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Thesis submitted for the degree of PhD, 2014

The Expansion of Financial Access and Financial Development in Kenya
ABSTRACT

The expansion of financial access has been promoted as a method to promote financial development for structural transformation. However, the linkages between expansion of financial access, financial development and financial stability are under-researched. The thesis seeks to contribute to research on these relationships using a mixed methodology with quantitative analysis of the balance sheet structures of institutions and interpretative fieldwork material from Kenya.

Its finds that as financial access has expanded there have been increases in credit, liquidity and foreign exchange risk at institutions and increasing systemic risks. Private capital inflows have encouraged these trends. There is limited mitigation of these risks through improved institutional capacity and financial architecture. Increased deposit mobilization has been achieved but it is not clear that it is incremental. Credit expansion has increased but has been developmentally sub-optimal because of increased consumption lending. Interviews with the poor in urban and rural areas in Kenya found that barriers continue to the use of formal financial services but they are primarily “voluntary”.

The implications of the thesis are that alternative policy approaches need to be developed including macroprudential regulation, capital controls and cooperative banking. The thesis finds that the balance sheet approach offers a promising framework for further research, including developing a structuralist approach to financial development.
Declaration for SOAS PhD thesis

I have read and understood regulation 17.9 of the Regulations for students of the SOAS, University of London concerning plagiarism. I undertake that all the material presented for examination is my own work and has not been written for me, in whole or in part, by any other person. I also undertake that any quotation or paraphrase from the published or unpublished work of another person has been duly acknowledged in the work which I present for examination.

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Date: ___________________
Acknowledgements

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I would like to dedicate the thesis to Ulysses Tyson, my son, who contributed nothing except distraction, but is still the most beloved of all.
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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>AfDB</td>
<td>African Development Bank</td>
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<tr>
<td>AMFI</td>
<td>Association of Microfinance Institutions of Kenya</td>
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<tr>
<td>ATM</td>
<td>Automated Teller Machine</td>
</tr>
<tr>
<td>BCEAO</td>
<td>Central Bank of the West African Monetary Union (French)</td>
</tr>
<tr>
<td>BCP</td>
<td>Basel Core Principles for Effective Banking Supervision</td>
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<td>BIMAS</td>
<td>Business Initiative and Management Assistance Services</td>
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<td>BIEA</td>
<td>British Institute in East Africa</td>
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<tr>
<td>BIS</td>
<td>Bank for International Settlements</td>
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<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
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<tr>
<td>CEO</td>
<td>Chief executive officer</td>
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<td>CFM</td>
<td>Capital flow management</td>
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<td>CFO</td>
<td>Chief financial officer</td>
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<td>CGAP</td>
<td>Consultative Group to Assist the Poor</td>
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<tr>
<td>CREP</td>
<td>Community Rehabilitation and Environmental Program</td>
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<tr>
<td>DFID</td>
<td>Department for International Development</td>
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<tr>
<td>DRC</td>
<td>Democratic Republic of the Congo</td>
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<tr>
<td>DTM</td>
<td>Deposit-taking microfinance institution</td>
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<tr>
<td>EACB</td>
<td>East African Currency Board</td>
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<td>ECLOF</td>
<td>Ecumenical Church Loan Fund</td>
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<td>EIB</td>
<td>European Investment Bank</td>
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<td>Acronym</td>
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<tr>
<td>FASC</td>
<td>Financial Sector Adjustment Credit</td>
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<td>FDI</td>
<td>Foreign direct investment</td>
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<td>FMO</td>
<td>Netherlands Development Finance Company (Dutch)</td>
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<td>FSB</td>
<td>Financial Stability Board</td>
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<td>FSD</td>
<td>Financial Sector Deepening Program</td>
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<tr>
<td>FX</td>
<td>Foreign exchange</td>
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<tr>
<td>GNP</td>
<td>Gross national product</td>
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<tr>
<td>HIPC</td>
<td>Heavily-indebted poor countries</td>
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<tr>
<td>IBM</td>
<td>International Business Systems</td>
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<tr>
<td>ICB</td>
<td>Independent Commission for Banking</td>
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<td>IFI</td>
<td>International financial institutions</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>ILO</td>
<td>International Labor Organization</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>KADET</td>
<td>Kenya Agency for Development of Enterprise and Technology</td>
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<tr>
<td>KfW</td>
<td>German Development Bank (German)</td>
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<tr>
<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
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<td>KWFT</td>
<td>Kenya Women’s Finance Trust</td>
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<tr>
<td>IADB</td>
<td>Inter-American Development Bank</td>
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<td>LIC</td>
<td>Low Income Country</td>
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<td>MDB</td>
<td>Multilateral development bank</td>
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<td>Acronym</td>
<td>Description</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>MDRI</td>
<td>Multilateral Debt Relief Initiative</td>
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<tr>
<td>MFI</td>
<td>Microfinance institution</td>
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<tr>
<td>MFOB</td>
<td>Microfinance-orientated bank</td>
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<tr>
<td>MFOI</td>
<td>Microfinance-orientated institution</td>
</tr>
<tr>
<td>MIC</td>
<td>Middle Income Country</td>
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<tr>
<td>MIX</td>
<td>Microfinance Information Exchange</td>
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<tr>
<td>M-PESA</td>
<td>Mobile money (Swahili)</td>
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<td>NCCK</td>
<td>National Council of Church’s in Kenya</td>
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<tr>
<td>NBFI</td>
<td>Non-banking financial institution</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
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<td>NPL</td>
<td>Non-performing loans</td>
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<td>PAR</td>
<td>Portfolio-at-risk</td>
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<td>POS</td>
<td>Point of sale</td>
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<td>PAWDEP</td>
<td>Pamoja Women’s Development Program</td>
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<tr>
<td>RCT</td>
<td>Randomized control trial</td>
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<tr>
<td>RBI</td>
<td>Reserve Bank of India</td>
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<td>RDB</td>
<td>Regional development bank</td>
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<tr>
<td>SACCO</td>
<td>Saving and credit cooperative society</td>
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<tr>
<td>SHG</td>
<td>Self-help group</td>
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<tr>
<td>SME</td>
<td>Small and medium enterprise</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>SMEP</td>
<td>Small and Medium Enterprise Program</td>
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<tr>
<td>SRI</td>
<td>Socially-responsible investor</td>
</tr>
<tr>
<td>VAR</td>
<td>Value-at-risk</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNCTAD</td>
<td>United Nations Commission on Trade and Development</td>
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<td>WB</td>
<td>World Bank</td>
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1. Thesis Outline

