact that the other two deposit markets – demand and term deposits – are not concentrated. As personal savings form a large part of personal deposits, and this is a segment directly affecting many consumers, Phase 2 of this inquiry will examine this segment in more detail:

212.1. Concentration: In particular whether the apparent concentration is material or as a result of the way in which different banks have classified their products in their regulatory returns, or specific customer choices – namely the distribution of Government accounts

212.2. Entry/Expansion barriers: Particular barriers faced by small banks in increasing their market share in the saving deposits market will be explored:

212.2.1. *Lack of interoperable payment systems of banks*. Understanding the current situation in terms of interoperability of the banking systems and the interbank ATM fee, and whether this results in a disadvantage for small banks.

212.2.2. *Network of branches and ATMs as an entry barrier*. Examining how the saving deposit account holders are distributed across large cities, small cities and rural areas.

212.2.3. *Brand as an entry barrier*. Since we also observe that saving rates in the data are typically higher for small banks, we will explore the premium interest small banks have to pay to the depositors in order to attract saving deposits

212.2.4. *Switching costs*. Examining the existence and extent of switching costs in terms of financial and non-financial costs in the savings deposit market. Factors that would increase the likelihood of customer switching will be identified.

212.3. Interest rates: A detailed analysis of prevailing saving deposit rates to determine if they are at the competitive level can be done. Further an analysis that separates the impact of lack of competition in the market from the impact of consumers' need to have deposits in a large and safe bank can be done in Phase 2. This would require information on banks' credit ratings. Interviews with banks will also help us identify drivers that influence deposit rates in general.

213. In general, removing constraints on consumers in terms of switching bank accounts can enhance competition in the market. Phase 2 study will consider whether, for example, a ban on early loan repayment penalty can increase competition without having a significant negative impact on the banking industry.

214. As noted earlier, our analysis of interest rate spreads only considers tenor and market segments but does not incorporate differences in credit risk across bank customers or bank heterogeneity in terms of differences in the likelihood of a bank failing. Examining lending and deposit spreads after incorporating information on credit ratings of a bank's borrowers and the financial strength/credit rating of the bank will address the question of whether spreads are driven by the underlying credit risk and maturity or by market power. This would also involve examining the banks' strategy. Banks may strategically focus on particular product segments, for example, Housing Finance and KCB may focus on mortgage lending, or banks may focus on a lower income segment. This focus may explain the observed concentration results and trends in interest rates.

215. The concentration analysis in this report has relied on lending and deposit data for market segments and products as defined by each bank. Since these definitions are likely to vary across banks, detailed data on lending and deposits can be used to address this issue. Detailed data can be used to objectively define segments and products in the same way for all banks.

216. Finally, given the available data our report has analysed overall bank profitability even as we acknowledge the presence of distinct market segments. Analysing profitability by the markets considered for the concentration and the spread analysis can help correlate market power, where it exists, to profitability in that segment.

217. Table 29 gives a summary of the phase 2 tasks outlined in this study.

Table 29: Summary of Phase 2 tasks

Task	Description
Analysis of the fees charged by banks	An analysis of the range of fees and the manner in which fees is determined in the Kenyan banking industry
Investigation of m-pesa fees	Since m-pesa has a very high share, the fees charged for transactions between m-pesa and other payment services is an important constituent for ensuring a competitive market.
Analysis of the vehicle asset finance market	An analysis of the market structure of the vehicle asset finance market
Analysis of the saving deposit market	Competitive analysis of the savings deposit market to ensure that there are no competition concerns
Segment analysis of profitability	Analysis of bank profitability by market segment. However this analysis will be dependent upon bank's ability to allocate cost by segment
Validation of the concentration results in Phase 1 study	Validation of the concentration results in Phase 1 using data from banks that reflect a consistent definition of lending and deposit market segments.
Analysis of the interest rate spread	Analysis of the credit risk of customers and banks to assess interest rate spread
Assessment of ban on penalty for early repayment of loan	Analysis to consider if a ban on early repayment penalty is justified
Identifying consumer protection concerns	While this is a market inquiry that examines how market conditions can impact consumers, relevant guidelines in Kenya and other countries can be reviewed to identify ways of strengthening consumer protection using measures within the ambit of the CAK.
Further analysis of MFB's	Consideration of the importance of MFB's in each saving and deposit product

9. POLICY RECOMMENDATIONS

218. We find that the Kenyan banking industry is generally competitive. As the industry has a competitive market structure, the widely held concern that high lending rates and high interest spread are as a result of the market power of dominant banks has not been substantiated by this study and is probably misplaced. The regulation of lending rates, or interest rate spread is thus not justified by competitive concerns or the market structure. Our analysis of interest rate spreads also does not reveal any evidence of anti-competitive interest rates that would warrant such an intervention.

219. The guiding principle for regulation is that the remedy for harmful conduct should be the least restrictive to achieve the intended objective and should be proportionate to the extent of risk, and should also consider the potential harmful effects of any regulation. Any unwarranted regulation of rates or spreads may adversely affect the incentives for new players to enter the market or existing players to expand.

220. The results of Phase 2 results may nonetheless suggest areas in which specific regulatory interventions are justified, but further analysis is required. In particular creating a greater degree of inter-operability within the payment system and ensuring that the prices at which the customers of smaller banks access the payments system are not disadvantageous can promote competition.

221. Another important measure is to ensure the depth and quality of public information on borrowers through the credit bureaus so that banks can compete more effectively for customers. This is already being implemented, and commercial as well as microfinance banks have been sharing positive and negative information with credit bureaus since March 2014.

222. While there are a large number of banks in the Kenyan banking industry, the data shows that several of these banks are very small. These banks may lack resources to compete with large banks, particularly in markets where barriers to expansion may exist in the form of high cost of network, branding, etc. The fact that smaller banks are less profitable may mean that they struggle to make the investments necessary to compete and will continue to lose market share. Increasing capital requirements to reduce the number of banks is thus sometimes hypothesised as a way of increase effective competition within the sector, but needs to be approached with extreme caution as rapid consolidation can result in some very unhappy and unsustainable mergers as occurred in Nigeria. It is to be noted that the CBK is already considering such a move.[109]

223. Finally, another intervention which enhances competition is reduction in the difficulty faced by consumers in switching bank accounts. Establishing an appropriate code of conduct to ensure that the bank which is losing a customer, and associated credit or deposit facilities, acts with appropriate speed and diligence, and potentially outlawing early repayment penalty fees are appropriate regulatory interventions. However, further field research to confirm current practices is needed before any such intervention.

224. Table 30 gives a summary of the policy recommendations given in this study based on phase 1 analysis.

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[109] http://www.nation.co.ke/business/Bankers-want-core-capital-up-to-Sh9bn/-/996/2411982/-/6acym8z/-/index.html

Table 30: Summary of Policy Recommendations

Policy Recommendation	Further Steps	Stakeholder(s)
Greater degree of interoperability between payment systems	Phase 2 study examining the current situation on interoperability and whether it is a constraint for small banks in attracting savings deposits. Cost-benefit analysis of a move towards greater interoperability; Resolving issues such as fixing the interoperability fee.	Competition Authority of Kenya, Central Bank of Kenya, and Kenyan Bankers Association
Increasing capital requirements for banking licenses	Cost-benefit analysis of the move	Central Bank of Kenya
Ensuring greater customer switching by banning early repayment penalty	Evaluation of the effects of repayment penalty in terms of switching cost and efficiencies (in terms of asset-liability mismatch)	Competition Authority of Kenya, Central Bank of Kenya
Code of conduct to ensure that banks act with appropriate speed and diligence to close their customers' accounts where requested		Kenyan Bankers Association

APPENDICES

APPENDIX A: REGULATORY ENVIRONMENT AND CHANGES

1. The Central Bank of Kenya (CBK) is the regulator of the banking industry in Kenya. The commercial banks have an industry association, Kenya Bankers Association (KBA), which works as a forum to address issues affecting the banking sector. Similarly, the micro-finance institutions are organized under the Association of Micro-Finance Institutions (AMFI) which addresses concerns of micro-finance institutions.

2. The CBK is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. It was established in 1966 through the Central Bank Act as a result of the desire of three East African states to have independent monetary and fiscal policies.[110]

3. Following the announcement of the new constitution on 27 August 2010, the CBK was established under Article 231 of the Constitution (2010). Under this Article, the Central Bank of Kenya has the responsibility of formulating monetary policy, promoting price stability, issuing currency and performing any other functions conferred on it by an Act of Parliament.

4. Sections 4 and 4A of the Central Bank of Kenya Act set out the Bank's objectives which include: (i) to formulate and implement monetary policy, (ii) to foster the liquidity, solvency and proper functioning of a stable market-based financial system, (iii) to support the economic policies of the Government including its objectives for growth and employment, (iv) to formulate and implement foreign exchange policy, (v) to hold and manage its foreign exchange reserves and to license and supervise authorised foreign exchange dealers, (vi) to issue currency notes and coins, and (vii) to formulate and implement such policies that best promote the establishment, regulation and supervision of efficient and effective payment, clearing and settlement systems, amongst others.

5. In order to achieve these objectives, various regulations and guidelines have been issued by the Central Bank of Kenya that intend to[111]:

    5.1. Reduce the level of risk to which bank creditors are exposed

    5.2. Reduce the risk of disruption resulting from adverse trading conditions for banks causing multiple or major bank failures

    5.3. Reduce the risk of banks being used for criminal purposes

    5.4. Protect banking confidentiality credit allocation

6. The CBK follows a Risk Based Supervisory (RBS) framework, which is intended to allow the CBK to "deliver consistent, high-quality supervision as the financial sector develops and as risk profiles of institutions change in reaction to competitive forces." The approach enables the CBK to focus its regulatory attention on high risk areas.

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[110] Central Bank Website (2014) About us, Accessed 3 March 2014
[111] Central Bank Website (2014) About us, Accessed 4 March 2014

7. In addition, the CBK has published Prudential Guidelines that implement various regulations and guidelines for the banking sector. These were updated in 2000, 2006, and recently in 2013. These typically cover bank license requirements, capital requirements, liquidity measures and requirements, foreign exchange limits, and prohibited business. The most recent regulations issued by the CBK are the Prudential Guidelines of 2013 which are intended to make the banking system of Kenya stronger and more transparent.

Key banking legislation and regulations

8. The banking industry in Kenya is primarily governed by the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the CBK.[112] In addition, the Microfinance Act, The National Payment System Act and the Kenya Deposit Insurance Act also regulate the activities of the industry players.

Prudential Guidelines

9. The Prudential Guidelines are an important instrument for the CBK to regulate the banking industry. The Prudential Guidelines of 2013 include, but are not limited to, the following:

    9.1. *Entry requirements.* Entry into the banking sector is regulated by the CBK, which is the sole authority responsible for issuing banking licences, as well as licenses for MFBs. The regulation is intended to provide guidance and information to those applicants seeking to secure a license to conduct the business of a bank, financial institution or mortgage finance company in Kenya in compliance with Sections 3, 4 and 5 of the Banking Act.

    9.2. *Ownership.* The guidelines limit the holding of any one shareholder*:*

    > *To diversify ownership of an institution for the purpose of prudent management; direct or indirect share-holding of an institution has been restricted to a maximum of 25% to any one person other than:*
    >
    > *a) another institution,*
    >
    > *b) the government of Kenya, or the Government of a foreign sovereign state,*
    >
    > *c) a state corporation within the meaning of the State Corporations Act, or,*
    >
    > *d) a foreign company, which is licensed to carry on the business of an institution in its country of incorporation*

    9.3. *Capital.* Section 18 of the Banking Act empowers the Central Bank of Kenya to prescribe the minimum capital requirements in terms of the core capital, the core capital to total capital ratio etc. to be maintained by institutions. The requirements laid down in the guideline attempt to ensure that each institution maintains a level of capital that is sufficient to protect its depositors and creditors, as well as commensurate with the risk associated with activities and profile of the institution.

[112] The Companies Act is also applicable to the banks for the purpose of registration of banks as a business.

The minimum capital requirements in terms of the core capital has increased in 2008 Prudential Guidelines with effect from 31 December 2012 from the previous Prudential Guidelines issued in 2000 and 2006, where capital requirements did not have a conservation buffer, and minimum core capital was set at 250m Ksh and is now at 1b Ksh.

Table 31: Minimum capital requirements as defined in the Prudential Guidelines, 2013[113]

	Core Capital (Tier 1) to Risk-weighted Assets (RWA)	Total Capital to Risk-weighted Assets (RWA)
Minimum Ratio	8%	12%
Conservation Buffer	2.5%	2.5%
Minimum plus Conservation Buffer	10.5%	14.5%
Minimum absolute core capital		
Banks and Mortgage finance companies	Kshs 1bn	
Financial Institutions	Kshs 200m	

Source: Central Bank of Kenya Prudential Guidelines, 2013

9.4. *Liquidity.* The purpose of the liquidity guidelines is to, among other things, ensure each institution maintains adequate level of liquidity in order to meet its obligations and help institutions in the formulation of liquidity management strategies and procedures.[114] Currently an institution is required to maintain a minimum of twenty per cent of all its deposit liabilities in liquid assets. Additionally an institution is required to put mechanisms in place that will alert to potential funding problems.[115]

9.5. *Activities.* The guidelines set out specific requirements, including single borrower limits, restrictions on facilities to insiders (staff and directors), restrictions on large exposures, and restrictions on trading and investments.

9.6. *Bank governance*. The regulations cover (i) corporate governance principles, (ii) code of conduct, (iii) remedial measures and administrative sanctions, (iv) guidance on Board and individual director's performance evaluation, and (v) guidance on holding Board meetings through Video Conferencing. These are intended to provide the minimum standards required from shareholders, directors, chief executive officers, management and employees of an institution so as to promote proper standards of conduct and sound banking practices, as well as ensure that they exercise their duties and responsibilities with clarity, assurance and effectiveness.[116]

9.7. *Anti-Money Laundering (AML).* The purpose of the AML section is to provide guidance regarding the prevention, detection and the control of possible money laundering activities and terrorism financing and applies to all institutions licensed

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[113] Risk weighted assets are a measure of banks assets adjusted for risk. Thus a $1m loan to a high risk borrower may have the same RWA as a $10m loan to a low risk borrower. Tier 1 capital is Core Capital – primarily consisting of common equity and disclosed reserves. Tier 2 capital is supplementary capital will be applied when the institution becomes a "Gone" concern
[114] CBK Prudential Guidelines 2013, pg 157
[115] The guidelines set out the minimum liquidity management that should be in place, including Liquidity Management Strategy, Structure & Information Systems, Measuring and monitoring, Contingency Funding Plans, and stress testing activities.
[116] CBK Prudential Guidelines 2013, section 2.1 pg 37

under the Banking Act. The 2013 updates reflect a significant increase in stringency in AML requirements.

10. The 2013 Prudential Guidelines include increased consumer protection reforms, which are intended to provide a clear framework for protecting customers against risks of fraud, loss of privacy and unfair practices, and require full disclosure of information regarding products and services offered to customers. Specifically, the new Prudential Guidelines require certain disclosures when a customer applies for a loan, or makes an interest-bearing deposit:

- Inform the consumer of the term of the fixed deposit or loan;
- Inform the consumer of the charges, if any, for, and consequences of, prematurely terminating a fixed deposit or loan;
- Inform the consumer of whether the interest is fixed or variable;
- Give a consumer information on the applicable interest rates for the contracted period and the basis and frequency on which interest payments or deductions are to be made;
- Explain the method used to calculate interest rates;
- Disclose prominently the total amount of income the consumer shall receive on the fixed rate deposits of the consumer;
- Provide a repayment schedule over the term of the loan indicating periodic principal repayments and interest charged; and
- Disclose the total cost of credit.

11. By increasing the transparency of the costs of credit and interest rates, quality of competition may increase because consumers are able to make an informed choice around products.

12. Thus the 2013 updates to the Prudential Guidelines stipulate higher capital requirements, greater consumer protection and transparency, as well as more stringent Anti-Money Laundering requirements. The key changes to the regulations include (i) an enhancement of the capital adequacy requirement, (ii) an enhancement of Corporate Governance requirements, (iii) significant reforms for consumer protection, as well as guidelines on stress testing, outsourcing, prompt corrective action and voluntary liquidation, as shown in the figure below.