1.1 The Research Question
At the core of economic development is structural transformation. The processes of structural transformation are complex because they are ill-defined, numerous and interdependent. However, they result in the transformation of sectors, especially agriculture and industry, from low to high productivity sectors. Where such transformation is pro-poor, it includes employment creation, the creation of public services and the equitable distribution of income and wealth.

Structural transformation requires investment to achieve these goals. The fundamental function of the financial system in structural transformation is to mobilise and intermediate financial resources into this investment. This includes via the financial system, providing pooling of resources, risk sharing, liquidity provision, inter-temporal transformation and efficient financial services.

Empirical studies are consistent with this role for the financial system in economic development and they have found that the deepening of the financial sector is closely correlated with – although not necessarily causative of – economic development. However, this deepening has also been associated with financial fragility and crisis in developing economies, which has had negative impacts on economic growth trajectories.

Furthermore, in many lower-income countries today (2014), and especially in sub-Saharan Africa (the focus of this thesis), development of financial systems remains weak and financial systems shallow. They are typically characterized by low levels of savings and investment, oligopolistic market structures, weak prudential regulation, poor institutional capacity, and financial fragility. Such characteristics have resulted in constrained credit and investment – particularly for the much needed long-term, low cost financing required for structural transformation – and in low levels of financial access for those with low-incomes.

Policy approaches to tackling these issues have been varied. Among the recent policies employed has been the expansion of financial access. Broadly defined as enabling households and firms to
use financial services if they chose to do so, financial access is seen as being able to contribute to a number of core outcomes of financial and economic development. These include:

- Financing investment
- Mobilization of savings
- The development of financial architecture
- Building institutional capacity and
- Benefits for poor households or individuals

However, the links between the expansion of financial access and financial and economic development remain under-researched. This applies to both the development of a theoretical framework to analyse transmission mechanisms as well as the understanding of how financial access and financial and economic development are causally related. This thesis seeks to contribute to closing this research gap.

1.2 THE THESIS’S ORIGINALITY

Financial access policy has been adopted because of its potential to contribute to the core functions of the financial system, and hence economic development, including savings mobilization and investment. However, despite current policy being underpinned by the assumption that these contributions are being made, relatively little research has been conducted that tests whether or not this proposition can be substantiated. This includes not only the impact of the expansion of financial access on the development of the financial system, but also its impact on financial fragility.

Instead, the majority of research to date has focused on the microeconomic, pro-poor impact of the expansion of financial access (Khan, 2011; Adasme, 2006). Commentators, particularly those concerned with financial stability, have identified this gap in knowledge. For example, H.R. Khan (Deputy Governor of the Bank of India), whose country has experienced financial instability resulting from problems with microfinance, has called for more research into the issue and the relationship between financial instability and the structure of the financial system. He comments,
“The transmission channels and potential feedback loops between financial stability and inclusion could be a subject of further research” (Khan, 2011).

This thesis makes three original contributions. First, it explores the relatively under-researched question of the potential benefits of expanding financial access and the risks it poses to financial system development and fragility. It does this by examining the sources and nature of idiosyncratic and systemic risk related to the expansion of financial access. The thesis seeks to examine these issues in relation to institutions in a detailed and systemic way. It does this by presenting an original analysis based on the balance sheet structures of microfinance-orientated institutions and their relevance to financial soundness or the fragility of both the individual institutions and the financial system.

Second, the thesis challenges the predominant theory relating to microfinance – agent-based theory – that represents the financial system as a “credit network” (Stiglitz, 1981; Corrado et al., 2011), arguing that it is an inadequate representation of the financial system. The thesis develops an alternative proposition, proposing a balance sheet approach to the role of financial access in the financial system. It provides a new definition of financial sector development, one based on its contribution to structural transformation, rather than mere growth in credit.

Third, it presents new primary research material from Kenya. This includes primary fieldwork material from interviews with regulators, investors and microfinance practitioners, and with the poor in urban and rural areas in Kenya. It also includes original analysis of the balance sheets of microfinance-orientated institutions drawn from the financial statements of these institutions.

1.3 Thesis Methodology
Development Economics is an interdisciplinary field. It employs many methodological approaches, including quantitative and qualitative methods. Depending on the research question, financial market development can be examined using both approaches. Each provides its own important insights that can illuminate and support the findings of the other.