Microfinance regulations

13. In Kenya, microfinance institutions were historically considered to be providers of credit to micro business and individuals and were not allowed to take deposits. However, the Microfinance Act of 2006, that became operational in May 2008, effectively allowed Microfinance institutions to apply for a license for becoming a microfinance bank (MFB) that is allowed to accept deposits. As a result microfinance institutions are now in a position to meet a broader set of needs of their customers.

14. Following this measure, several microfinance banks have entered the market. Currently in Kenya there are 9 MFBs, as shown in the table below. The latest license was given to U&I

Deposit Taking Microfinance Institution Ltd. in May 2013.[117] This move is expected to increase competition in the banking industry, particularly for the low-income customers.

Table 32: List of licensed MFBs in Kenya

S. No.	Name of the MFB
1	Faulu Kenya
2	Kenya Women Finance Trust
3	SMEP
4	Remu
5	Rafiki
6	UWEZO
7	Century
8	SUMAC
9	U&I

Source: Central Bank of Kenya, 2014

15. The principal objective of the Microfinance Act, which governs the MFBs, is to regulate the establishment, business and operations of microfinance institutions. The Act enables the MFBs to "mobilise savings from the general public, thus promoting competition, efficiency and access".[118] It is ultimately expected that the microfinance industry will play a crucial role in deepening financial markets and enhancing access to financial services in Kenya. The decision to allow select microfinance institutions to take deposits reflects the evolution of government policies on this front.

16. The key regulations for the MFBs are summarised in the table below:

Table 33: Microfinance regulations - key requirements

	Regulations
Banking licence issuing agency	CBK
Application fee	Ksh5,000
Licence fee	Ksh 150 000 (National)
Branch opening	*City council - Ksh 50 000 *Town council - Ksh 20 000 *County council - Ksh 10 000
Minimum capital requirements	20m for community–based MFBs and 60m Ksh for nationwide MFBs
Minimum risk-based regulatory capital ratio	Not available
Supplementary Capital (Tier 2)	Should not exceed core capital
Capital conservation Buffer	Not available

[117] Central Bank of Kenya
[118] Central Bank of Kenya website https://www.centralbank.go.ke/index.php/microfinance-institutions

	Regulations
Minimum Core Capital (Tier 1) of total risk adjusted assets plus risk adjusted off balance sheet items	10%
Minimum Core Capital (Tier 1) of total deposit liabilities	8%
Minimum Total Capital of total risk adjusted assets plus risk adjusted off balance sheet items	12%
Minimum liquidity requirement	20% deposit liabilities in liquid assets
Single borrower limit	shall not extend loans or credit facilities 5% of core capital
	grant a microfinance loan to any single end user or his associate that exceed 2% of its core capital
	aggregate amount of microfinance loans is equivalent to or more than 70% of the institution's total loan portfolio
	No advances or credit to shareholders and directors unless approved by Board, made in the normal course of business and on similar terms to ordinary customers
Large exposures (10% of core capital)	Large exposure defined as exceeding 2% and not more than 5% of core capital - such facility may not exceed 30% of institutions core capital

Source: Deposit taking microfinance regulations, 2008

17. Most notably, the difference in the requirements for MFBs and commercial banks is in the capital requirement. Microfinance banks are only required to hold 20m or 60m (depending on whether it is a community-based or a nationwide bank), while commercial banks are required to hold 1bn KES. This difference would have significant implications if microfinance banks were able to offer credit and lending products to the same class of customers as commercial banks. However the core of their business remains 'micro-focused' because they are only allowed to lend up to 30% of core capital to large exposures (those that exceed 2% of core capital and not more than 5% of core capital). This limits the ability of microfinance providers to compete effectively for loans and advances in high salary and corporate segments. Note that there is no regulatory restriction on the MFBs to lend to any customer.

Other regulations

Credit reference bureaus

18. The CBK launched a credit information sharing mechanism between banks in 2010 to ensure that banks get access to credit histories of potential borrowers from other banks.[119] This has led to more efficient evaluation by banks of credit-worthiness of its customers and thus allows them to charge an interest rate that is more aligned with the possible risk in lending to a given customer. While previously, the mechanism allowed for sharing only the negative history (i.e., where a customer may have defaulted on loans), now the CBK has allowed for sharing of positive history also. This is likely to result in better pricing for customers that have a good credit history and may lead to lower average interest rates. Only two bureaus have been licensed to date including, Credit Reference Bureau Africa Limited and Metropol Credit Reference Bureau Limited.

Deposit Insurance

19. A key addition to the Kenyan banking regulatory landscape has been the introduction of deposit insurance regulations. Deposit insurance exists because banking institution failures have the potential to trigger a broad spectrum of negative outcomes, including economic recessions. A deposit insurance regulation clarifies the authority's obligations to depositors and can provide countries with an orderly process for dealing with bank failures and a mechanism for banks to fund the cost of failures. Since deposit insurance regulations promote deposit protection, instill public confidence, and foster financial stability, they allow for smaller banks to compete more effectively with large banks.

20. In Kenya, the Kenya Deposit Insurance Corporation (KDIC) provides for a deposit insurance scheme for customers of member institutions, and includes: administering the deposit insurance scheme; collecting contributions for the Fund from member institutions; and holding, managing, and applying the Fund

21. The Kenyan deposit insurance regulation covers (i) current accounts, (ii) saving accounts, (iii) call deposits, (iv) fixed/term deposits and (v) foreign currency deposits. The contributions required by institutions are calculated as.[120]

    21.1. A percentage, as directed by the KDIC from time to time, but not less than 0.15% of the average of its total deposit liabilities during the previous twelve months

    21.2. In addition to the flat rate contribution, institutions shall also contribute a flat percentage rate of their total deposit liabilities during the previous twelve months based on the risk-adjusted contribution methodology – which is outlined in the regulations

22. Every banking institution is required to provide monthly information to KDIC on total deposit liabilities, total number of depositors, total insured deposits, number of depositors fully covered total deposits with corresponding loans and debts immediately due and payable.

23. *Consolidated supervision & Supervisory colleges* have been introduced in Kenya. Consolidated supervision is a comprehensive approach to banking supervision which

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[119] DEVELOPMENTS IN THE KENYAN BANKING SECTOR FOR THE QUARTER ENDED 30th JUNE 2013. CBK.
[120] Kenya Deposit Insurance Act, 2012 Draft Regulations.

endeavours to evaluate the strength on an entire banking group taking into account all the risks which may affect a bank.

24. *Anti-Money Laundering*: 2012 also saw the strengthening of the country's Anti-Money Laundering and Combating the Financing of Terrorism legal and regulatory framework. In April 2012, the Anti-Money Laundering Advisory Board approved the operationalization of the Financial Reporting Centre

APPENDIX B: LENDING AND DEPOSIT BY BANK AS OF DECEMBER 2013

Table 34: Lending and deposit by market segment

Bank	Corporate Segment				SME Segment				Personal Segment			
	Lending	% share	Deposit	% share	Lending	% share	Deposit	% share	Lending	% share	Deposit	% share
African Banking Corporation Ltd	-	-	-	-	-	-	-	-	-	-	-	-
Bank of Africa (K) Ltd	19,250,609	2.7%	18,786,951	3%	8,264,728	2.7%	7,068,450	1.8%	3,855,128	0.8%	10,797,205	2.0%
Bank of Baroda (K) Ltd	16,093,441	2.3%	1,867,060	0%	5,824,153	1.9%	31,336,877	7.9%	2,150,078	0.4%	7,862,363	1.5%
Bank of India	-	-	-	-	-	-	-	-	-	-	-	-
Barclays Bank of Kenya Ltd	52,534,927	7.4%	53,216,442	7%	2,852,294	0.9%	63,630,884	16.0%	66,267,569	13.6%	42,929,524	8.0%
CFC Stanbic Bank (K) Ltd	36,455,624	5.1%	78,415,505	11%	12,164,509	4.0%	16,074,836	4.0%	22,682,091	4.7%	16,690,860	3.1%
Chase Bank Ltd	17,174,811	2.4%	14,208,634	2%	6,323,028	2.1%	8,271,292	2.1%	6,089,678	1.3%	13,857,832	2.6%
Citibank N.A. Kenya	25,213,008	3.6%	43,835,440	6%	-	-	-	-	-	-	-	0.0%
Commercial Bank of Africa Ltd	28,415,342	4.0%	43,409,212	6%	12,014,411	4.0%	22,468,920	5.6%	18,524,485	3.8%	24,435,219	4.6%
Consolidated Bank of Kenya Ltd	4,660,895	0.7%	3,775,504	1%	3,608,113	1.2%	4,529,461	1.1%	3,608,954	0.7%	3,717,571	0.7%
Co-operative Bank of Kenya Ltd	63,752,643	9.0%	86,088,636	12%	29,029,386	9.6%	43,966,628	11.0%	52,843,829	10.9%	44,720,961	8.3%
Credit Bank Ltd	2,656,120	0.4%	2,265,832	0%	1,498,573	0.5%	843,952	0.2%	411,580	0.1%	2,557,390	0.5%
Development Bank of Kenya Ltd	4,082,848	0.6%	9,254,618	1%	-	-	-	-	3,317,112	0.7%	1,271,977	0.2%
Diamond Trust Bank (K) Ltd	13,894,771	2.0%	6,599,240	1%	55,606,004	18.3%	32,894,178	8.3%	4,088,525	0.8%	33,549,264	6.3%
Dubai Bank Ltd	-	-	-	-	2,754,758	0.9%	-	-	167,335	0.0%	-	-
Ecobank Kenya Ltd	5,050,694	0.7%	5,658,319	1%	7,070,972	2.3%	7,921,643	2.0%	8,081,110	1.7%	11,661,781	2.2%
Equatorial Commercial Bank Ltd	-	-	-	-	-	-	-	-	-	-	-	-
Equity Bank Ltd	54,142,099	7.6%	12,025,692	2%	59,343,833	19.5%	43,406,180	10.9%	44,771,061	9.2%	103,250,079	19.2%
Family Bank Ltd	-	-	527,405	0%	3,298,344	1.1%	5,838,749	1.5%	25,936,758	5.3%	28,230,833	5.3%

Bank	Corporate Segment				SME Segment				Personal Segment			
Fidelity Commercial Bank Ltd	2,219,119	0.3%	-	-	3,409,002	1.1%	10,871,331	2.7%	988,389	0.2%	645,605	0.1%
First Community Bank Ltd	-	-	-	-	-	-	-	-	-	-	-	-
Giro Bank Ltd	4,704,770	0.7%	1,868,204	0%	1,760,218	0.6%	9,402,991	2.4%	-	-	-	0.0%
Guaranty Trust Bank Ltd	8,974,125	1.3%	7,043,655	1%	1,328,217	0.4%	855,043	0.2%	461,068	0.1%	10,548,674	2.0%
Guardian Bank Ltd	8,252,012	1.2%	4,499,116	1%	-	-	543,885	0.1%	759,671	0.2%	6,137,982	1.1%
Gulf African Bank Ltd	7,995,993	1.1%	1,693,061	0%	1,704,815	0.6%	627,418	0.2%	1,178,352	0.2%	10,271,074	1.9%
Habib Bank Ltd	-	-	-	-	3,313,576	1.1%	2,734,408	0.7%	212,909	0.0%	2,817,690	0.5%
Habib Bank A.G. Zurich	1,906,477	0.3%	2,486,247	0%	615,465	0.2%	1,207,703	0.3%	184,277	0.0%	4,623,268	0.9%
Housing Finance Co. of Kenya Ltd	12,578,070	1.8%	17,050,035	2%	-	-	-	-	23,584,051	4.9%	9,450,760	1.8%
I&M Bank Ltd	35,881,474	5.1%	6,390,658	1%	26,281,065	8.6%	22,256,356	5.6%	12,924,390	2.7%	46,199,251	8.6%
Imperial Bank Ltd	17,573,275	2.5%	-	-	6,030,482	2.0%	-	0.0%	3,556,575	0.7%	-	0.0%
Jamii Bora Bank Ltd	1,468,664	0.2%	855,009	0%	158,670	0.1%	1,026,010	0.3%	2,379,671	0.5%	1,539,015	0.3%
Kenya Commercial Bank Ltd	91,913,161	13.0%	186,305,584	26%	17,056,016	5.6%	41,000,763	10.3%	95,782,904	19.7%	9,906,434	1.9%
K-Rep Bank Ltd	597,520	0.1%	971,325	0%	5,432,094	1.8%	1,625,049	0.4%	3,451,829	0.7%	6,545,872	1.2%
Middle East Bank (K) Ltd	3,627,349	0.5%	1,300,909	0%	-	-	489,923	0.1%	213,631	0.0%	1,810,253	0.3%
National Bank of Kenya Ltd	6,084,732	0.9%	13,024,384	2%	10,673,531	3.5%	6,274,407	1.6%	23,850,745	4.9%	14,306,245	2.7%
NIC Bank Ltd	70,357,618	9.9%	56,377,861	8%	418,600	0.1%	1,676,850	0.4%	9,635,123	2.0%	25,978,695	4.8%
Oriental Commercial Bank Ltd	281,589	0.0%	1,262,825	0%	3,494,440	1.2%	-	-	14,266	0.0%	4,114,491	0.8%
Paramount Universal Bank Ltd	-	-	-	-	-	-	-	-	-	-	-	-
Prime Bank Ltd	-	-	-	-	-	-	-	-	-	-	-	-
Standard Chartered Bank (K) Ltd	79,788,755	11.3%	42,257,450	6%	10,680,668	3.5%	9,195,724	2.3%	43,458,642	8.9%	27,695,026	5.2%

Bank	Corporate Segment				SME Segment				Personal Segment			
Trans – national Bank Ltd	3,194,543	0.5%	3,512,689	0%	2,068,017	0.7%	23,488	0.0%	414,286	0.1%	3,635,949	0.7%
UBA Kenya	-	-	-	-	-	-	-	-	-	-	-	-
Victoria Commercial Bank Ltd	7,844,490	1.1%	3,865,548	1%	21,510	0.0%	123,245	0.0%	512,552	0.1%	5,054,852	0.9%
Total/HHI	**708,621,568**	**709**	**730,699,050**	**1149**	**304,099,493**	**1006**	**398,186,646**	**849**	**486,358,625**	**988**	**536,813,994**	**770**

Source: Genesis calculations

Corporate segment

Table 35: Lending and deposit by bank as of December 2013 (in KSH 000)

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
African Banking Corporation Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bank of Africa (K) Ltd	4,714,087	1.1%	27,589	0.1%	14,045,275	4.7%	8,735,386	4.2%	10,515,223	2.1%
Bank of Baroda (K) Ltd	1,614,779	0.4%	859	0.0%	251,422	0.1%	9,593,321	4.7%	6,500,120	1.3%
Bank of India	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Barclays Bank of Kenya Ltd	30,303,888	7.3%	19,842	0.1%	22,892,712	7.7%	6,361,901	3.1%	46,173,026	9.2%
CFC Stanbic Bank (K) Ltd	62,375,273	15.1%	9,628	0.1%	16,030,604	5.4%	14,165,357	6.9%	22,290,267	4.4%
Chase Bank Ltd	3,334,780	0.8%	587,601	3.1%	10,286,252	3.5%	12,217,313	5.9%	4,957,497	1.0%
Citibank N.A. Kenya	37,024,015	8.9%	-	0.0%	6,811,425	2.3%	13,183,792	6.4%	12,029,217	2.4%
Commercial Bank of Africa Ltd	29,930,849	7.2%	397,823	2.1%	13,080,540	4.4%	9,506,212	4.6%	18,909,130	3.8%
Consolidated Bank of Kenya Ltd	1,040,966	0.3%	374,885	2.0%	2,359,653	0.8%	695,659	0.3%	3,965,236	0.8%
Co-operative Bank of Kenya Ltd	62,242,949	15.0%	432,035	2.3%	23,413,652	7.9%	7,030,960	3.4%	56,721,683	11.3%
Credit Bank Ltd	740,869	0.2%	36,136	0.2%	1,488,827	0.5%	1,339,147	0.6%	1,316,973	0.3%
Development Bank of Kenya Ltd	208,434	0.1%	32,392	0.2%	9,013,792	3.0%	1,138,012	0.6%	2,944,836	0.6%
Diamond Trust Bank (K) Ltd	684,612	0.2%	4,635	0.0%	5,909,993	2.0%	5,785,021	2.8%	8,109,750	1.6%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	-	0.0%	-	0.0%
Ecobank Kenya Ltd	1,705,338	0.4%	-	0.0%	3,952,981	1.3%	2,852,632	1.4%	2,198,062	0.4%
Equatorial Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
Equity Bank Ltd	4,682,017	1.1%	4,362,523.0	22.9%	2,981,152	1.0%	-	0.0%	54,142,099	10.8%
Family Bank Ltd	527,405	0.1%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Fidelity Commercial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	296,001	0.1%	1,923,118	0.4%
First Community Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Giro Commercial Bank Ltd	1,141,551	0.3%	4,588	0.0%	722,065	0.2%	1,944,366	0.9%	2,760,404	0.5%
Guaranty Trust Bank Ltd	3,942,902	1.0%	16,331	0.1%	3,084,422	1.0%	3,562,825	1.7%	5,411,300	1.1%
Guardian Bank Ltd	2,534,832	0.6%	-	0.0%	1,964,284	0.7%	4,430,739	2.1%	3,821,273	0.8%
Gulf African Bank Ltd	1,455,877	0.4%	42,938	0.2%	194,246	0.1%	-	0.0%	7,995,993	1.6%
Habib Bank A.G. Zurich	1,296,321	0.3%	-	0.0%	1,189,926	0.4%	-	0.0%	1,906,477	0.4%
Habib Bank Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Housing Finance Co. of Kenya Ltd	1,010,228	0.2%	4,827,305	25.3%	11,212,501	3.8%	154,736	0.1%	12,423,334	2.5%
I&M Bank Ltd	3,683,023	0.9%	-	0.0%	2,707,635	0.9%	13,931,956	6.8%	21,949,518	4.4%
Imperial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	8,810,033	4.3%	8,763,242	1.7%
Jamii Bora Bank Ltd	172,771	0.0%	98,314	0.5%	583,923	0.2%	139,881	0.1%	1,328,783	0.3%
Kenya Commercial Bank Ltd	119,171,38	28.8%	6,854,008	36.0%	60,280,193	20.3%	37,635,246	18.3%	54,277,915	10.8%
K-Rep Bank Ltd	175,238	0.0%	1,552	0.0%	794,535	0.3%	-	0.0%	597,520	0.1%
Middle East Bank	331,876	0.1%	1,072	0.0%	967,961	0.3%	1,676,655	0.8%	1,950,694	0.4%
National Bank of Kenya Ltd	2,492,433	0.6%	70,509	0.4%	10,461,442	3.5%	1,532,975	0.7%	4,551,757	0.9%
NIC Bank Ltd	21,724,681	5.2%	14,792	0.1%	34,638,388	11.6%	15,036,906	7.3%	55,320,712	11.0%
Oriental Commercial Bank Ltd	321,706	0.1%	2,968	0.0%	938,151	0.3%	-	0.0%	281,589	0.1%
Paramount Universal Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Prime Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Standard Chartered Bank (K) Ltd	11,934,503	2.9%	1,185	0.0%	30,321,762	10.2%	19,008,981	9.2%	60,779,774	12.1%
Trans - National Bank Ltd	586,999	0.1%	344,320	1.8%	2,581,370	0.9%	178,665	0.1%	3,015,878	0.6%
UBA Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Victoria Commercial Bank Ltd	1,132,599	0.3%	492,634	2.6%	2,240,315	0.8%	5,207,104	2.5%	2,637,386	0.5%
Total/HHI	**414,239,18**	**1,508**	**19,058,464**	**2,492**	**297,401,40**	**907**	**206,151,78**	**767**	**502,469,78**	**797**

Source: Genesis' calculations

SME segment

Table 36: Lending and deposit by bank as of December 2013 (in KSH 000)

Bank	Demand deposits	% share	Saving deposit	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
African Banking Corporation Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bank of Africa (K) Ltd	3,343,758	1.7%	351,436	1.1%	3,373,257	2.1%	2,715,414	4.0%	5,549,314	2.3%
Bank of Baroda (K) Ltd	1,173,232	0.6%	7,758	0.0%	30,155,887	18.6%	3,103,952	4.6%	2,720,201	1.1%
Bank of India	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Barclays Bank of Kenya Ltd	46,368,637	22.9%	17,262,247	51.7%	-	0.0%	469,141	0.7%	2,383,153	1.0%
CFC Stanbic Bank (K) Ltd	12,328,999	6.1%	1,034,474	3.1%	2,711,364	1.7%	1,272,554	1.9%	10,891,956	4.6%
Chase Bank Ltd	1,630,738	0.8%	1,029,244	3.1%	5,611,311	3.5%	3,986,355	5.9%	2,336,673	1.0%
Citibank N.A. Kenya	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Commercial Bank of Africa Ltd	14,636,454	7.2%	696,828	2.1%	7,135,638	4.4%	3,101,757	4.6%	8,912,654	3.8%
Consolidated Bank of Kenya Ltd	1,528,849	0.8%	304,998	0.9%	2,695,614	1.7%	572,953	0.9%	3,035,160	1.3%
Co-operative Bank of Kenya Ltd	30,437,362	15.0%	756,754	2.3%	12,772,512	7.9%	2,294,113	3.4%	26,735,273	11.3%
Credit Bank Ltd	267,722	0.1%	20,331	0.1%	555,899	0.3%	308,258	0.5%	1,190,315	0.5%
Development Bank of Kenya Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Diamond Trust Bank (K) Ltd	11,376,968	5.6%	43,782	0.1%	21,473,428	13.2%	15,605,689	23.2%	40,000,315	16.9%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	2,704,248	4.0%	50,510	0.0%
Ecobank Kenya Ltd	2,387,472	1.2%	-	0.0%	5,534,171	3.4%	3,993,685	5.9%	3,077,287	1.3%
Equatorial Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Equity Bank Ltd	27,992,839	13.8%	6,248,644	18.7%	9,164,698	5.6%	2,788,465	4.1%	56,555,368	23.9%
Family Bank Ltd	5,838,749	2.9%	-	0.0%	-	0.0%	1,500,995	2.2%	1,797,349	0.8%
Fidelity Commercial Bank Ltd	962,096	0.5%	-	0.0%	9,909,235	6.1%	431,885	0.6%	2,977,117	1.3%
First Community Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Giro Commercial Bank Ltd	1,179,062	0.6%	600,712	1.8%	7,623,217	4.7%	813,717	1.2%	946,501	0.4%
Guaranty Trust Bank Ltd	509,793	0.3%	9,966	0.0%	335,285	0.2%	395,224	0.6%	932,993	0.4%

Bank	Demand deposits	% share	Saving deposit	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
Guardian Bank Ltd	184,231	0.1%	-	0.0%	359,654	0.2%	-	0.0%	-	0.0%
Gulf African Bank Ltd	322,127	0.2%	100,686	0.3%	204,605	0.1%	-	0.0%	1,704,815	0.7%
Habib Bank A.G. Zurich	625,769	0.3%	-	0.0%	581,934	0.4%	-	0.0%	615,465	0.3%
Habib Bank Ltd	1,094,643	0.5%	-	0.0%	1,639,765	1.0%	941,009	1.4%	2,372,567	1.0%
Housing Finance Co. of Kenya Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
I&M Bank Ltd	7,339,206	3.6%	-	0.0%	14,917,150	9.2%	10,173,732	15.1%	16,107,333	6.8%
Imperial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	3,465,823	5.2%	2,564,659	1.1%
Jamii Bora Bank Ltd	207,325	0.1%	117,977	0.4%	700,708	0.4%	31,096	0.0%	127,574	0.1%
Kenya Commercial Bank Ltd	29,197,728	14.4%	1,612,547	4.8%	10,190,488	6.3%	1,180,638	1.8%	15,875,378	6.7%
K-Rep Bank Ltd	588,371	0.3%	27,012	0.1%	1,009,666	0.6%	302,904	0.5%	5,129,190	2.2%
Middle East Bank	23,032	0.0%	7,381	0.0%	459,510	0.3%	-	0.0%	-	0.0%
National Bank of Kenya Ltd	172,575	0.1%	1,342,194	4.0%	4,759,638	2.9%	1,428,388	2.1%	9,245,142	3.9%
NIC Bank Ltd	566,952	0.3%	29,958	0.1%	1,079,940	0.7%	155,738	0.2%	262,862	0.1%
Oriental Commercial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,494,440	1.5%
Paramount Universal Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Prime Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Standard Chartered Bank (K) Ltd	196,553	0.1%	1,750,005	5.2%	7,249,166	4.5%	1,658,351	2.5%	9,022,317	3.8%
Trans - National Bank Ltd	9,559	0.0%	9,205	0.0%	4,724	0.0%	1,858,989	2.8%	209,028	0.1%
UBA Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Victoria Commercial Bank Ltd	75,887	0.0%	18,724	0.1%	28,634	0.0%	9,647	0.0%	11,863	0.0%
Total/HHI	**202,566,68**	**1,298**	**33,382,861**	**3,125**	**162,237,09**	**882**	**67,264,720**	**1,004**	**236,834,77**	**1,164**

Source: Genesis' calculations

Personal segment

Table 37: Lending and deposit by bank as of December 2013 (in KSH 000)

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
African Banking Corporation Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bank of Africa (K) Ltd	2,663,524	1.7%	725,167	0.5%	7,408,514	3.3%	361,403	1.4%	3,493,726	0.8%
Bank of Baroda (K) Ltd	4,571,708	2.9%	768,478	0.5%	2,522,177	1.1%	809,282	3.1%	1,340,796	0.3%
Bank of India	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Barclays Bank of Kenya Ltd	24,320,848	15.6%	2,860,795	1.8%	15,747,881	6.9%	307,051	1.2%	65,960,518	14.3%
CFC Stanbic Bank (K) Ltd	6,449,795	4.1%	6,586,735	4.3%	3,654,331	1.6%	283,156	1.1%	22,398,934	4.9%
Chase Bank Ltd	1,252,373	0.8%	4,767,791	3.1%	7,837,668	3.5%	1,549,020	5.9%	4,540,658	1.0%
Citibank N.A. Kenya	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Commercial Bank of Africa Ltd	11,240,495	7.2%	3,227,932	2.1%	9,966,792	4.4%	1,205,282	4.6%	17,319,203	3.8%
Consolidated Bank of Kenya Ltd	477,565	0.3%	543,447	0.4%	2,696,559	1.2%	395,334	1.5%	3,213,620	0.7%
Co-operative Bank of Kenya Ltd	23,375,267	15.0%	3,505,530	2.3%	17,840,164	7.9%	891,448	3.4%	51,952,381	11.3%
Credit Bank Ltd	360,960	0.2%	164,430	0.1%	2,032,000	0.9%	13,229	0.1%	398,351	0.1%
Development Bank of Kenya Ltd	79,014	0.1%	81,386	0.1%	1,111,577	0.5%	286,844	1.1%	3,030,268	0.7%
Diamond Trust Bank (K) Ltd	8,083,899	5.2%	4,538,942	2.9%	20,926,422	9.2%	2,363,018	9.0%	1,725,507	0.4%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	18,389	0.1%	148,946	0.0%
Ecobank Kenya Ltd	2,728,540	1.8%	2,608,473	1.7%	6,324,768	2.8%	4,564,207	17.5%	3,516,903	0.8%
Equatorial Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Equity Bank Ltd	7,229,812	4.6%	82,235,797	53.2%	13,784,469	6.1%	1,269,437	4.9%	43,501,624	9.5%
Family Bank Ltd	15,247,973	9.8%	1,685,864	1.1%	11,296,996	5.0%	2,192	0.0%	25,934,566	5.6%
Fidelity Commercial Bank Ltd	-	0.0%	645,605	0.4%	-	0.0%	89,157	0.3%	899,232	0.2%
First Community Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Giro Commercial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Guaranty Trust Bank Ltd	2,139,207	1.4%	752,566	0.5%	7,656,901	3.4%	39,001	0.1%	422,067	0.1%
Guardian Bank Ltd	2,269,979	1.5%	-	0.0%	3,868,003	1.7%	299,574	1.1%	460,097	0.1%
Gulf African Bank Ltd	3,277,885	2.1%	4,159,982	2.7%	2,833,207	1.3%	-	0.0%	1,178,352	0.3%
Habib Bank A.G. Zurich	381,846	0.2%	1,576,882	1.0%	2,664,540	1.2%	-	0.0%	184,277	0.0%
Habib Bank Ltd	772,930	0.5%	-	0.0%	2,044,760	0.9%	46,784	0.2%	166,125	0.0%

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
Housing Finance Co. of Kenya Ltd	660,473	0.4%	3,941,164	2.5%	4,849,123	2.1%	-	0.0%	23,584,051	5.1%
I&M Bank Ltd	12,125,565	7.8%	241,129	0.2%	33,832,557	14.9%	1,946,573	7.4%	10,977,817	2.4%
Imperial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	1,006,809	3.9%	2,549,766	0.6%
Jamii Bora Bank Ltd	310,988	0.2%	176,965	0.1%	1,051,062	0.5%	22,187	0.1%	2,357,484	0.5%
Kenya Commercial Bank Ltd	7,389,777	4.8%	958,741	0.6%	1,557,916	0.7%	3,430,847	13.1%	92,352,057	20.1%
K-Rep Bank Ltd	1,639,744	1.1%	2,011,913	1.3%	2,894,215	1.3%	102,152	0.4%	3,349,677	0.7%
Middle East Bank	61,498	0.0%	188,763	0.1%	1,559,992	0.7%	75,159	0.3%	138,472	0.0%
National Bank of Kenya Ltd	339,479	0.2%	12,180,859	7.9%	1,785,907	0.8%	353,308	1.4%	23,497,437	5.1%
NIC Bank Ltd	14,745,084	9.5%	1,096,377	0.7%	10,137,234	4.5%	4,044,825	15.5%	5,590,298	1.2%
Oriental Commercial Bank Ltd	254,943	0.2%	381,692	0.2%	3,477,856	1.5%	-	0.0%	14,266	0.0%
Paramount Universal Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Prime Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Standard Chartered Bank (K) Ltd	-	0.0%	10,417,320	6.7%	17,277,706	7.6%	117,057	0.4%	43,341,585	9.4%
Trans - National Bank Ltd	1,101,031	0.7%	398,805	0.3%	2,136,113	0.9%	40,093	0.2%	374,192	0.1%
UBA Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Victoria Commercial Bank Ltd	14,838	0.0%	1,210,746	0.8%	3,829,268	1.7%	204,939	0.8%	307,613	0.1%
Total/HHI	**155,567,04**	**884**	**154,640,27**	**3,008**	**226,606,67**	**647**	**26,137,758**	**982**	**460,220,86**	**1,047**

Source: Genesis' calculations

Note: While the volume of deposits for Dubai Bank and Imperial Bank is not available by segment, their overall deposits (excluding interbank transactions) were 1,543,397 and 35,026,717 KSH 000.