As such, the thesis adopts a mixed methodological approach. As will be discussed in Chapter 2, the thesis adopts a theoretical framework based on balance sheet analysis. This is reflected in
quantitative work that examines the balance sheets of microfinance-orientated institutions. Interview material then provides additional confirming or interpretative material.

The thesis also focuses on a single country, Kenya, in order to allow granular balance sheet analysis. Kenya has been chosen for a number of reasons. Firstly, Kenya has a financial sector that is reasonably representative of a low-income\(^2\) country’s economy. Moreover, although the formal financial sector remains relatively small and shallow, it has experienced significant growth in the last decade. This includes the increased financial access that the government has adopted as official policy.

Secondly, its microfinance sector has experienced the main microfinance trends identified elsewhere in recent years: Shifts from group to individual lending; an expanding range of financial products; a diverse pool of suppliers; strengthening regulation and supervision; and moves towards financial profitability (Armendariz & Labie, 2011).

In Kenya, there are also many institutions engaged in the expansion of financial access. They include small, unregulated microfinance institutions (MFIs) and large, regulated microfinance-orientated institutions. There has been a proliferation of financial products including lending and deposit-taking. Supervision and regulation has been developed (including regulation) under the Kenyan Banking Act 2014 (and its pre-2014 predecessors), the 2006 Microfinance Act and the 2008 SACCO Act. Mobile banking is widely used by microfinance-orientated institutions in Kenya, especially in rural areas where population density is low. This includes M-PESA, an electronic platform for financial services. However, alongside these changes, there remains a large informal sector with many saving and credit organizations that compete with formal sector financial services.

Thirdly, the microfinance sector in Kenya has seen increasing integration into the domestic financial system, with large microfinance-orientated institutions engaging in interbank markets, domestic payment systems and capital markets. This has been facilitated by domestic and

\(^2\) This is according to the World Bank’s IDA classification as at 2013. In October 2014 the GDP of Kenya was rebased by the World Bank, resulting in its reclassification as a MIC.
international private capital flows from investors that are actively investing in the Kenyan microfinance sector.

Using Kenya as a national study presented challenges that are reflected in the methodology. First, the data available for Kenyan financial systems is, in common with other developing countries, limited. For example, institutional coverage in the data collected and made publically available by the central bank is limited and excludes many of the institutions and sectors of interest to the thesis. As a consequence, the thesis draws on the financial statements of microfinance-orientated institutions to produce an original analysis of the microfinance industry.

However, the thesis seeks to interpret that data using qualitative research relating to formal financial system institutions, such as banks and regulators, and the poor who actually use them. Interviews were conducted with regulators, investors and financial institutions, and with the poor themselves, examining the broad context of their financial lives and their experiences and engagement with the microfinance sector.

Indeed, in relation to the latter, the thesis seeks to incorporate strongly “the voices of the poor” in order to examine microfinance and financial access and to build on current themes of research relating to the “financial lives of the poor”. Quantitative interview data was collected and qualitative interviews were conducted. The interviewees were selected on the basis of those who were not amongst the “poorest of the poor” but rather were either conducting stable subsistence livelihoods or were generating excess income above a subsistence level. The latter, in particular, were interesting because, as the economy grows, the financial lives of individuals with such surpluses will determine not only their own paths out of poverty, but also the success of important macroeconomic goals in development such as savings mobilization and productive investments.

Detailed discussion of the thesis methodology is included in two sections – Section 6.1.1, which discusses the methodology that was used for the balance sheet analysis and fieldwork interviews with institutions, regulators and investors – and Section 8.1, which discusses the fieldwork interviews with poor individuals.

Access to data and to research subjects is important for the quality of fieldwork. In particular, it allows one to incorporate confidential information from institutions unavailable from public sources. As a consequence, the generous agreement to provide help with fieldwork as proffered
by the Central Bank, International Finance Corporation (IFC), Financial Sector Deepening Program Kenya\(^3\) (FSD) and the non-governmental organization (NGO), Farm Africa, were important practical considerations in deciding to study Kenya.

Finally, it should be noted that due to practical limitations, such as access and resources, the interviewees were not randomly selected. Interviewee selection differed according to the type of interviewee. All members of the Association of Microfinance Institutions of Kenya (AMFI) were invited to be interviewed by the author and the Financial Sector Deepening Program, but only some agreed. Investors and Central Bank officials accepted interviews through academic contacts. Individual interviewees were accessed through local community contacts and Farm Africa. This means that there is the possibility of selection bias amongst interviewees. Nevertheless we believe that the interviews provide strong interpretative material that is also of clear research value.

1.4 THE THESIS STRUCTURE

This chapter has given a broad overview of the research question, the originality of the thesis and the thesis methodology. Thesis definitions are included at the end of this chapter.

Chapter 2 examines existing neo-classically based theories of financial system development. These include endogenous growth theory, the theory of asymmetrical information and “augmented” liberalization. It highlights economic theory relevant to microfinance and access to finance, most notably theories of asymmetrical information. It comments that agent-based theories, even when they have been extended into “networks of agents” do not adequately represent the systemic nature of financial systems. Instead, the thesis proposes adopting the “balance sheet” approach that views the economy as comprising interdependent balance sheets of all its agents as a theoretical framework to examine the impact of the expansion of financial systems on financial development and its contribution to structural transformation.