Other lending products

Table 38: Lending in specific categories as of December 2013 (in KSH 000, Residential mortgages in KSH million)

Bank	Consumer durable loans	% share	Credit card loans	% share	Mortgages	% share	Residential mortgages	% share
African Banking Corporation Ltd	n/a	n/a	n/a	n/a	n/a	n/a	2,075	1.5%
Bank of Africa (K) Ltd	41,070	0.1%	-	0.0%	2,269,087	1.4%	1,735	1.3%
Bank of Baroda (K) Ltd	55,831	0.1%	-	0.0%	457,072	0.3%	394	0.3%

Bank	Consumer durable loans	% share	Credit card loans	% share	Mortgages	% share	Residential mortgages	% share
Bank of India	n/a	n/a	n/a	n/a	n/a	n/a	91	0.1%
Barclays Bank of Kenya Ltd	4,508	0.0%	3,171,237	47.3%	32,292,705	19.6%	4,640	3.4%
CFC Stanbic Bank (K) Ltd	408,857	0.6%	-	0.0%	10,831,059	6.6%	11,621	8.4%
Chase Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	1,947	1.4%
Citibank N.A. Kenya	-	0.0%	32,402	0.5%	-	0.0%	-	0.0%
Commercial Bank of Africa Ltd	n/a	n/a	440,292	6.6%	n/a	n/a	2,889	2.1%
Consolidated Bank of Kenya Ltd	-	0.0%	-	0.0%	2,981,884	1.8%	3,686	2.7%
Co-operative Bank of Kenya Ltd	n/a	n/a	524,916	7.8%	n/a	n/a	5,911	4.3%
Credit Bank Ltd	-	0.0%	-	0.0%	52,971	0.0%	-	0.0%
Development Bank of Kenya Ltd	1,514,801	2.4%	-	0.0%	728,545	0.4%	2,711	2.0%
Diamond Trust Bank (K) Ltd	74,536	0.1%	201,851	3.0%	585,537	0.4%	442	0.3%
Dubai Bank Ltd	-	0.0%	-	0.0%	-	0.0%	3	0.0%
Ecobank Kenya Ltd	-	0.0%	-	0.0%	2,124,325	1.3%	1,393	1.0%
Equatorial Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	145	0.1%
Equity Bank Ltd	40,288,325	62.5%	52,250	0.8%	4,866,680	2.9%	5,277	3.8%
Family Bank Ltd	14,270,385	22.1%	-	0.0%	3,485,983	2.1%	393	0.3%
Fidelity Commercial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	117	0.1%
First Community Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	129	0.1%
Giro Commercial Bank Ltd	110,357	0.2%	-	0.0%	1,559,284	0.9%	393	0.3%
Guaranty Trust Bank Ltd	2,677	0.0%	-	0.0%	-	0.0%	-	0.0%
Guardian Bank Ltd	70,953	0.1%	-	0.0%	-	0.0%	257	0.2%
Gulf African Bank Ltd	1,037,530	1.6%	-	0.0%	1,196,681	0.7%	1,197	0.9%
Habib Bank A.G. Zurich	65,823	0.1%	-	0.0%	-	0.0%	-	0.0%
Habib Bank Ltd	18,728	0.0%	-	0.0%	36,989	0.0%	-	0.0%
Housing Finance Co. of Kenya Ltd	-	0.0%	-	0.0%	36,007,385	21.8%	35,279	25.5%
I&M Bank Ltd	234,498	0.4%	224,122	3.3%	3,014,964	1.8%	2,743	2.0%
Imperial Bank Ltd	47,862	0.1%	150,099	2.2%	216,646	0.1%	459	0.3%

Bank	Consumer durable loans	% share	Credit card loans	% share	Mortgages	% share	Residential mortgages	% share
Jamii Bora Bank Ltd	-	0.0%	-	0.0%	680,622	0.4%	626	0.5%
Kenya Commercial Bank Ltd	1,021,258	1.6%	521,993	7.8%	31,339,963	19.0%	34,030	24.6%
K-Rep Bank Ltd	215,572	0.3%	-	0.0%	702,757	0.4%	-	0.0%
Middle East Bank	-	0.0%	-	0.0%	46,233	0.0%	14	0.0%
National Bank of Kenya Ltd	4,786,065	7.4%	75,894	1.1%	12,227,093	7.4%	5,150	3.7%
NIC Bank Ltd	23,834	0.0%	353,649	5.3%	1,679,930	1.0%	1,618	1.2%
Oriental Commercial Bank Ltd	3,132	0.0%	-	0.0%	9,309	0.0%	9	0.0%
Paramount Universal Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	56	0.0%
Prime Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	473	0.3%
Standard Chartered Bank (K) Ltd	-	0.0%	962,113	14.3%	14,824,001	9.0%	10,099	7.3%
Trans - National Bank Ltd	137,063	0.2%	-	0.0%	850,418	0.5%	98	0.1%
UBA Kenya	n/a	n/a	n/a	n/a	n/a	n/a	-	0.0%
Victoria Commercial Bank Ltd	-	0.0%	-	0.0%	90,194	0.1%	9	0.0%
Total/HHI	**64,433,665**	**4,467**	**6,710,817**	**2,658**	**165,158,317**	**1,423**	**138,109**	**1,471**

Source: Genesis' calculations

HHI by County

County	Deposit HHI	Lending HHI	County	Deposit HHI	Lending HHI	County	Deposit HHI	Lending HHI	County	Deposit HHI	Lending HHI
Baringo	7,719	6,455	Kiambu	1,755	1,412	Marsabit	5,009	5,840	Samburu	5,409	5,003
Bomet	5,898	4,104	Kilifi	1,974	1,697	Meru	1,583	1,784	Siaya	5,153	5,180
Bungoma	2,699	1,701	Kirinyaga	3,879	3,382	Migori	4,934	3,959	Taita/Taveta	4,802	2,745
Busia	2,511	1,877	Kisii	1,334	1,327	Mombasa	611	831	Tana River	6,945	6,091
Elgeyo/Marakwet	10,000	10,000	Kisumu	936	901	Murang'a	3,421	3,143	Tharaka	5,294	5,272
Embu	2,265	2,023	Kitui	2,749	3,072	Nairobi City	717	781	Trans Nzoia	1,599	1,927

County	Deposit HHI	Lending HHI	County	Deposit HHI	Lending HHI	County	Deposit HHI	Lending HHI	County	Deposit HHI	Lending HHI
Garissa	2,798	4,532	Kwale	1,851	2,096	Nakuru	970	923	Turkana	5,914	5,346
Homa Bay	2,662	2,692	Laikipia	1,872	1,496	Nandi	2,683	2,380	Uasin Gishu	951	3,019
Isiolo	2,639	2,646	Lamu	4,212	6,224	Narok	2,791	2,784	Vihiga	5,071	3,760
Kajiado	2,940	2,106	Machakos	2,460	2,312	Nyamira	8,666	6,563	Wajir	5,577	5,504
Kakamega	1,993	1,896	Makueni	4,645	3,286	Nyandarua	4,809	4,163	West Pokot	6,927	5,201
Kericho	1,731	1,470	Mandera	5,013	5,938	Nyeri	1,999	1,799			

APPENDIX C: LENDING AND DEPOSIT BY BANK AS OF DECEMBER 2012

Corporate segment

Table 39: Lending and deposit by bank as of December 2012 (in KSH 000)

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
African Banking Corporation Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bank of Africa (K) Ltd	3,046,004	1.0%	20,514	0.1%	8,473,200	2.7%	10,362,693	5.5%	9,664,618	2.5%
Bank of Baroda (K) Ltd	1,595,578	0.5%	232	0.0%	24,528,907	7.8%	7,698,315	4.1%	8,983,998	2.3%
Bank of India	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Barclays Bank of Kenya Ltd	20,540,893	6.6%	-	0.0%	15,492,319	4.9%	9,213,747	4.9%	46,195,269	11.7%
CFC Stanbic Bank (K) Ltd	10,460,672	3.4%	990,250	5.7%	10,491,874	3.4%	15,141,659	8.0%	25,211,525	6.4%
Chase Bank Ltd	3,055,694	1.0%	603,272	3.5%	11,735,173	3.7%	12,256,002	6.5%	4,644,965	1.2%
Citibank N.A. Kenya	31,146,668	10.1%	-	0.0%	13,568,901	4.3%	9,487,372	5.0%	14,025,843	3.6%
Commercial Bank of Africa Ltd	25,954,024	8.4%	162,771	0.9%	12,588,347	4.0%	7,383,035	3.9%	13,026,268	3.3%
Consolidated Bank of Kenya Ltd	1,121,237	0.4%	303,684	1.8%	1,976,612	0.6%	568,417	0.3%	4,008,712	1.0%

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
Co-operative Bank of Kenya Ltd	48,652,667	15.7%	360,203	2.1%	29,395,242	9.4%	8,167,640	4.3%	43,955,233	11.2%
Credit Bank Ltd	959,429	0.3%	52,854	0.3%	1,567,698	0.5%	1,150,946	0.6%	861,172	0.2%
Development Bank of Kenya Ltd	296,818	0.1%	25,400	0.1%	6,629,828	2.1%	699,425	0.4%	2,962,280	0.8%
Diamond Trust Bank (K) Ltd	514,732	0.2%	3,701	0.0%	2,479,458	0.8%	5,027,737	2.7%	4,685,531	1.2%
Dubai Bank Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Ecobank Kenya Ltd	1,591,552	0.5%	-	0.0%	3,462,356	1.1%	2,023,090	1.1%	1,936,461	0.5%
Equatorial Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Equity Bank Ltd	3,236,232	1.0%	3,750,151	21.7%	5,890,193	1.9%	-	0.0%	-	0.0%
Family Bank Ltd	631,756	0.2%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Fidelity Commercial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	306,074	0.2%	1,718,593	0.4%
First Community Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Giro Commercial Bank Ltd	933,931	0.3%	4,459	0.0%	642,381	0.2%	1,739,250	0.9%	2,452,282	0.6%
Guaranty Trust Bank Ltd	2,549,447	0.8%	562,499	3.3%	8,166,356	2.6%	3,231,524	1.7%	4,934,977	1.3%
Guardian Bank Ltd	1,764,010	0.6%	14,053	0.1%	1,343,033	0.4%	3,076,857	1.6%	2,705,081	0.7%
Gulf African Bank Ltd	1,158,803	0.4%	86,354	0.5%	243,754	0.1%	-	0.0%	7,405,829	1.9%
Habib Bank A.G. Zurich	1,361,392	0.4%	-	0.0%	1,063,754	0.3%	-	0.0%	1,624,809	0.4%
Habib Bank Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Housing Finance Co. of Kenya Ltd	-	0.0%	4,403,095	25.5%	10,510,891	3.4%	-	0.0%	5,176,669	1.3%
I&M Bank Ltd	590,474	0.2%	-	0.0%	6,683,044	2.1%	11,868,437	6.3%	17,596,961	4.5%
Imperial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	6,371,013	3.4%	5,756,163	1.5%
Jamii Bora Bank Ltd	221,501	0.1%	-	0.0%	564,730	0.2%	66,046	0.0%	427,827	0.1%
Kenya Commercial Bank Ltd	105,546,02	34.1%	5,296,687	30.6%	61,380,810	19.6%	40,715,530	21.6%	61,781,567	15.7%
K-Rep Bank Ltd	655,769	0.2%	2,880	0.0%	117,364	0.0%	-	0.0%	573,413	0.1%
Middle East Bank (K) Ltd	462,021	0.1%	1,429	0.0%	1,055,431	0.3%	1,115,777	0.6%	1,864,941	0.5%
National Bank of Kenya Ltd	3,089,065	1.0%	-	0.0%	14,778,332	4.7%	2,118,032	1.1%	3,026,401	0.8%
NIC Bank Ltd	18,369,097	5.9%	6,930	0.0%	35,158,409	11.2%	8,831,047	4.7%	37,744,976	9.6%
Oriental Commercial Bank Ltd	262,051	0.1%	1,520	0.0%	964,416	0.3%	-	0.0%	294,438	0.1%

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
Paramount Universal Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Prime Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Standard Chartered Bank (K) Ltd	17,949,771	5.8%	3,133	0.0%	18,100,415	5.8%	15,154,950	8.0%	55,506,082	14.1%
Trans - National Bank Ltd	732,742	0.2%	308,049	1.8%	2,309,543	0.7%	1,302,246	0.7%	1,560,206	0.4%
UBA Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Victoria Commercial Bank Ltd	1,165,025	0.4%	327,314	1.9%	1,618,179	0.5%	3,457,011	1.8%	1,490,425	0.4%
Total/HHI	**309,615,07**	**1,711**	**17,291,432**	**2,128**	**312,980,95**	**843**	**188,533,87**	**862**	**393,803,51**	**911**

Source: Genesis' calculations

SME segment

Table 40: Lending and deposit by bank as of December 2012 (in KSH 000)

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
African Banking Corporation Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bank of Africa (K) Ltd	5,624,095	2.9%	140,922	0.5%	5,516,604	4.5%	3,816,517	6.6%	5,292,782	2.1%
Bank of Baroda (K) Ltd	1,194,068	0.6%	8,937	0.0%	1,343,329	1.1%	2,347,372	4.0%	1,327,755	0.5%
Bank of India	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Barclays Bank of Kenya Ltd	50,551,531	25.8%	17,434,410	56.9%	-	0.0%	276,991	0.5%	3,106,845	1.2%
CFC Stanbic Bank (K) Ltd	-	0.0%	50,780	0.2%	2,466,368	2.0%	897,897	1.5%	9,093,600	3.6%
Chase Bank Ltd	1,934,373	1.0%	1,069,836	3.5%	4,572,765	3.7%	3,784,318	6.5%	3,016,046	1.2%
Citibank N.A. Kenya	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Commercial Bank of Africa Ltd	16,429,906	8.4%	288,657	0.9%	4,905,215	4.0%	2,279,679	3.9%	8,458,154	3.3%
Consolidated Bank of Kenya Ltd	1,257,443	0.6%	321,565	1.0%	3,194,381	2.6%	879,745	1.5%	3,669,378	1.4%
Co-operative Bank of Kenya Ltd	30,799,029	15.7%	638,780	2.1%	11,454,244	9.4%	2,521,944	4.3%	28,540,802	11.2%
Credit Bank Ltd	26,893	0.0%	305	0.0%	312,745	0.3%	447,091	0.8%	465,451	0.2%
Development Bank of Kenya Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
Diamond Trust Bank (K) Ltd	11,062,605	5.6%	30,953	0.1%	21,858,659	17.9%	15,957,057	27.4%	33,098,175	12.9%
Dubai Bank Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Ecobank Kenya Ltd	2,228,172	1.1%	-	0.0%	4,847,298	4.0%	2,832,327	4.9%	2,711,048	1.1%
Equatorial Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Equity Bank Ltd	23,555,497	12.0%	6,248,892	20.4%	9,838,311	8.1%	2,842,870	4.9%	84,870,585	33.2%
Family Bank Ltd	4,013,233	2.0%	-	0.0%	-	0.0%	1,321,418	2.3%	1,303,869	0.5%
Fidelity Commercial Bank Ltd	930,688	0.5%	-	0.0%	9,024,857	7.4%	465,878	0.8%	2,831,378	1.1%
First Community Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Giro Commercial Bank Ltd	1,036,396	0.5%	593,120	1.9%	7,003,440	5.7%	454,848	0.8%	799,685	0.3%
Guaranty Trust Bank Ltd	331,336	0.2%	41,678	0.1%	419,147	0.3%	89,750	0.2%	358,258	0.1%
Guardian Bank Ltd	265,593	0.1%	3,823	0.0%	205,203	0.2%	242,416	0.4%	871,698	0.3%
Gulf African Bank Ltd	293,628	0.1%	34,058	0.1%	21,000	0.0%	-	0.0%	1,276,839	0.5%
Habib Bank A.G. Zurich	687,503	0.4%	-	0.0%	347,574	0.3%	-	0.0%	381,168	0.1%
Habib Bank Ltd	1,468,783	0.7%	-	0.0%	239,097	0.2%	950,959	1.6%	2,401,657	0.9%
Housing Finance Co. of Kenya Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
I&M Bank Ltd	10,378,559	5.3%	-	0.0%	11,974,893	9.8%	7,841,615	13.5%	13,442,367	5.3%
Imperial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	2,524,463	4.3%	1,910,071	0.7%
Jamii Bora Bank Ltd	8	0.0%	-	0.0%	-	0.0%	1,485	0.0%	20,165	0.0%
Kenya Commercial Bank Ltd	30,445,285	15.5%	1,547,852	5.0%	11,175,701	9.2%	1,851,411	3.2%	12,549,084	4.9%
K-Rep Bank Ltd	995,001	0.5%	888,366	2.9%	1,780,359	1.5%	200,741	0.3%	5,903,796	2.3%
Middle East Bank (K) Ltd	27,183	0.0%	16,178	0.1%	464,844	0.4%	-	0.0%	-	0.0%
National Bank of Kenya Ltd	-	0.0%	-	0.0%	-	0.0%	353,495	0.6%	449,544	0.2%
NIC Bank Ltd	319,320	0.2%	1,237	0.0%	815,314	0.7%	332,789	0.6%	14,293,009	5.6%
Oriental Commercial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2,973,553	1.2%
Paramount Universal Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Prime Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Standard Chartered Bank (K) Ltd	53,778	0.0%	1,270,834	4.1%	8,147,743	6.7%	1,458,547	2.5%	10,052,108	3.9%

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
Trans - National Bank Ltd	13,539	0.0%	13,032	0.0%	6,691	0.0%	1,225,961	2.1%	225,099	0.1%
UBA Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Victoria Commercial Bank Ltd	74,931	0.0%	20,236	0.1%	21,376	0.0%	14,522	0.0%	8,650	0.0%
Total/HHI	**195,998,37**	**1,445**	**30,664,452**	**3,721**	**121,957,15**	**869**	**58,214,107**	**1,171**	**255,702,61**	**1,537**

Source: Genesis' calculations

Personal segment

Table 41: Lending and deposit by bank as of December 2012 (in KSH 000)

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
African Banking Corporation Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bank of Africa (K) Ltd	2,940,616	2.4%	513,080	0.4%	8,028,351	4.1%	562,390	2.1%	2,625,804	0.7%
Bank of Baroda (K) Ltd	4,194,176	3.4%	679,942	0.5%	3,794,727	1.9%	677,678	2.6%	1,318,180	0.4%
Bank of India	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Barclays Bank of Kenya Ltd	21,682,789	17.4%	2,092,903	1.5%	12,059,222	6.1%	276,914	1.1%	53,529,793	15.1%
CFC Stanbic Bank (K) Ltd	-	0.0%	4,693,935	3.5%	2,740,062	1.4%	65,233	0.2%	17,467,078	4.9%
Chase Bank Ltd	1,227,825	1.0%	4,711,527	3.5%	7,427,293	3.7%	1,712,368	6.5%	4,173,818	1.2%
Citibank N.A. Kenya	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Commercial Bank of Africa Ltd	10,428,727	8.4%	1,271,235	0.9%	7,967,274	4.0%	1,031,533	3.9%	11,704,991	3.3%
Consolidated Bank of Kenya Ltd	860,408	0.7%	402,492	0.3%	3,993,078	2.0%	12,862	0.0%	1,514,298	0.4%
Co-operative Bank of Kenya Ltd	19,549,391	15.7%	2,813,167	2.1%	18,604,504	9.4%	1,141,155	4.3%	39,496,778	11.2%
Credit Bank Ltd	280,350	0.2%	207,331	0.2%	1,635,904	0.8%	48,970	0.2%	382,909	0.1%
Development Bank of Kenya Ltd	103,793	0.1%	95,538	0.1%	1,019,343	0.5%	80,770	0.3%	2,345,871	0.7%
Diamond Trust Bank (K) Ltd	6,501,892	5.2%	3,921,897	2.9%	19,681,475	9.9%	1,805,207	6.9%	1,259,046	0.4%
Dubai Bank Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Ecobank Kenya Ltd	2,546,482	2.0%	1,330,840	1.0%	5,539,769	2.8%	3,236,941	12.3%	3,098,340	0.9%
Equatorial Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Bank	Demand deposits	% share	Saving deposits	% share	Term deposits	% share	Overdraft	% share	Term loans	% share
Equity Bank Ltd	6,115,797	4.9%	71,495,022	52.9%	12,233,723	6.2%	1,172,139	4.4%	37,647,228	10.6%
Family Bank Ltd	12,147,850	9.8%	1,154,505	0.9%	6,682,935	3.4%	1,520	0.0%	17,165,100	4.9%
Fidelity Commercial Bank Ltd	-	0.0%	584,291	0.4%	-	0.0%	31,888	0.1%	518,677	0.1%
First Community Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Giro Commercial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Guaranty Trust Bank Ltd	558,629	0.4%	161,300	0.1%	956,452	0.5%	117,313	0.4%	493,501	0.1%
Guardian Bank Ltd	2,135,913	1.7%	732,340	0.5%	3,909,505	2.0%	267,661	1.0%	479,829	0.1%
Gulf African Bank Ltd	3,094,685	2.5%	3,860,966	2.9%	2,410,258	1.2%	-	0.0%	914,714	0.3%
Habib Bank A.G. Zurich	309,346	0.2%	1,611,499	1.2%	2,351,739	1.2%	-	0.0%	94,586	0.0%
Habib Bank Ltd	1,351,703	1.1%	-	0.0%	2,062,898	1.0%	17,699	0.1%	109,598	0.0%
Housing Finance Co. of Kenya Ltd	-	0.0%	3,953,519	2.9%	4,100,704	2.1%	-	0.0%	25,841,953	7.3%
I&M Bank Ltd	7,757,119	6.2%	200,025	0.1%	32,204,448	16.3%	1,090,558	4.1%	4,786,652	1.4%
Imperial Bank Ltd	-	0.0%	-	0.0%	-	0.0%	963,047	3.7%	2,311,693	0.7%
Jamii Bora Bank Ltd	53,707	0.0%	343,196	0.3%	36,074	0.0%	7,800	0.0%	1,010,368	0.3%
Kenya Commercial Bank Ltd	7,978,479	6.4%	958,741	0.7%	1,563,588	0.8%	7,098,394	26.9%	69,548,513	19.7%
K-Rep Bank Ltd	381,940	0.3%	1,757,967	1.3%	55,465	0.0%	82,696	0.3%	795,496	0.2%
Middle East Bank (K) Ltd	80,442	0.1%	194,518	0.1%	1,506,419	0.8%	55,718	0.2%	138,909	0.0%
National Bank of Kenya Ltd	-	0.0%	13,146,285	9.7%	1,905,384	1.0%	585,489	2.2%	16,815,043	4.8%
NIC Bank Ltd	10,886,356	8.8%	979,470	0.7%	10,909,919	5.5%	3,798,525	14.4%	3,608,100	1.0%
Oriental Commercial Bank Ltd	195,967	0.2%	268,443	0.2%	3,113,827	1.6%	-	0.0%	24,045	0.0%
Paramount Universal Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Prime Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Standard Chartered Bank (K) Ltd	-	0.0%	9,388,087	7.0%	14,493,281	7.3%	111,790	0.4%	32,251,544	9.1%
Trans - National Bank Ltd	1,016,848	0.8%	364,554	0.3%	1,925,834	1.0%	191,882	0.7%	156,362	0.0%
UBA Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Victoria Commercial Bank Ltd	26,877	0.0%	1,156,693	0.9%	3,174,907	1.6%	95,181	0.4%	230,531	0.1%
Total/HHI	**124,408,10**	**958**	**135,045,30**	**3,011**	**198,088,36**	**707**	**26,341,321**	**1,278**	**353,859,34**	**1,078**

Source: Genesis' calculations

Specific Lending Products

Table 42: Lending in specific categories as of December 2012 (in KSH 000)

Bank	Consumer durable loans	% share	Credit card loans	% share	Mortgages	% share
African Banking Corporation Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Bank of Africa (K) Ltd	22,387	0.0%	-	0.0%	1,194,051	1.0%
Bank of Baroda (K) Ltd	55,176	0.1%	-	0.0%	433,692	0.4%
Bank of India	n/a	n/a	n/a	n/a	n/a	n/a
Barclays Bank of Kenya Ltd	7,958	0.0%	3,140,389	51.8%	18,432,180	15.6%
CFC Stanbic Bank (K) Ltd	1,328,110	2.2%	99,099	1.6%	9,209,417	7.8%
Chase Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Citibank N.A. Kenya	-	0.0%	9,571	0.2%	-	0.0%
Commercial Bank of Africa Ltd	-	-	444,168	7.3%	-	-
Consolidated Bank of Kenya Ltd	-	0.0%	-	0.0%	3,141,421	2.7%
Co-operative Bank of Kenya Ltd	-	-	507,302	8.4%	-	-
Credit Bank Ltd	-	0.0%	-	0.0%	149,038	0.1%
Development Bank of Kenya Ltd	7,227,028	11.8%	-	0.0%	935,362	0.8%
Diamond Trust Bank (K) Ltd	67,510	0.1%	209,695	3.5%	462,254	0.4%
Dubai Bank Ltd	-	0.0%	-	0.0%	-	0.0%
Ecobank Kenya Ltd	-	0.0%	-	0.0%	2,232,586	1.9%
Equatorial Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Equity Bank Ltd	36,288,030	59.5%	44,534	0.7%	3,737,940	3.2%
Family Bank Ltd	8,641,423	14.2%	-	0.0%	1,605,844	1.4%
Fidelity Commercial Bank Ltd	8	0.0%	-	0.0%	2	0.0%
First Community Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Giro Commercial Bank Ltd	105,580	0.2%	-	0.0%	1,044,199	0.9%

Bank	Consumer durable loans	% share	Credit card loans	% share	Mortgages	% share
Guaranty Trust Bank Ltd	-	0.0%	-	0.0%	-	0.0%
Guardian Bank Ltd	18,331	0.0%	-	0.0%	2	0.0%
Gulf African Bank Ltd	864,003	1.4%	-	0.0%	3,140,902	2.7%
Habib Bank A.G. Zurich	-	0.0%	-	0.0%	17,991	0.0%
Habib Bank Ltd	65,823	0.1%	-	0.0%	-	0.0%
Housing Finance Co. of Kenya Ltd	-	0.0%	-	0.0%	31,018,622	26.2%
I&M Bank Ltd	412,878	0.7%	189,087	3.1%	2,309,121	1.9%
Imperial Bank Ltd	60,165	0.1%	153,370	2.5%	178,848	0.2%
Jamii Bora Bank Ltd	-	0.0%	-	0.0%	218,344	0.2%
Kenya Commercial Bank Ltd	619,716	1.0%	485,516	8.0%	18,215,430	15.4%
K-Rep Bank Ltd	158,685	0.3%	-	0.0%	666,257	0.6%
Middle East Bank	-	0.0%	-	0.0%	45,642	0.0%
National Bank of Kenya Ltd	4,820,293	7.9%	66,433	1.1%	6,539,548	5.5%
NIC Bank Ltd	27,699	0.0%	276,677	4.6%	714,814	0.6%
Oriental Commercial Bank Ltd	86,152	0.1%	-	0.0%	16,717	0.0%
Paramount Universal Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Prime Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Standard Chartered Bank (K) Ltd	-	0.0%	432,754	7.1%	12,224,786	10.3%
Trans - National Bank Ltd	126,014	0.2%	-	0.0%	596,150	0.5%
UBA Kenya	n/a	n/a	n/a	n/a	n/a	n/a
Victoria Commercial Bank Ltd	226	0.0%	-	0.0%	-	0.0%
Total/HHI	**61,003,195**	**3950.4**	**6,058,595**	**2979.2**	**118,481,160**	**1398.0**

Source: Genesis' calculations

APPENDIX D: RISK SPREAD BY BANK AS OF DECEMBER 2013

Table 43: Risk free rate in Kenya as of 31 December 2013

Tenor	Yield
0 to 3 months	9%
Over 3 to 12 months	10%
Over 1 to 2 years	11%
Over 2 to 5 years	11%
Over 5 years	13%
Overdraft/Loan	8%

Source: Genesis' calculations

Corporate segment

Table 44: Lending spread by bank as of December 2013 in the corporate segment

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	5.6%	-3.0%	7.0%	4.4%	2.0%	0.1%
Bank of Baroda (K) Ltd	8.0%	9.0%	8.3%	7.2%	6.1%	4.8%
Barclays Bank of Kenya Ltd	7.6%	7.3%	5.9%	5.4%	4.6%	3.0%
Citibank N.A. Kenya	-1.7%	3.0%	2.5%	2.0%	1.1%	-0.6%
Consolidated Bank of Kenya Ltd	8.8%	n/a	n/a	n/a	n/a	n/a
Credit Bank Ltd	9.5%	10.1%	8.6%	9.1%	7.6%	4.9%
Development Bank of Kenya Ltd	11.4%	11.7%	9.4%	8.8%	6.9%	6.6%
Diamond Trust Bank (K) Ltd	6.8%	9.4%	6.8%	2.7%	0.8%	4.4%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	13.3%	13.0%	11.6%	11.1%	10.3%	8.7%
Equity Bank Ltd	n/a	8.2%	6.9%	6.3%	5.5%	3.9%
Family Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Fidelity Commercial Bank Ltd	10.0%	7.1%	5.9%	6.7%	6.4%	n/a
Guaranty Trust Bank Ltd	11.0%	10.2%	9.2%	8.4%	7.8%	5.0%

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Giro Commercial Bank Ltd	5.5%	6.2%	6.9%	6.3%	5.5%	2.9%
Guardian Bank Ltd	-1.2%	-1.5%	-2.8%	-3.4%	-4.2%	-5.8%
Gulf African Bank Ltd	n/a	8.0%	6.8%	6.6%	5.3%	4.3%
Habib Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Habib Bank A.G. Zurich	n/a	6.3%	4.1%	2.3%	3.7%	n/a
Housing Finance Co. of Kenya Ltd	10.9%	7.1%	5.9%	5.3%	4.1%	2.6%
I&M Bank Ltd	8.0%	8.9%	6.0%	6.0%	4.7%	2.3%
Imperial Bank Ltd	12.5%	0.3%	4.3%	8.5%	6.7%	-0.8%
Jamii Bora Bank Ltd	14.0%	13.2%	11.9%	11.3%	10.5%	8.9%
Kenya Commercial Bank Ltd	5.6%	4.2%	3.3%	3.1%	2.3%	0.7%
K-Rep Bank Ltd	n/a	15.1%	12.8%	5.1%	8.2%	7.6%
Middle East Bank (K) Ltd	12.6%	8.0%	12.9%	7.8%	6.6%	4.0%
National Bank of Kenya Ltd	9.5%	9.1%	7.8%	9.8%	9.0%	5.7%
NIC Bank Ltd	11.1%	9.1%	8.3%	7.7%	6.8%	1.4%
Oriental Commercial Bank Ltd	n/a	9.6%	7.8%	n/a	n/a	n/a
CFC Stanbic Bank (K) Ltd	-1.3%	-5.4%	-8.7%	3.3%	7.5%	1.9%
Standard Chartered Bank (K) Ltd	6.3%	5.2%	3.1%	3.7%	2.0%	0.7%
Trans - National Bank Ltd	12.5%	12.0%	10.6%	10.1%	9.3%	5.9%
Victoria Commercial Bank Ltd	8.8%	n/a	n/a	6.3%	6.3%	4.5%

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank offered no loans over that tenor

Table 45: Deposit spread by bank as of December 2013 in the corporate segment

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	-5.4%	-8.5%	2.7%	0.8%	n/a	n/a	n/a
Bank of Baroda (K) Ltd	-5.4%	-7.2%	1.6%	-1.0%	n/a	-11.5%	n/a
Barclays Bank of Kenya Ltd	-4.3%	-8.5%	-4.1%	-3.2%	-4.1%	n/a	n/a
Citibank N.A. Kenya	0.1%	n/a	0.1%	-0.8%	-0.3%	n/a	n/a

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Consolidated Bank of Kenya Ltd	-8.5%	-5.8%	-5.2%	-2.4%	n/a	n/a	n/a
Credit Bank Ltd	-8.5%	-8.5%	1.0%	-0.1%	n/a	-2.0%	n/a
Development Bank of Kenya Ltd	-8.5%	-6.0%	2.4%	-2.6%	1.3%	-7.3%	n/a
Diamond Trust Bank (K) Ltd	-8.3%	-8.0%	3.8%	-2.6%	-2.2%	-2.5%	-5.8%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	-8.5%	n/a	4.1%	2.8%	2.2%	1.4%	-0.2%
Equity Bank Ltd	-8.5%	-8.5%	1.0%	-0.1%	-0.7%	-1.0%	n/a
Family Bank Ltd	-8.5%	n/a	n/a	n/a	n/a	n/a	n/a
Fidelity Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Guaranty Trust Bank Ltd	-7.8%	-5.2%	0.5%	-0.7%	n/a	n/a	n/a
Giro Commercial Bank Ltd	-4.5%	-6.5%	0.2%	-0.1%	n/a	n/a	n/a
Guardian Bank Ltd	-8.5%	n/a	-4.8%	-6.2%	n/a	n/a	n/a
Gulf African Bank Ltd	-8.5%	-7.5%	0.4%	-2.4%	n/a	n/a	n/a
Habib Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Habib Bank A.G. Zurich	-8.5%	n/a	0.6%	0.2%	n/a	n/a	n/a
Housing Finance Co. of Kenya Ltd	-8.5%	-6.1%	1.8%	0.1%	n/a	n/a	n/a
I&M Bank Ltd	-8.4%	n/a	1.1%	-4.1%	-2.8%	n/a	-8.6%
Imperial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Jamii Bora Bank Ltd	-8.5%	-6.5%	-5.8%	n/a	n/a	n/a	n/a
Kenya Commercial Bank Ltd	-8.3%	-6.5%	-3.3%	-3.8%	n/a	n/a	n/a
K-Rep Bank Ltd	n/a	n/a	-0.4%	-0.8%	-10.7%	n/a	n/a
Middle East Bank (K) Ltd	-1.8%	-6.1%	0.1%	-0.8%	-1.2%	n/a	n/a
National Bank of Kenya Ltd	-5.5%	-7.5%	0.2%	-3.1%	n/a	n/a	n/a
NIC Bank Ltd	-7.1%	-6.7%	0.8%	-0.3%	-2.7%	-2.4%	-8.1%
Oriental Commercial Bank Ltd	-8.2%	-4.9%	2.3%	0.1%	-3.5%	-11.5%	n/a
CFC Stanbic Bank (K) Ltd	-7.6%	-8.3%	n/a	-9.5%	-10.1%	n/a	n/a
Standard Chartered Bank (K) Ltd	0.7%	-8.2%	-4.4%	-3.6%	-3.9%	n/a	n/a
Trans - National Bank Ltd	-8.5%	-8.5%	2.2%	1.9%	-3.7%	n/a	n/a