Chapter 3 discusses theoretical ideas specific to the expansion of financial access and its impact on financial sector development and stability and that underlie recent policy supporting the broadening of financial access. The limitations of the existing theoretical frameworks are such

\(^3\) See [http://www.fsdkenya.org](http://www.fsdkenya.org) for more details.
that this chapter explores relevant theoretical themes derived from the basic functions of financial systems. Topics addressed include expansion of financial access and its contribution to:

- Investment intermediation
- Savings mobilization
- Strengthening of financial architecture
- Strengthening of institutional capacity; and
- Benefits for households or individuals.

Chapter 4 discusses the nature and causes of financial instability in developing countries and its relationship to financial sector development. It explores processes relevant to financial access and which are transmitted through institutions’ interdependent balance sheets as the basis of an analysis of financial fragility and stability. It examines in depth the role of private capital flows in financial crises in developing countries and the characteristics of recent private capital flows to sub-Saharan Africa.

Chapter 5 uses the framework set out in Chapters 3 and 4 to examine the relationship between microfinance and the expansion of financial access, financial sector development and financial instability. It charts the expansion of microfinance from its small-scale, charitable origins to becoming a large-scale, commercial industry and describes the crises that microfinance has suffered in a number of countries in recent years, including the part played by private capital flows. It also considers the impact that expansion of microfinance using private capital flows by microfinance-orientated institutions has had on:

- "Mission drift"
- Balance sheet structures
- Composition and purpose of lending
- Level of financial access.

It concludes that while private capital flows can provide important sources of financing for the expansion of institutions, they also can also induce mission drift (including decreasing lending to
the poor), increase consumption lending, reduce consumer protection and increase institutional fragility. Furthermore, in many countries in sub-Saharan Africa, financial access remains stubbornly low and explanations of the “barriers” deserve deeper examination.

Chapters 6, 7 and 8 present the thesis’s original research on Kenya, including further detail concerning the methodology.

Chapter 6 examines the institutions serving the poor, including the evolution of institutional risks as financial access has expanded. It does this by presenting an original analysis of the balance sheets of institutions based on their financial statements. This is combined with interpretative material drawn from primary fieldwork interviews with regulators, investors and microfinance practitioners. The chapter examines the restructuring of the balance sheets of microfinance-orientated institutions as financial access has expanded, including increases in credit, liquidity and foreign exchange (FX) risk, and the mitigation of these increasing risks through institutional capacity and the development of financial architecture. It concludes that, while expansion of access is bringing benefits, the institutions through which it has been expanded are experiencing increasing financial fragility because the risks involved are not fully mitigated.

Chapter 7 extends the analysis to systemic implications of the expansion of financial access and shows how linkages within the financial system are deepening, including in domestic interbank markets and payment systems. The impacts are improved risk management capabilities and efficiency, but also heightened financial fragility because of contagion risk. An examination of how the expansion of financial access has impacted on the financial sector development follows. Although increased deposit mobilization has been achieved by microfinance-orientated institutions, it is not clear that the increased mobilisation is incremental in terms of the financial system as a whole. Furthermore, much of the credit expansion has been developmentally sub-optimal because credit has not been intermediated into investments thus assisting structural transformation, but into consumption lending and microbusinesses.

Chapter 8 presents the research findings from the perspective of the “financial lives of the poor”. It reports findings from interviews with the poor in urban and rural areas in Kenya that explore their financial lives and the place of the expansion of financial access in these lives. Findings suggest that barriers to the use of formal financial services by the poor are primarily “voluntary”
and may undermine the goals of financial sector development, including mobilization of savings and the use of credit for investment in small and medium-sized enterprises in the formal sector.

In Chapter 9, the thesis concludes by examining the implications of the thesis findings for policy and theory. It examines alternative policy approaches that balance financial access and financial stability and deepen the contribution of the expansion of financial access to structural transformation whilst also ensuring that the expansion of financial access serves the poor. It proposes, in conclusion, that using the balance sheet approach as a theoretical framework for these discussions has been promising including a potential to link more clearly financial sector growth to structural transformation but that it requires further development including extending it to examine the overall financial systems of developing economies and the development of new metrics that will allow further empirical research.

1.5 Thesis Definitions
The thesis adopts the following definitions for key terms, drawing on definitions used by the World Bank, the OECD and the African Development Bank:

**Access to finance** is defined as the share of households, individuals and firms that are able to use financial services if they choose to do so.

A **bank run** is defined as a series of unexpected cash deposit withdrawals caused by a sudden decline in depositor confidence or fear that the bank will be closed with many depositors withdrawing cash simultaneously.

The **financial system** is defined as the interlocking balance sheets of all financial “agents” and real economy agents as they interact with the financial agents. Financial agents include regulated banks, non-banking financial institutions, non-regulated and informal savings and credit organizations and regulatory bodies. Real economy agents include firms, households and individuals. Interaction includes transactions in relation to any financial markets and services, including credit, savings and services such as money transfers, and the financial infrastructure.
such as regulation, credit information-sharing systems and payment, settlement and transfer systems.

The thesis assumes that the financial systems fundamental functions within an economy are as follows:

1. To facilitate the mobilization and pooling of savings, allowing for larger capital sums to be applied in investments. Although such pooling is typically through bank deposits, it can also take other forms such as capital markets, investment funds and cooperative societies.

2. To provide screening and monitoring that reduce agency problems. Such problems arise from asymmetric information in credit markets, without which credit rationing can occur (Stiglitz & Weiss, 1981). They can take many forms, but include credit project analysis, credit information monitoring, and financial and economic monitoring.

3. To allow for risk-sharing and diversification, including the pooling of investments such as within a bank’s lending portfolio, and the creation of tradable investments.

4. To allow for inter-temporal exchange between borrowers and lenders, removing the “double wants” problems between them and allowing for maturity transformation from short-term deposits to long-term investments.

5. To allow for efficient exchange, the provision of liquidity and reduced transaction costs. This can be achieved in various ways including through, respectively, economies of scale within institutions, market creation, and provision of payment systems.

**Financial development** is the contribution of the financial system to structural transformation, primarily through productivity increases within the real economy and via economic stabilization.

**Financial banking crisis** is defined as: (1) Bank deposit runs that lead to the significant curtailment of deposit-taking or closure, forced merging, or takeover by the public sector of one or more financial institutions; (ii) Borrower runs that lead to the material curtailment of lending or closure, forced merging, or takeover by the public sector of one or more financial institutions; and (iii) if there are no runs, the closure, forced merging, takeover, or large-scale government assistance of an important financial institution (or group of institutions), that marks the start of a
string of similar outcomes for other financial institutions (adapted from Rogoff & Reinhart, 2009; Ashok & Bond, 2009).

**Financial fragility** is defined as a state where the pre-determinants of institutional failure or financial crisis are present and there is an absence of effective shock absorbing mechanisms, making a financial institution or system susceptible to endogenous or exogenous shocks that could cause a financial crisis.

**Financial architecture** is defined as the framework for safeguarding and ensuring the efficient and stable functioning of the financial system. Its goal is to strengthen financial systems by encouraging sound regulation and supervision, greater transparency, more efficient and robust institutions and markets, promoting financial stability by facilitating better-informed lending and investment decisions, improving market integrity, and reducing the risks of financial distress and contagion. It includes macroeconomic policy, legal structures, macro-prudential and micro-prudential financial supervision, and institutional and market practices and standards. It relates to crisis resolution, deposit insurance, insolvency, corporate governance, auditing and accounting, payments and settlement systems, and market integrity. It includes both domestic and international structures (material drawn and elaborated from FSB, 2014).

**Financialisation** is defined as “the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies” (Epstein, 2003).

**Institutional failure** is defined by a financial institution suffering from events that lead to the significant curtailment of deposit-taking or lending, or is otherwise unable to meet its obligations and/or its closure, merger or takeover by the public sector.

**Microfinance** as defined as the provision of financial services, including savings, credit, insurance and payment services, to low-income households or individuals, thus basing the definition on the users, not the providers, of microfinance services to the poor. As such it is broad and satisfactorily encompasses the proliferating types and forms of institutions that are providing “financial access” to the poor.
Microfinance-Orientated Institution (MFOI) is any financial institutions with a tendency to serve poor households or individuals. It includes all of the following institutions:

1. Microfinance-orientated banking institutions (MFOB): Which are regulated banks designated as such by the Central Bank of Kenya based on the predominant customer base and subject to full banking regulation with oversight by the microfinance supervisory teams

2. Deposit-taking microfinance institutions (DTM): Which are non-banking institutions licensed for deposit-taking by the Central Bank of Kenya and are subject to specific DTM regulation with oversight by the microfinance supervisory teams

3. Microfinance institutions (MFI): Which are unregulated microfinance institutions.

Mission drift is defined by the thesis in two ways. Firstly, it is defined as a tendency for microfinance-orientated institutions to reduce lending to the poor and increase it to wealthier clients, thus drifting away from their social mission to serve the poor (Consultative Group to Assist the Poor, 2001). Secondly, it refers to a tendency to reduce lending for purposes that contribute to long-term poverty alleviation and structural transformation, such as lending for microenterprise, and increase lending for purposes contributing less or not at all to these goals such as, for example, consumption.

Non-banking financial institution is a financial institution is not regulated as a bank. They can include microfinance-orientated institutions as well as insurance companies, housing finance providers, pension funds and investment funds.

Sub-Saharan Africa is defined in line with the IMF sub-Saharan Africa Lower Income and Lower Middle Income Countries. Specific countries are: Angola⁴, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Republic of Congo, Côte d’Ivoire, Equatorial Guinea, Eritrea, Ethiopia, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali,

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⁴ Angola graduated to Upper MIC in July 2012 but as it was a Lower LIC for the duration of the thesis analysis, therefore it has been included in the data analysis.
Mozambique, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, South Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.
2. THEORIES OF FINANCE DEVELOPMENT

The theoretical framework which links financial sector development to economic development is based upon the financial system’s role in intermediation that mobilizes resources for investment and, hence, productivity increases (e.g., Arestis & Demetriades, 1997). This process takes multiple forms. Among the most important are those that shift resources from low, labour-intensive sectors to high-productivity, capital intensive ones which establish infrastructure and human capital.

Empirical studies involving cross-country and time-series regression analysis support the correlation of financial sector development with economic growth. Cross-country regression analysis examines the relationship between financial development typically measured as the ratio of bank deposits or stock market capitalization to GDP and long-run economic growth. It aims to explain differences in growth rates between countries by appealing to an isolated factor, in this case financial development. A number of studies have taken this approach and found a positive relationship. This includes, for example, Gelb (1989), World Bank (1989), Roubini and Sala-i-Martin (1991), Atje and Jovanovic (1993), Fry (1997), King and Levine (1993), Levine and Zervos (1996), and Levine et al. (2000).