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Victoria Commercial Bank Ltd	-8.5%	0.2%	0.7%	-2.0%	-3.7%	n/a	n/a

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank accepted no deposits over that tenor

SME segment

Table 46: Lending spread by bank as of December 2013 in the SME segment

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	9.6%	3.6%	7.2%	7.6%	6.9%	3.8%
Bank of Baroda (K) Ltd	7.7%	6.4%	7.4%	6.9%	6.3%	4.5%
Barclays Bank of Kenya Ltd	15.3%	14.2%	12.9%	12.3%	11.5%	n/a
Citibank N.A. Kenya	n/a	n/a	n/a	n/a	n/a	n/a
Consolidated Bank of Kenya Ltd	8.8%	n/a	n/a	n/a	n/a	n/a
Credit Bank Ltd	9.5%	1.3%	9.4%	10.1%	8.5%	5.4%
Development Bank of Kenya Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Diamond Trust Bank (K) Ltd	6.8%	8.7%	7.2%	3.1%	1.9%	4.2%
Dubai Bank Ltd	8.2%	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	13.3%	13.0%	11.6%	11.1%	10.3%	8.7%
Equity Bank Ltd	10.5%	10.2%	8.9%	8.3%	7.5%	5.9%
Family Bank Ltd	14.0%	n/a	10.3%	9.8%	9.0%	n/a
Fidelity Commercial Bank Ltd	7.3%	8.8%	7.8%	7.8%	7.8%	5.5%
Guaranty Trust Bank Ltd	12.8%	8.8%	9.3%	11.7%	10.1%	5.2%
Giro Commercial Bank Ltd	7.5%	7.2%	7.9%	6.3%	4.5%	3.9%
Guardian Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Gulf African Bank Ltd	n/a	9.5%	8.9%	9.1%	8.3%	6.0%
Habib Bank Ltd	8.1%	7.6%	8.2%	4.9%	4.6%	n/a
Habib Bank A.G. Zurich	n/a	9.7%	6.3%	6.1%	5.5%	3.7%
Housing Finance Co. of Kenya Ltd	n/a	n/a	n/a	n/a	n/a	n/a

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
I&M Bank Ltd	9.0%	9.8%	5.9%	4.7%	4.7%	3.8%
Imperial Bank Ltd	11.0%	0.3%	4.3%	8.5%	6.7%	n/a
Jamii Bora Bank Ltd	16.0%	13.2%	11.9%	11.3%	10.5%	8.9%
Kenya Commercial Bank Ltd	10.2%	9.4%	6.1%	5.9%	5.1%	3.1%
K-Rep Bank Ltd	15.0%	26.4%	20.3%	20.1%	15.1%	7.4%
Middle East Bank (K) Ltd	14.5%	n/a	n/a	n/a	n/a	n/a
National Bank of Kenya Ltd	17.8%	17.4%	16.1%	13.4%	12.6%	12.3%
NIC Bank Ltd	15.5%	9.2%	9.5%	8.5%	7.5%	3.2%
Oriental Commercial Bank Ltd	n/a	8.4%	6.7%	7.1%	6.8%	3.7%
CFC Stanbic Bank (K) Ltd	14.5%	-3.5%	6.3%	-1.7%	12.5%	5.9%
Standard Chartered Bank (K) Ltd	9.8%	8.1%	11.1%	6.9%	7.5%	3.0%
Trans - National Bank Ltd	18.0%	17.2%	15.9%	15.3%	n/a	n/a
Victoria Commercial Bank Ltd	8.6%	n/a	n/a	6.0%	6.1%	6.4%

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank offered no loans over that tenor

Table 47: Deposit spread by bank as of December 2013 in the SME segment

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	-7.7%	-8.3%	1.6%	-0.3%	-5.9%	-6.5%	n/a
Bank of Baroda (K) Ltd	-6.9%	-6.8%	0.7%	-0.6%	-2.7%	-8.8%	-13.1%
Barclays Bank of Kenya Ltd	-8.5%	-7.7%	-3.1%	-1.4%	n/a	n/a	n/a
Citibank N.A. Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Consolidated Bank of Kenya Ltd	-8.5%	-6.2%	-5.4%	-3.4%	n/a	n/a	n/a
Credit Bank Ltd	-8.5%	-8.5%	3.3%	0.3%	n/a	-1.9%	n/a
Development Bank of Kenya Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Diamond Trust Bank (K) Ltd	-8.4%	-7.8%	-0.7%	-1.5%	-3.5%	-7.0%	-3.6%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	-8.5%	n/a	4.1%	2.8%	2.2%	1.4%	-0.2%

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Equity Bank Ltd	-8.5%	-8.5%	0.2%	-0.6%	-0.9%	-1.5%	-3.1%
Family Bank Ltd	-8.5%	n/a	n/a	n/a	n/a	n/a	n/a
Fidelity Commercial Bank Ltd	-8.5%	n/a	-0.6%	-1.7%	n/a	n/a	n/a
Guaranty Trust Bank Ltd	-7.8%	-5.7%	0.9%	-1.5%	-2.7%	n/a	n/a
Giro Commercial Bank Ltd	-6.5%	-6.5%	0.2%	-1.1%	-1.7%	n/a	n/a
Guardian Bank Ltd	-8.5%	n/a	-4.8%	n/a	n/a	n/a	n/a
Gulf African Bank Ltd	-8.5%	-5.7%	1.7%	-4.0%	n/a	n/a	n/a
Habib Bank Ltd	-8.3%	n/a	-2.5%	-1.6%	n/a	n/a	n/a
Habib Bank A.G. Zurich	-8.5%	n/a	-0.1%	-2.4%	n/a	n/a	n/a
Housing Finance Co. of Kenya Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
I&M Bank Ltd	-8.4%	n/a	0.9%	-3.4%	-5.3%	-4.0%	-8.2%
Imperial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Jamii Bora Bank Ltd	-8.5%	-6.5%	-5.8%	n/a	n/a	n/a	n/a
Kenya Commercial Bank Ltd	-8.3%	-6.4%	-5.3%	n/a	n/a	n/a	n/a
K-Rep Bank Ltd	-8.5%	-6.5%	-1.2%	-1.9%	-4.2%	-7.0%	n/a
Middle East Bank (K) Ltd	-3.8%	-6.3%	1.9%	-0.1%	n/a	n/a	n/a
National Bank of Kenya Ltd	-4.5%	-7.5%	-1.8%	-4.1%	n/a	n/a	n/a
NIC Bank Ltd	-7.0%	-7.1%	0.5%	-1.7%	n/a	-4.6%	-8.2%
Oriental Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CFC Stanbic Bank (K) Ltd	-8.2%	0.3%	n/a	-2.3%	-2.9%	n/a	n/a
Standard Chartered Bank (K) Ltd	-3.0%	-6.5%	-0.6%	-1.2%	3.7%	0.6%	n/a
Trans - National Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Victoria Commercial Bank Ltd	-8.5%	-8.5%	-0.9%	-4.2%	-9.7%	n/a	n/a

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank accepted no deposits over that tenor

Personal segment

Table 48: Lending spread by bank as of December 2013 in the personal segment

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	8.5%	-1.0%	6.6%	6.4%	5.0%	-0.5%
Bank of Baroda (K) Ltd	8.1%	4.8%	4.4%	5.6%	5.1%	1.5%
Barclays Bank of Kenya Ltd	15.8%	12.6%	11.3%	10.7%	9.9%	8.3%
Citibank N.A. Kenya	n/a	n/a	n/a	n/a	n/a	n/a
Consolidated Bank of Kenya Ltd	8.8%	n/a	n/a	n/a	n/a	n/a
Credit Bank Ltd	17.0%	10.7%	6.3%	5.3%	3.3%	-4.1%
Development Bank of Kenya Ltd	14.6%	10.6%	9.3%	6.2%	4.6%	-2.0%
Diamond Trust Bank (K) Ltd	7.0%	n/a	6.2%	1.9%	0.7%	0.9%
Dubai Bank Ltd	8.2%	n/a	n/a	n/a	n/a	7.9%
Ecobank Kenya Ltd	13.3%	13.0%	11.6%	11.1%	10.3%	8.7%
Equity Bank Ltd	10.5%	10.2%	8.9%	8.3%	7.5%	4.9%
Family Bank Ltd	10.7%	n/a	5.7%	5.2%	4.4%	2.8%
Fidelity Commercial Bank Ltd	9.4%	7.0%	6.9%	7.6%	6.8%	n/a
Guaranty Trust Bank Ltd	15.1%	5.2%	9.5%	8.9%	7.6%	5.5%
Giro Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Guardian Bank Ltd	-1.2%	n/a	n/a	n/a	-4.2%	-5.8%
Gulf African Bank Ltd	n/a	8.7%	4.0%	4.9%	2.1%	-1.4%
Habib Bank Ltd	-0.2%	9.0%	4.0%	0.2%	3.9%	-8.1%
Habib Bank A.G. Zurich	n/a	8.5%	7.5%	10.9%	4.4%	n/a
Housing Finance Co. of Kenya Ltd	n/a	-2.9%	5.7%	3.9%	3.0%	0.1%
I&M Bank Ltd	7.7%	9.6%	7.1%	5.2%	5.3%	2.3%
Imperial Bank Ltd	12.5%	6.1%	6.5%	7.3%	5.8%	-1.2%
Jamii Bora Bank Ltd	15.5%	8.2%	6.9%	6.3%	5.5%	3.9%
Kenya Commercial Bank Ltd	15.5%	8.5%	9.1%	8.1%	7.3%	6.3%
K-Rep Bank Ltd	15.0%	18.3%	17.9%	16.4%	13.0%	6.5%

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Middle East Bank (K) Ltd	14.1%	16.7%	3.9%	0.7%	-1.0%	-0.2%
National Bank of Kenya Ltd	15.6%	15.3%	14.0%	8.5%	7.7%	3.9%
NIC Bank Ltd	13.1%	13.6%	1.8%	2.6%	2.6%	-2.5%
Oriental Commercial Bank Ltd	n/a	5.7%	3.6%	2.1%	0.9%	-3.1%
CFC Stanbic Bank (K) Ltd	18.5%	1.0%	3.2%	-4.7%	11.5%	7.9%
Standard Chartered Bank (K) Ltd	13.0%	12.6%	8.3%	7.7%	5.5%	0.7%
Trans - National Bank Ltd	9.5%	17.2%	15.9%	15.3%	14.5%	1.4%
Victoria Commercial Bank Ltd	7.7%	n/a	n/a	5.5%	3.8%	-2.0%

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank offered no loans over that tenor

Table 49: Deposit spread by bank as of December 2013 in the personal segment

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	-6.6%	-8.1%	1.7%	0.0%	-3.9%	n/a	n/a
Bank of Baroda (K) Ltd	-6.7%	-6.7%	-0.5%	-1.2%	-3.3%	-7.4%	-13.1%
Barclays Bank of Kenya Ltd	-8.5%	-7.7%	-3.1%	-1.4%	-3.1%	-4.4%	n/a
Citibank N.A. Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Consolidated Bank of Kenya Ltd	-8.5%	-6.4%	-6.0%	-4.2%	n/a	n/a	n/a
Credit Bank Ltd	-8.5%	-8.5%	2.1%	1.2%	n/a	-1.8%	n/a
Development Bank of Kenya Ltd	-8.5%	-6.0%	2.4%	2.1%	-4.2%	n/a	n/a
Diamond Trust Bank (K) Ltd	-8.4%	-8.1%	-0.7%	-2.1%	-3.7%	-5.4%	-5.5%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	-8.5%	-4.9%	4.1%	2.8%	2.2%	1.4%	-0.2%
Equity Bank Ltd	-8.5%	-8.0%	-1.8%	-2.6%	-2.7%	-3.5%	-5.1%
Family Bank Ltd	-8.5%	-7.5%	-5.4%	-5.9%	n/a	n/a	n/a
Fidelity Commercial Bank Ltd	n/a	-2.5%	n/a	n/a	n/a	n/a	n/a
Guaranty Trust Bank Ltd	-7.6%	-4.4%	0.8%	-0.8%	-0.6%	-1.5%	n/a
Giro Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Guardian Bank Ltd	-8.5%	n/a	-4.8%	-6.2%	-6.7%	n/a	n/a
Gulf African Bank Ltd	-8.5%	-7.7%	0.8%	-1.6%	n/a	n/a	n/a
Habib Bank Ltd	-8.5%	n/a	-1.5%	-1.6%	n/a	n/a	n/a
Habib Bank A.G. Zurich	-8.5%	-8.5%	-0.5%	-1.1%	n/a	n/a	n/a
Housing Finance Co. of Kenya Ltd	-8.5%	-7.1%	-0.5%	-1.4%	0.4%	-8.9%	-2.9%
I&M Bank Ltd	-8.4%	-8.5%	0.5%	-3.0%	-4.7%	-4.1%	-10.0%
Imperial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Jamii Bora Bank Ltd	-8.5%	-6.5%	-6.8%	n/a	n/a	n/a	n/a
Kenya Commercial Bank Ltd	-8.3%	-6.7%	-3.8%	n/a	n/a	n/a	n/a
K-Rep Bank Ltd	-8.5%	-6.5%	-1.4%	-3.4%	-4.1%	n/a	-4.9%
Middle East Bank (K) Ltd	-0.5%	-6.2%	0.7%	-1.2%	-3.3%	n/a	-13.1%
National Bank of Kenya Ltd	-8.5%	-8.3%	-3.8%	-6.1%	n/a	n/a	n/a
NIC Bank Ltd	-6.9%	-7.1%	-0.3%	-3.5%	-7.2%	-5.3%	-7.1%
Oriental Commercial Bank Ltd	-8.0%	-4.9%	2.2%	0.5%	-1.5%	-1.8%	n/a
CFC Stanbic Bank (K) Ltd	-8.2%	-8.3%	n/a	-9.5%	-10.7%	n/a	n/a
Standard Chartered Bank (K) Ltd	n/a	-7.4%	-0.1%	-1.6%	0.3%	0.8%	n/a
Trans - National Bank Ltd	-8.5%	-8.5%	-6.8%	-6.1%	-8.7%	n/a	n/a
Victoria Commercial Bank Ltd	-8.5%	-2.0%	0.6%	-1.3%	-9.7%	n/a	n/a

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank accepted no deposits over that tenor

APPENDIX E: RISK SPREAD BY BANK AS OF DECEMBER 2012

Corporate segment

Table 50: Lending spread by bank as of December 2012 in the corporate segment

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	10.1%	12.4%	11.6%	5.8%	7.8%	1.5%
Bank of Baroda (K) Ltd	-3.0%	10.3%	9.0%	8.8%	7.6%	3.7%
Barclays Bank of Kenya Ltd	10.1%	9.8%	8.5%	7.9%	7.1%	5.5%
Citibank N.A. Kenya	6.9%	2.3%	2.8%	4.7%	0.5%	-0.6%
Consolidated Bank of Kenya Ltd	15.5%	15.2%	13.9%	12.3%	10.5%	7.4%
Credit Bank Ltd	6.1%	11.0%	12.3%	9.1%	9.7%	5.3%
Development Bank of Kenya Ltd	13.4%	13.4%	11.9%	12.4%	9.4%	8.8%
Diamond Trust Bank (K) Ltd	8.5%	5.5%	8.7%	9.2%	8.6%	5.5%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	13.3%	13.0%	11.6%	11.1%	10.3%	8.7%
Equity Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Family Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Fidelity Commercial Bank Ltd	12.5%	13.2%	4.9%	3.3%	9.5%	n/a
Guaranty Trust Bank Ltd	13.0%	10.7%	9.7%	10.3%	8.9%	7.3%
Giro Commercial Bank Ltd	8.5%	11.2%	9.9%	8.3%	8.5%	5.9%
Guardian Bank Ltd	1.7%	1.4%	0.1%	-0.5%	-1.3%	-2.9%
Gulf African Bank Ltd	n/a	3.5%	6.8%	4.5%	5.9%	8.4%
Habib Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Habib Bank A.G. Zurich	n/a	8.5%	4.9%	5.8%	2.3%	1.8%
Housing Finance Co. of Kenya Ltd	n/a	9.2%	7.9%	7.1%	n/a	4.9%
I&M Bank Ltd	11.0%	4.7%	6.5%	-0.6%	2.3%	2.8%
Imperial Bank Ltd	12.5%	8.3%	6.9%	7.0%	8.1%	-2.5%
Jamii Bora Bank Ltd	15.5%	12.2%	16.9%	-10.7%	10.5%	-13.1%
Kenya Commercial Bank Ltd	7.0%	8.7%	8.4%	7.8%	7.0%	5.4%

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
K-Rep Bank Ltd	n/a	n/a	n/a	n/a	4.5%	n/a
Middle East Bank (K) Ltd	16.1%	9.6%	11.5%	n/a	8.6%	6.0%
National Bank of Kenya Ltd	10.5%	n/a	n/a	10.8%	n/a	6.7%
NIC Bank Ltd	11.1%	8.5%	8.0%	8.1%	6.3%	3.8%
Oriental Commercial Bank Ltd	n/a	12.7%	10.1%	-0.2%	n/a	n/a
CFC Stanbic Bank (K) Ltd	10.5%	n/a	n/a	3.3%	7.5%	1.9%
Standard Chartered Bank (K) Ltd	6.5%	4.2%	1.7%	2.9%	3.0%	-1.1%
Trans - National Bank Ltd	10.1%	12.0%	10.6%	10.1%	9.3%	5.9%
Victoria Commercial Bank Ltd	11.1%	n/a	n/a	8.0%	8.2%	5.8%

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank offered no loans over that tenor

Table 51: Average lending spread of top 4 and the other banks in the corporate segment

Lending	Overdraft	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4	8.8%	7.8%	6.7%	6.7%	5.9%	3.4%
Other banks	10.2%	9.5%	9.0%	6.1%	7.2%	3.6%
Number of banks	24	25	25	27	26	26

Source: Genesis' calculations

Table 52: Deposit spread by bank as of December 2012 in the corporate segment

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	1.8%	-7.8%	6.4%	6.0%	n/a	n/a	n/a
Bank of Baroda (K) Ltd	-4.4%	-7.2%	3.1%	0.5%	-2.6%	-1.0%	n/a
Barclays Bank of Kenya Ltd	1.5%	n/a	0.4%	-2.5%	n/a	n/a	n/a
Citibank N.A. Kenya	-3.2%	n/a	-2.6%	-0.1%	4.6%	-9.3%	n/a
Consolidated Bank of Kenya Ltd	-8.5%	-6.1%	-3.0%	5.1%	n/a	n/a	n/a
Credit Bank Ltd	-8.5%	-8.5%	2.7%	1.2%	n/a	4.3%	n/a
Development Bank of Kenya Ltd	-8.5%	-6.0%	4.9%	-0.3%	-5.2%	n/a	n/a
Diamond Trust Bank (K) Ltd	-8.1%	-7.5%	0.1%	0.2%	1.4%	-0.9%	-4.3%

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	-8.5%	n/a	2.6%	1.3%	0.8%	0.0%	-1.7%
Equity Bank Ltd	-8.5%	-8.5%	-0.3%	-0.6%	-0.9%	-1.5%	-2.1%
Family Bank Ltd	-8.5%	n/a	n/a	n/a	n/a	n/a	n/a
Fidelity Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Guaranty Trust Bank Ltd	-7.7%	-4.2%	1.5%	0.3%	0.4%	-1.5%	n/a
Giro Commercial Bank Ltd	-4.5%	-6.5%	1.2%	-1.1%	n/a	n/a	n/a
Guardian Bank Ltd	-8.5%	-5.5%	-3.0%	-4.3%	n/a	n/a	n/a
Gulf African Bank Ltd	-8.5%	-7.6%	-6.8%	0.5%	n/a	n/a	n/a
Habib Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Habib Bank A.G. Zurich	-8.5%	n/a	2.5%	-1.1%	n/a	n/a	n/a
Housing Finance Co. of Kenya Ltd	n/a	-6.3%	2.7%	4.4%	-2.3%	n/a	n/a
I&M Bank Ltd	-8.3%	n/a	0.2%	1.4%	-4.1%	-6.2%	-8.7%
Imperial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Jamii Bora Bank Ltd	-8.5%	n/a	n/a	3.9%	-2.7%	n/a	n/a
Kenya Commercial Bank Ltd	-8.3%	-7.7%	-5.3%	-6.3%	n/a	n/a	n/a
K-Rep Bank Ltd	-8.5%	n/a	n/a	-3.9%	-2.1%	n/a	n/a
Middle East Bank (K) Ltd	0.5%	-4.9%	2.0%	0.5%	2.3%	n/a	-13.1%
National Bank of Kenya Ltd	-3.6%	n/a	7.1%	6.3%	n/a	n/a	n/a
NIC Bank Ltd	-6.5%	-6.0%	0.7%	-1.3%	-0.7%	-5.6%	-7.8%
Oriental Commercial Bank Ltd	-7.8%	-5.3%	4.4%	0.2%	1.7%	-11.5%	n/a
CFC Stanbic Bank (K) Ltd	-7.3%	-0.6%	-1.2%	-0.3%	n/a	n/a	n/a
Standard Chartered Bank (K) Ltd	-3.5%	-7.5%	0.3%	4.6%	n/a	n/a	n/a
Trans - National Bank Ltd	-8.5%	-8.5%	2.2%	1.9%	-3.7%	n/a	n/a
Victoria Commercial Bank Ltd	-8.5%	1.4%	1.9%	1.8%	n/a	n/a	n/a

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank accepted no deposits over that tenor

Table 53: Average deposit spread of top 4 and the other banks in the corporate segment

Deposit	Demand	Saving	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4	-4.1%	-5.8%	-0.3%	-0.6%	-0.2%	-4.3%	-5.1%
Other banks	-6.8%	-6.1%	1.2%	0.9%	-1.1%	-2.6%	-8.7%
Number of banks	28	20	26	28	15	10	6

Source: Genesis' calculations

SME segment

Table 54: Lending spread by bank as of December 2012 in the SME segment

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	13.5%	9.5%	11.9%	11.3%	11.5%	4.8%
Bank of Baroda (K) Ltd	-0.7%	9.7%	8.6%	9.4%	8.8%	6.7%
Barclays Bank of Kenya Ltd	17.0%	15.2%	13.8%	13.3%	12.5%	n/a
Citibank N.A. Kenya	n/a	n/a	n/a	n/a	n/a	n/a
Consolidated Bank of Kenya Ltd	15.5%	15.2%	13.9%	12.3%	10.5%	8.4%
Credit Bank Ltd	11.4%	11.4%	10.7%	10.1%	9.3%	9.4%
Development Bank of Kenya Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Diamond Trust Bank (K) Ltd	8.5%	10.2%	5.9%	8.2%	8.2%	3.9%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	13.3%	13.0%	11.6%	11.1%	10.3%	8.7%
Equity Bank Ltd	13.5%	13.2%	11.9%	11.3%	10.5%	8.9%
Family Bank Ltd	10.7%	n/a	9.2%	8.6%	7.8%	n/a
Fidelity Commercial Bank Ltd	8.5%	12.2%	7.9%	8.3%	5.5%	3.9%
Guaranty Trust Bank Ltd	17.1%	13.2%	11.0%	13.5%	12.5%	9.0%
Giro Commercial Bank Ltd	9.5%	12.2%	9.9%	8.3%	6.5%	5.9%
Guardian Bank Ltd	1.7%	1.4%	0.1%	-0.5%	-1.3%	n/a
Gulf African Bank Ltd	n/a	9.6%	10.1%	9.5%	8.5%	6.9%
Habib Bank Ltd	9.2%	8.5%	5.1%	8.1%	5.9%	n/a
Habib Bank A.G. Zurich	n/a	10.5%	7.4%	8.6%	8.0%	7.0%

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Housing Finance Co. of Kenya Ltd	n/a	n/a	n/a	n/a	n/a	n/a
I&M Bank Ltd	12.0%	6.4%	-1.1%	1.3%	1.0%	1.2%
Imperial Bank Ltd	12.5%	8.3%	6.9%	7.0%	8.1%	n/a
Jamii Bora Bank Ltd	11.5%	11.2%	-10.1%	-10.7%	8.5%	n/a
Kenya Commercial Bank Ltd	7.0%	9.7%	8.4%	7.8%	7.0%	5.4%
K-Rep Bank Ltd	10.5%	n/a	0.1%	n/a	-0.9%	n/a
Middle East Bank (K) Ltd	n/a	n/a	n/a	n/a	n/a	n/a
National Bank of Kenya Ltd	17.8%	n/a	n/a	13.4%	n/a	12.3%
NIC Bank Ltd	15.5%	2.3%	9.0%	9.4%	8.6%	4.8%
Oriental Commercial Bank Ltd	n/a	12.0%	7.3%	9.8%	9.4%	12.9%
CFC Stanbic Bank (K) Ltd	14.5%	n/a	n/a	-1.7%	12.5%	5.9%
Standard Chartered Bank (K) Ltd	12.2%	10.2%	10.1%	9.5%	8.0%	4.7%
Trans - National Bank Ltd	12.5%	17.2%	15.9%	15.3%	n/a	n/a
Victoria Commercial Bank Ltd	10.3%	n/a	n/a	7.7%	8.4%	6.8%

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank offered no loans over that tenor

Table 55: Average lending spread of top 4 and the other banks in the SME segment

Lending	Overdraft	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4	11.9%	8.0%	6.4%	7.6%	7.1%	4.7%
Other banks	11.3%	11.1%	8.1%	8.3%	8.1%	7.4%
Number of banks	25	23	25	27	26	20

Source: Genesis' calculations

Table 56: Deposit spread by bank as of December 2012 in the SME segment

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	-4.3%	-8.3%	6.7%	3.7%	2.5%	-10.7%	3.5%
Bank of Baroda (K) Ltd	-7.4%	-7.1%	1.4%	0.3%	-3.6%	-10.0%	-13.1%
Barclays Bank of Kenya Ltd	-8.5%	-8.5%	3.2%	0.7%	n/a	n/a	n/a

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Citibank N.A. Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Consolidated Bank of Kenya Ltd	-8.5%	-6.1%	-3.4%	0.0%	n/a	n/a	n/a
Credit Bank Ltd	-8.5%	-8.5%	3.2%	4.6%	n/a	n/a	n/a
Development Bank of Kenya Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Diamond Trust Bank (K) Ltd	-7.6%	-7.4%	0.5%	0.7%	-3.0%	-1.8%	n/a
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	-8.5%	n/a	2.6%	1.3%	0.8%	0.0%	-1.7%
Equity Bank Ltd	-8.5%	-8.5%	-0.3%	-0.6%	-0.9%	-1.5%	-2.1%
Family Bank Ltd	-8.5%	n/a	n/a	n/a	n/a	n/a	n/a
Fidelity Commercial Bank Ltd	-8.5%	n/a	4.2%	3.9%	1.3%	n/a	n/a
Guaranty Trust Bank Ltd	-8.0%	-5.4%	1.1%	-0.7%	-1.7%	n/a	n/a
Giro Commercial Bank Ltd	-7.5%	-6.5%	2.2%	-0.1%	-4.7%	n/a	n/a
Guardian Bank Ltd	-8.5%	-5.5%	-3.0%	n/a	n/a	n/a	n/a
Gulf African Bank Ltd	-8.5%	-7.6%	n/a	-1.8%	n/a	n/a	n/a
Habib Bank Ltd	-8.3%	n/a	-2.5%	2.9%	n/a	n/a	n/a
Habib Bank A.G. Zurich	-8.5%	n/a	0.2%	n/a	n/a	n/a	n/a
Housing Finance Co. of Kenya Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
I&M Bank Ltd	-8.3%	n/a	0.0%	3.2%	4.0%	-6.7%	-7.8%
Imperial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Jamii Bora Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Kenya Commercial Bank Ltd	-8.3%	-7.7%	-5.3%	n/a	n/a	n/a	n/a
K-Rep Bank Ltd	-8.5%	-6.5%	-4.2%	-5.4%	n/a	15.7%	n/a
Middle East Bank (K) Ltd	0.8%	-7.6%	2.2%	1.7%	n/a	n/a	n/a
National Bank of Kenya Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NIC Bank Ltd	-7.9%	-6.5%	-0.8%	-2.5%	n/a	-4.5%	-7.1%
Oriental Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CFC Stanbic Bank (K) Ltd	n/a	0.3%	-0.7%	-2.3%	-3.8%	n/a	n/a
Standard Chartered Bank (K) Ltd	-6.2%	-6.2%	1.4%	1.5%	5.5%	1.2%	1.9%

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Trans - National Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Victoria Commercial Bank Ltd	-8.5%	-3.3%	-0.1%	-3.4%	n/a	n/a	n/a

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank accepted no deposits over that tenor

Table 57: Average deposit spread of top 4 and the other banks in the SME segment

Deposit	Saving	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years	Demand
Top 4	-7.7%	-1.3%	1.8%	0.3%	-2.2%	-1.1%	-8.2%
Other banks	-6.1%	0.8%	0.0%	-0.7%	-1.9%	-7.3%	-7.5%
Number of banks	18	22	20	11	9	7	23

Source: Genesis' calculations

Personal segment

Table 58: Lending spread by bank as of December 2012 in the personal segment

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	11.8%	9.0%	14.5%	12.2%	9.7%	-0.7%
Bank of Baroda (K) Ltd	1.1%	9.1%	6.2%	6.1%	6.8%	3.6%
Barclays Bank of Kenya Ltd	16.0%	13.2%	11.9%	11.3%	10.5%	8.9%
Citibank N.A. Kenya	n/a	n/a	n/a	n/a	n/a	n/a
Consolidated Bank of Kenya Ltd	15.5%	15.2%	13.9%	13.3%	12.5%	10.9%
Credit Bank Ltd	15.6%	13.8%	13.3%	11.8%	7.3%	3.3%
Development Bank of Kenya Ltd	12.0%	14.0%	11.8%	9.6%	6.3%	1.0%
Diamond Trust Bank (K) Ltd	8.4%	n/a	7.9%	8.2%	6.7%	5.2%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	13.3%	13.0%	11.6%	11.1%	10.3%	8.7%
Equity Bank Ltd	13.5%	13.2%	11.9%	11.3%	10.5%	8.9%
Family Bank Ltd	10.7%	n/a	7.6%	7.0%	6.2%	4.6%
Fidelity Commercial Bank Ltd	12.5%	11.2%	10.9%	10.3%	8.5%	n/a

Bank	Overdraft/Loan	0 to 3 months	Over 3 to 12 months	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Guaranty Trust Bank Ltd	16.1%	n/a	12.0%	11.5%	9.8%	7.2%
Giro Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a
Guardian Bank Ltd	1.7%	1.4%	n/a	-0.5%	n/a	n/a
Gulf African Bank Ltd	n/a	-4.8%	7.1%	2.9%	3.4%	1.1%
Habib Bank Ltd	11.5%	9.8%	-2.4%	7.6%	6.3%	-8.1%
Habib Bank A.G. Zurich	n/a	12.2%	8.1%	11.2%	6.8%	5.9%
Housing Finance Co. of Kenya Ltd	n/a	-5.3%	2.9%	5.3%	2.7%	2.2%
I&M Bank Ltd	-5.0%	5.6%	-0.6%	5.6%	0.7%	-3.1%
Imperial Bank Ltd	12.5%	7.8%	5.3%	10.0%	8.7%	0.4%
Jamii Bora Bank Ltd	5.5%	5.2%	3.9%	11.3%	10.5%	-5.1%
Kenya Commercial Bank Ltd	5.0%	7.7%	4.4%	3.8%	3.0%	1.4%
K-Rep Bank Ltd	5.1%	1.6%	0.0%	-0.5%	-1.3%	n/a
Middle East Bank (K) Ltd	17.4%	15.5%	3.0%	-0.1%	2.2%	-4.1%
National Bank of Kenya Ltd	16.6%	n/a	n/a	9.5%	n/a	4.9%
NIC Bank Ltd	13.1%	14.9%	4.6%	2.1%	1.7%	5.7%
Oriental Commercial Bank Ltd	n/a	13.2%	10.9%	7.2%	4.0%	-2.8%
CFC Stanbic Bank (K) Ltd	18.5%	n/a	n/a	-4.7%	11.5%	7.9%
Standard Chartered Bank (K) Ltd	13.2%	9.6%	9.8%	9.0%	6.9%	0.6%
Trans - National Bank Ltd	12.5%	12.2%	10.9%	10.3%	9.5%	4.9%
Victoria Commercial Bank Ltd	8.3%	n/a	n/a	7.7%	6.3%	1.0%