However, such studies cannot establish causality and it remains open to debate. King and Levine (1993) propose that finance causes growth, commenting that “higher levels of financial development are significantly and robustly correlated with faster current and future rates of economic growth, physical capital accumulation and economic efficiency improvements” (pp.717-8). Others suggest that causality runs in the opposite direction, namely from economic growth to financial development. For example, Demetriades and Hussein (1996) found that causality tests suggest that causality runs from growth to finance.

Given this, a theoretical framework is needed to understand the interaction of financial systems with structural transformation. This chapter discusses the existing theories that have been applied to this issue which are based in neo-classical frameworks of optimizing agents, and suggests an alternative drawn from non-development economics, balance sheet approaches.
2.1 EXISTING THEORIES OF FINANCIAL DEVELOPMENT

2.1.1 FINANCIAL REPRESSION THEORY

McKinnon (1973) and Shaw’s (1973) seminal works set the agenda for linking liberalized financial markets to economic growth through neo-classical models of an economy in which savings equal investment. Their hypothesis was that removing restrictions in financial markets would allow equilibrium interest rates to stimulate supply and demand of deposits and credit respectively. They critiqued policies that “repressed” financial markets, such as interest rate controls, as suppressing the level of savings and investment capital and distorting the efficient allocation of resources. Additionally, McKinnon proposed that financial repression could lead to dualism in which firms that have access to subsidized credit have an incentive to favour relatively capital-intensive technologies. The implicit assumption underlying the hypothesis is that, with liberalization, interest rates will rise and stimulate savings that will then finance higher levels of investment and thus growth.

The McKinnon-Shaw hypothesis has been tested in many studies covering a wide range of countries and time periods (Gemach & Struthers, 2006). However, the relationship between real interest rates and savings rates in liberalized financial systems, including in developing countries, has been found to be ambiguous. For example, in a recent study examining developing countries, Bandiera et al. (2000) created an index of financial liberalization on the basis of eight different measures for the period 1970-94 for Chile, Ghana, Indonesia, Korea, Malaysia, Mexico, Turkey and Zimbabwe. He found that the real interest rate had no positive effect on saving. Instead, he found a long-term decline in savings associated with a rise in real interest rates in some countries. Similarly, Reinhart and Tokatlidis (2001), examined 50 countries, including 36 developing countries, and found that although financial liberalization was correlated with higher real interest

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5 These included interest rates, reserve requirements, directed credit, bank ownership, prudential regulation, securities markets deregulation and capital account liberalization.
rates it was also associated with lower investment and lower savings. Overall, therefore, the relationship seemed variable between countries.

The concept of financial repression was developed further as part of endogenous growth theory. From the 1970s onwards, it incorporated a wider range of variables, more sophisticated transmission channels between financial market development and economic growth, and the development of formal models. Studies included Greenwood and Jovanovic (1990), Bencivenga and Smith (1991), Levine (1991a), Gregorio (1992), Itoubini and Sala-i-Martin (1992) and Greenwald and Stiglitz (1986). This theoretical base addressed the issue of causality between financial development and economic growth. It examined how financial development, defined as levels of intermediation, affects growth and how growth interacts with the growth of financial intermediation (Roubini & Sala-i-Martin, 1991). Most analysts proposed that a greater level of financial intermediation increases economic growth through improved efficiency of resource allocation (e.g., Greenwood & Jovanovic, 1990). This literature also examined variables’ relationship to policy choices\(^6\) (Roubini, 1991; Montiel, 1995) empirically – most commonly through regression analysis, as well as the political economic aspects of financial repression\(^8\) (Bird, 1996). However, such analysis did not provide a substantial theoretical framework to explain how such variables might act in either the financial sector or structural transformation.

As this theoretical body of work evolved, financial market liberalization became widely adopted as policy. IMF structural adjustment programs in developing countries included them, especially after the onset of debt management problems in developing countries from 1982 onwards. By the early 1990s, it was apparent that the results of this financial liberalization were disappointing (Rodrik, 1990; Nissane, 1999) and had failed to be straightforwardly associated with growth.

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\(^6\) These featured taxes, trade constraints (Roubini, 1991), introduction of technologies, anti-usury laws, directed credit policy, restriction of entry into banking, restriction on foreign capital, public ownership of major banks and high reserve ratios (Montiel, 1995).

\(^8\) These included directed and subsidized credit policy to chosen sectors, financing of deficits, the raising of taxes, and the impact of oligopolistic and foreign dominated ownership of private financial institutions (Bird, 1996).
addition, they came to be associated with financial fragility and crisis. This is discussed further in Chapter 4.

2.1.2 ASYMMETRICAL INFORMATION
Credit rationing remained a feature of financial markets in many developing countries, despite their widespread liberalization. This challenged the financial repression hypothesis based on the neo-classical theory of clearing in long-run, equilibrium markets with independently acting, rational agents. Thus, “macroeconomics and the financial network is reduced to the behaviour of individual agents” (Guilmi et al., 2012, p.2). Such a reductionist approach to a financial system allows for little insight into, not only its internal interdependencies, but also its interaction with the macroeconomy.

In 1981, Stiglitz and Weiss proposed a competing neo-Keynesian model based on the theory that markets are not necessarily self-equilibrating, but can fail to clear in the long-run. They suggest that this can occur in financial markets and results in credit rationing. Stiglitz and Weiss comment, “In equilibrium a loan market may be characterised by credit rationing… deriv(ing) from the residual imperfect information which is present in loan markets” (Stiglitz & Weiss, 1981, p.2). This is because in a perfect market credit funds would be unlimited and equilibrium would be achieved through increased “price” – that is higher interest rates – matching supply and demand for such borrowers and projects.

However, where there is imperfect information relating to the credit worthiness of borrowers, this process does not occur. Instead there is adverse selection, moral hazard and non-clearing markets. This is because, in the presence of imperfect information about creditworthiness, lenders cannot distinguish between inherently risky and safe borrowers. As a consequence they use “screening devices” in order to attempt to differentiate between borrowers, including high interest rates so that borrowers self-select based on their willingness to pay high rates. There are two effects of this process. First, if a borrower is willing to pay high interest rates then this indicates to lenders that the proposal is high risk and this will lead them to reduce the supply of credit. This was termed “adverse selection”. Second, there is an incentive effect, because the higher the interest rate the lower the chance that projects financed by borrowing will succeed and this induces firms
to take on projects with a low chance of success but with very high returns if they do succeed. However, only borrowers who either cannot borrow elsewhere because of poor credit worthiness, or who have high-risk, high-return projects that can bear higher rates self-select themselves to borrow. This means that either the lenders lend and “adverse selection” takes place whereby only high risk borrowers and project get credit or borrowers refuse credit altogether and credit rationing occurs. Thus higher interest rates lead to reduced credit.

Further, moral hazard occurs because lenders are unable to monitor and enforce the borrower and their project effectively, meaning that the borrower can have a perverse incentive to not repay or to not make a full effort to ensure the success of their project or the repayment of funds from it.

A criticism of this theory is that it is an agent-based theory and, as for the approach of liberalised markets, it does not provide a systemic view of a financial system. This issue has been partially addressed through models that build on this agent-based approach to represent the credit economy as a network of linked heterogeneous agents (e.g., Guilmi et al., 2012), but they remain essentially microeconomic, agent-based models, despite their network innovations. Because of this they provide limited insight into financial market dynamics including the growth and deepening of financial systems and causes of systemic fragility.

Nevertheless, this theory has important implications for policy because it implies that perfecting information would lead to closure of gaps in credit markets. Stiglitz proposes that the policy implications of the theory are that it supports a role for state regulation and intervention to correct markets. Stiglitz (1994) proposes that pervasive market failures can be closed by governments and that to do so would facilitate market functioning and economic performance through improving the efficiency with which capital is allocated. He suggests that this occurs because there would be an improvement in the quality of borrowers due to the market mechanism of lower interest rates creating demand and though direct policy of state selection of borrowers.

The theory of perfect information and its role in credit markets is particularly important for the thesis as it has been applied to microfinance. Stiglitz (1994) draws on his theory of asymmetrical information to explain microfinance group lending. In the absence of microfinance, the poor in developing countries often do not have access to the formal financial sector. Stiglitz approaches this as being a market gap due to asymmetrical information that is closed through group lending.
Without group lending, in underdeveloped credit markets little information is available relating to the credit worthiness of the poor borrower, leading to moral hazard and adverse selection. Further, in developing countries, this cannot be compensated for, as in developed credit markets, by collateral and contract enforcement. This leads formal banks to withdraw from the market (Armendariz & Morduch, 2007).

In this framework, microfinance is a method to overcome the issues of asymmetrical and incomplete information through group lending. The group self-selects members known to them, ensuring that only the creditworthy are included, and self-selects projects to be financed, which they are able to do more effectively because of their social and economic links with one another. As the group is held jointly liable for any loan and the members are able to more easily monitor each other, it provides more effective “social collateral” and “peer monitoring” through group pressure on individuals within the group in order to avoid the negative economic and social impact on the group of a failure to repay. Such group lending thus avoids moral hazard and adverse selection and improves the efficiency of capital allocation. These gains should then allow interest rates to fall, further mitigating the moral hazard problem. Thus group lending overcomes credit market deficiencies created by asymmetrical information for formal sector lenders to poor borrowers (Stiglitz, 1990; Armendariz & Morduch, 2007).

This theory examines the microeconomics of group lending as an example of agency-based credit markets. However, two issues arise in applying it to microfinance. Firstly, it assumes group lending is taking place. As will be discussed later, in fact, in microfinance, group lending has been increasingly replaced by individual lending. Such individual lending has taken a number of forms. For example, it has included progressive lending, which refers to the practice of increasing loan size to borrowers with good credit histories and collateral arrangements. This requires a re-examination of the theory to consider its continued relevance. This has featured in a number of studies that look at alternative mechanisms within agency-based theory (e.g., Armendariz & Morduch, 2010; Giné & Karlan, 2009).

Secondly, such theoretical innovations do not address the main critique of these theories – that they do not provide systemic insights relating to the financial system. This is discussed further in Section 2.1.5.
2.1.3 The Institutionalist Approach

Simplistic liberalization – the policy recommended by the theories of financial repression – yielded disappointing effects on financial system deepening. Moreover, it was increasingly associated with financial fragility and crisis. Alongside the development of imperfect markets theory, new *ex-post* approaches emerged in response to these shortcomings.

They remained based on the neo-liberal paradigm which led to liberalizing private financial markets, but were augmented by features designed to defend the original theory despite its disappointing empirical record (Fry, 1997; Rodrik, 2005). These approaches were as focused on policy as on theory as they sought to address the practical problem of what policy approaches build a financial system that materially assists development.