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank offered no loans over that tenor

Table 59: Average lending spread of top 4 and the other banks in the personal segment

Lending	Overdraft	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4	10.0%	10.9%	9.5%	8.9%	7.8%	5.0%
Other banks	11.0%	8.7%	7.4%	7.2%	6.5%	2.4%
Number of banks	26	24	26	30	28	27

Source: Genesis' calculations

Table 60: Deposit spread by bank as of December 2012 in the personal segment

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
Bank of Africa (K) Ltd	-3.8%	-2.7%	8.8%	5.0%	n/a	7.3%	4.0%
Bank of Baroda (K) Ltd	-6.7%	-6.8%	1.3%	-3.7%	-5.5%	-7.6%	-12.7%
Barclays Bank of Kenya Ltd	-8.5%	-0.3%	3.2%	0.7%	-0.1%	-3.3%	n/a
Citibank N.A. Kenya	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Consolidated Bank of Kenya Ltd	-8.5%	-6.4%	-5.0%	6.8%	n/a	n/a	n/a
Credit Bank Ltd	-8.5%	-8.5%	2.7%	1.2%	n/a	1.7%	n/a
Development Bank of Kenya Ltd	-8.5%	-6.0%	5.3%	3.6%	-2.1%	-5.5%	n/a
Diamond Trust Bank (K) Ltd	-8.2%	-7.4%	0.5%	0.2%	-0.5%	-3.9%	-3.3%
Dubai Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ecobank Kenya Ltd	-8.5%	3.0%	2.6%	1.3%	0.8%	0.0%	-1.7%
Equity Bank Ltd	-8.5%	-8.0%	-3.5%	-4.5%	-4.2%	-3.8%	-5.1%
Family Bank Ltd	-8.5%	-7.5%	-3.9%	-4.1%	n/a	n/a	n/a
Fidelity Commercial Bank Ltd	n/a	-2.5%	n/a	n/a	n/a	n/a	n/a
Guaranty Trust Bank Ltd	-7.8%	-5.5%	1.1%	0.4%	-0.6%	-0.8%	n/a
Giro Commercial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Guardian Bank Ltd	-8.5%	-5.5%	-3.0%	-4.3%	n/a	n/a	n/a
Gulf African Bank Ltd	-8.5%	-7.6%	0.8%	0.1%	n/a	n/a	n/a
Habib Bank Ltd	-8.5%	n/a	-1.5%	-1.6%	-1.8%	n/a	n/a
Habib Bank A.G. Zurich	-8.5%	-5.0%	1.5%	0.3%	n/a	n/a	n/a
Housing Finance Co. of Kenya Ltd	n/a	-6.6%	0.9%	0.9%	2.7%	0.4%	-1.7%
I&M Bank Ltd	-8.3%	-8.5%	-0.3%	0.6%	-3.0%	-4.8%	-9.5%
Imperial Bank Ltd	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Jamii Bora Bank Ltd	-8.5%	-7.5%	0.2%	-0.1%	n/a	-10.5%	n/a
Kenya Commercial Bank Ltd	-8.3%	-7.7%	-5.3%	n/a	n/a	n/a	n/a
K-Rep Bank Ltd	-8.5%	-6.5%	-3.4%	-4.4%	-4.2%	n/a	n/a
Middle East Bank (K) Ltd	-1.2%	-6.3%	1.0%	0.8%	4.4%	n/a	-13.1%

Bank	Demand	Savings	0 to 3 months	Over 3 to 12	Over 1 to 2 years	Over 2 to 5 years	Over 5 years
National Bank of Kenya Ltd	n/a	-8.0%	7.1%	6.3%	n/a	n/a	n/a
NIC Bank Ltd	-7.6%	-7.0%	-0.2%	-3.7%	-6.1%	-5.8%	-8.0%
Oriental Commercial Bank Ltd	-6.4%	-5.0%	3.0%	2.7%	1.4%	-0.8%	n/a
CFC Stanbic Bank (K) Ltd	n/a	-0.9%	-3.1%	-3.5%	-3.2%	-8.0%	n/a
Standard Chartered Bank (K) Ltd	n/a	-7.2%	4.2%	0.9%	5.3%	1.7%	n/a
Trans - National Bank Ltd	-8.5%	-8.5%	-6.8%	-6.1%	-8.7%	n/a	n/a
Victoria Commercial Bank Ltd	-5.4%	-0.4%	1.0%	-0.6%	-9.7%	n/a	n/a

Source: Genesis' calculations

Note: n/a in a tenor implies that the bank accepted no deposits over that tenor

Table 61: Average deposit spread of top 4 and the other banks in the personal segment

Deposit	Demand	Saving	0-3 months	3-12 months	1-2 years	2-5 years	Over 5 years
Top 4	-8.2%	-6.0%	0.2%	-0.7%	-0.6%	-2.7%	-6.4%
Other banks	-7.5%	-5.5%	0.4%	-0.1%	-2.3%	-2.7%	-5.0%
Number of banks	24	28	28	27	18	16	9

Source: Genesis' calculations

APPENDIX F: PROFITABILITY BY BANK FOR 2013

Table 62: Profit ratios by bank for 2013

	Ratio analysis			Du-pont analysis			
Bank	NII margin	NIR margin	Cost-to-Income	ROE	Net profit margin	Asset-turnover	Financial leverage
Kenya Commercial Bank Ltd	9.1%	4.9%	53.6%	21.0%	32.8%	11.1%	5.74
Equity Bank Ltd	11.3%	6.9%	53.7%	22.2%	32.4%	13.7%	5.02
Standard Chartered Bank (K) Ltd	8.1%	4.3%	43.7%	23.4%	39.6%	10.3%	5.73
Barclays Bank of Kenya Ltd	9.9%	5.6%	60.3%	23.5%	27.0%	12.6%	6.88
CFC Stanbic Bank (K) Ltd	4.6%	7.4%	55.3%	22.2%	31.6%	8.9%	7.92
Diamond Trust Bank (K) Ltd	7.4%	2.3%	42.9%	21.8%	41.4%	8.2%	6.38
NIC Bank Ltd	6.1%	3.1%	43.2%	20.6%	40.1%	7.7%	6.68
I&M Bank Ltd	6.7%	3.0%	35.6%	21.4%	45.7%	8.2%	5.74
National Bank of Kenya Ltd	7.0%	2.4%	77.6%	10.8%	15.9%	7.8%	8.63
Citibank N.A. Kenya	6.2%	6.4%	33.7%	19.0%	40.2%	10.4%	4.53
Bank of Africa (K) Ltd	4.3%	2.4%	69.4%	11.9%	25.0%	4.7%	10.05
Bank of Baroda (K) Ltd	5.9%	0.6%	23.2%	24.5%	54.1%	6.2%	7.29
Housing Finance Co. of Kenya Ltd	5.7%	1.0%	58.3%	15.7%	32.0%	5.9%	8.39
Family Bank Ltd	11.3%	5.1%	71.3%	20.8%	20.0%	13.4%	7.76
Imperial Bank Ltd	10.2%	2.9%	48.9%	33.2%	35.8%	11.5%	8.05
Ecobank Kenya Ltd	2.8%	2.8%	175.2%	-34.3%	-73.4%	4.1%	11.36
Guaranty Trust Bank Ltd	4.7%	1.8%	71.3%	5.4%	23.0%	5.5%	4.34
Consolidated Bank of Kenya Ltd	4.7%	3.4%	117.6%	-11.1%	-13.6%	6.3%	12.99
Gulf African Bank Ltd	8.7%	2.4%	73.7%	9.8%	16.9%	9.3%	6.26
Development Bank of Kenya Ltd	3.5%	0.6%	61.3%	10.4%	30.8%	3.8%	8.94
Victoria Commercial Bank Ltd	6.3%	2.1%	42.6%	17.3%	40.9%	7.1%	5.93
Giro Commercial Bank Ltd	5.5%	1.0%	53.3%	18.2%	46.7%	5.9%	6.66
K - Rep Bank Ltd	11.4%	5.8%	72.8%	19.6%	19.0%	11.9%	8.63
Guardian Bank Ltd	5.8%	1.1%	56.7%	19.2%	32.0%	5.0%	11.99
Fidelity Commercial Bank Ltd	4.5%	3.2%	69.4%	15.1%	24.0%	6.9%	9.21
Habib Bank A.G. Zurich	6.3%	1.9%	39.3%	16.2%	38.2%	9.1%	4.64
Trans - National Bank Ltd	7.3%	3.0%	77.8%	7.5%	15.6%	8.6%	5.55
Habib Bank Ltd	7.9%	1.2%	36.4%	17.8%	38.5%	6.7%	6.89
Credit Bank Ltd	7.6%	2.3%	85.2%	7.5%	14.8%	2.0%	25.67

Bank	NII margin	NIR margin	Cost-to-Income	ROE	Net profit margin	Asset-turnover	Financial leverage
	Ratio analysis				Du-pont analysis		
Jamii Bora Bank Ltd	7.0%	6.6%	88.5%	3.3%	11.5%	8.5%	3.34
Oriental Commercial Bank Ltd	5.6%	1.5%	65.9%	9.8%	34.1%	6.0%	4.79
Middle East Bank (K) Ltd	5.0%	1.8%	79.1%	6.4%	20.9%	5.8%	5.22
Dubai Bank Ltd	5.6%	13.1%	95.9%	1.1%	2.9%	10.0%	3.82

Source: Genesis' calculations

APPENDIX G: PROFITABILITY BY BANK FOR 2012

Table 63: Profit ratios by bank for 2012

Bank	NII margin	NIR margin	Cost-to-Income	ROE	Net profit margin	Asset-turnover	Financial leverage
	Ratio analysis				Du-pont analysis		
Kenya Commercial Bank Ltd	8.7%	4.9%	57.1%	20.7%	30.6%	10.97%	6.17
Equity Bank Ltd	11.5%	6.8%	51.6%	24.8%	33.9%	13.84%	5.29
Standard Chartered Bank (K) Ltd	7.8%	4.6%	44.8%	24.9%	38.9%	10.36%	6.18
Barclays Bank of Kenya Ltd	10.9%	6.6%	52.5%	30.6%	32.0%	13.92%	6.86
CFC Stanbic Bank (K) Ltd	5.1%	7.1%	67.2%	15.8%	21.1%	9.84%	7.61
Diamond Trust Bank (K) Ltd	7.6%	2.5%	46.0%	20.6%	35.5%	8.82%	6.58
NIC Bank Ltd	5.0%	3.2%	42.4%	19.5%	40.3%	6.98%	6.92
I&M Bank Ltd	5.8%	3.1%	34.9%	20.1%	46.2%	7.58%	5.74
National Bank of Kenya Ltd	8.2%	2.8%	82.9%	7.3%	11.8%	8.92%	6.97
Citibank N.A. Kenya	8.0%	8.4%	23.9%	25.7%	46.9%	13.43%	4.08
Bank of Africa (K) Ltd	3.6%	1.7%	73.3%	9.3%	19.7%	4.04%	11.73
Bank of Baroda (K) Ltd	4.7%	0.7%	32.2%	19.9%	47.8%	5.14%	8.10
Housing Finance Co. of Kenya Ltd	4.9%	1.0%	60.6%	12.5%	28.9%	5.25%	8.24
Family Bank Ltd	11.5%	5.5%	82.1%	11.7%	13.1%	13.20%	6.78
Imperial Bank Ltd	9.2%	3.7%	51.7%	30.2%	33.9%	10.99%	8.11
Ecobank Kenya Ltd	-2.2%	3.6%	1377.2%	-287.7%	-1239.2%	0.53%	43.93
Guaranty Trust Bank Ltd	4.8%	2.8%	70.3%	13.5%	20.8%	6.73%	9.63
Consolidated Bank of Kenya Ltd	6.0%	3.6%	90.7%	7.0%	7.2%	7.69%	12.54
Gulf African Bank Ltd	9.4%	2.5%	73.7%	15.2%	16.3%	10.26%	9.11
Development Bank of Kenya Ltd	2.0%	0.9%	79.3%	4.7%	22.2%	2.46%	8.52

	Ratio analysis				Du-pont analysis		
Bank	NII margin	NIR margin	Cost-to-Income	ROE	**Net profit margin**	**Asset-turnover**	**Financial leverage**
Victoria Commercial Bank Ltd	7.0%	1.6%	42.2%	15.7%	40.6%	7.47%	5.17
Giro Commercial Bank Ltd	4.3%	1.7%	69.0%	11.8%	31.4%	5.26%	7.14
K - Rep Bank Ltd	14.6%	5.8%	81.4%	14.2%	13.0%	14.05%	7.75
Guardian Bank Ltd	4.4%	1.3%	65.1%	13.8%	25.9%	3.92%	13.59
Fidelity Commercial Bank Ltd	2.6%	3.6%	73.4%	10.2%	18.5%	5.48%	10.03
Habib Bank A.G. Zurich	6.7%	2.2%	41.7%	17.4%	36.4%	9.98%	4.79
Trans - National Bank Ltd	6.5%	5.7%	68.9%	12.0%	23.3%	10.00%	5.15
Habib Bank Ltd	8.4%	1.2%	35.2%	20.6%	40.6%	6.86%	7.39
Credit Bank Ltd	6.7%	2.6%	83.6%	7.4%	16.6%	2.30%	19.43
Jamii Bora Bank Ltd	8.6%	10.2%	80.8%	3.1%	19.8%	8.59%	1.82
Oriental Commercial Bank Ltd	4.0%	2.0%	74.6%	6.1%	25.5%	5.03%	4.75
Middle East Bank (K) Ltd	3.3%	1.8%	95.9%	2.6%	10.8%	4.31%	5.55
Dubai Bank Ltd	11.3%	16.1%	81.2%	5.9%	13.2%	16.05%	2.80

Source: Genesis' calculations

APPENDIX H: CALCULATION OF COST OF EQUITY

1. This appendix shows the methodology used by us to calculate the country-wise cost of equity for banks. The cost of equity is the return that the shareholders of a bank would expect. This depends on the risk-free returns that can be made by investing in the country, and the level of risk perceived by the shareholders in investing in a bank.

2. We use a standard model called as the capital asset pricing model (CAPM) used to calculate the cost of equity. This states that the cost of equity, $E(R_i)$ is:

$$E(R_i) = R_f + \beta_i(E(R_m) - R_f)$$

Where, R_f is the risk free rate, B_i is the equity beta measuring the relative risk of a bank vis-à-vis the equity market in general, $E(R_m)$ is the equity risk premium, which is the general risk premium of investing in equity in the country.

3. We describe the calculation for each of these elements:

   3.1. *Risk free rate.* The risk free rate is calculated in two steps. First we calculate the risk-free rate for the United States (US) by taking the annual real rate of return for bonds between 1900-2014 as 1.9 per cent[121], and the long-term average inflation rate in the US as 3.22 per cent[122]. Based on this, the nominal risk free rate in the US is 5.18 per cent. Second, the risk free rate for each country is calculated by summing the risk-free rate for the US with the rating based spread relative to the US, as given by Damodaran.[123] For example, the rating based spread for Kenya is 4.5 per cent, which implies that the risk-free rate for Kenya is 9.7 per cent.

   3.2. *Equity risk premium.* The equity risk premium for each country is calculated similarly in two steps. First, we take the equity premium relative to bonds for the US in the period 1900-2013 as 4.5 per cent.[124] Second, we add the country risk premium as given by Damodraran. For example, the country risk premium estimated by Damodaran for Kenya is 6.8 per cent. Therefore, the equity risk premium for Kenya is 11.3 per cent.

   3.3. *Equity beta.* The final element of equity beta is calculated as an average of 721 banks across the globe. This beta is 0.58. This beta is assumed to be the same for all countries.

4. Using the elements above, the cost of equity is calculated for each country. For Kenya, it is calculated as 9.7% + 11.3%*0.58. This comes to 16.2%.

[121] https://publications.credit-suisse.com/tasks/render/file/?fileID=0E0A3525-EA60-2750-71CE20B5D14A7818
[122] http://inflationdata.com/Inflation/Inflation_Rate/Long_Term_Inflation.asp
[123] http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html
[124] https://publications.credit-suisse.com/tasks/render/file/?fileID=0E0A3525-EA60-2750-71CE20B5D14A7818