The key approach was a focus on institutions. In terms of financial systems, institutions were defined as financial intermediaries, markets and regulators. This represented a move away from neo-classical and imperfect information approaches based only on individual agents, although and as will be discussed in the next section, the approach remained firmly entrenched within the neo-classical framework.

This approach was supported by empirical studies, which linked long-term economic growth to well-functioning institutions. For example, Rodrick et al. (2004) estimated through regression analysis the respective contribution of institutions, as well as geography and trade, to the determination of income levels. They concluded that institutions “trump everything else”. Acemoglu et al. (2005) examined the role of “property rights institutions”, which protect against private property expropriation, and “contracting institutions”, which enforce private contracts, and found a strong relationship between both types of institutions and long-term economic growth, investment and – importantly for the present argument – financial development measured as private sector credit to GDP and stock market capitalization.

It has been proposed that regulation and supervision contributed to the development of financial institutions. For example, McKinnon (1991) suggests that adequate regulation and supervision is required to control moral hazard problems within the financial system. Banks can be incentivized to take excessive risks relative to their capitalization when protected by government safety nets.
In these circumstances they have a “one way bet” on risks whereby they are the beneficiaries of gains, but governments bail them out in the instance of losses. Similarly, depositors may be disincentivized from monitoring the creditworthiness of banks where deposits are guaranteed explicitly through deposit insurance or through the market belief in an “implicit guarantee” due to the presence of contagion fears so that, in the event of the bank failing, the government will bail it out, ensuring they do not suffer a loss.

Empirical studies have supported the role of certain aspects of institutions in financial market development. For example, Porta et al. (1997, 1998) found a correlation between the strength of legal protection given to minority shareholders and creditors, and the extent of the development of capital markets. More recent research also supports the need for “enabling institutions” in financial systems. Arestis and Demetriades (1997) provide evidence that suggests that the causal link between finance and growth is crucially determined by the nature and operation of the financial institutions and policies pursued in each country. Honohan and Beck (2007) suggest that in Africa “two main factors discourage lending … the difficulty of obtaining information … to assess clients’ credit worthiness … (and) the difficulty of enforcing creditor rights” and propose that “a well-functioning legal system… procedural regulations and strong institutions, backed by proper enforcement mechanisms… are essential for financial system development” (Honohan & Beck, 2007, p.77).

However, it remains an open question as to what form an “enabling environment” should take. Honohan and Beck recommend addressing issues such as “reforming the legal systems, improving financial information and transparency… establishment of credit registries and training of financial professionals” (Honohan & Beck, 2007, p.7).

However, these approaches are essentially a replication of “best practice” taken from advanced economies’ financial infrastructure of microprudential regulation in liberalized markets. As the financial crisis in advanced markets underlined, such an approach, even when instructional capacity and development is “modernist” (Honohan & Beck, 2007, p.10) does not prevent financial fragility and crisis. Indeed, such approaches were heavily criticized post-crisis for failing to sufficiently control moral hazard within the banking system, especially in relation to excessive risk-taking, and for not engaging in macroprudential regulation (e.g., Independent Commission for Banking, 2011).
In addition, “financial development” was defined simply as the growth of finance relative to GDP. The relationship of this to economic growth – and especially structural transformation of the economy defined as productivity increases – was not examined in the Institutional approach.

Furthermore, despite these empirical studies mainly based on regression analysis, the institutional approach was increasingly challenged by the historical experience of a lack of a clear relationship between the adoption of the recommended institutions and reforms and sustained economic growth (Rodrik, 2014). This took two forms. Firstly, developing countries who followed the prescribed policies experienced financial instability accompanied by sharp retractions in their economic growth trajectories. This included countries in Asia and Latin America. Secondly – and more challengingly because it could not be dismissed as an episodic bout of financial excess – countries that had very different institutions and economic policies saw strong and persistent economic growth. Countries that did not deregulate or liberalize their trade and financial sectors saw rapid and deep economic growth and poverty reduction. This was most notable in East Asia, including in China. Conversely, countries that followed policies of significant liberalization, deregulation and privatization saw disappointing and only episodic growth. This includes many countries in Africa and Latin America (Rodrik, 2007).

2.1.4 STRUCTURALIST APPROACHES

These failures led to a rethink – but not an abandonment of – the neo-liberal approach which was adapted to a new framework focused on structural transformation.

In this approach, structural transformation is defined as the shift of resources from low to high productivity activities (Rodrik, 2013) (and as adopted by the thesis). This results in sustained economic growth where this takes place under “first-order principles” which ensure that markets function. For example, the principles include protection of property rights, contract enforcement and market-based competition. However, these are presented at a greater level of abstraction than under previous approaches (Summers, 2003; Rodrik, 2007).

These first-order principles are able to function because of effective institutions. “Institutions” in this context are understood as broadly-defined mechanisms that create or enforce these first-order principles. For example, they include institutions for enforcing property rights and contracts,
establishing macroeconomic stability, creating supportive environments for private sector development or integrating economies into world trade (Summers, 2003; Rodrik, 2005). They can include broadly-defined mechanisms such as informal and social arrangements and have been extended to include government actively adopting a role in coordinating investments for industrial upgrading and diversification and in compensating for externalities (Lin, 2012).

Because this approach allows for a much broader range of context-specific policy approaches and institutional structures than the Institutionalist approach it is able to provide insight into a much wider range of historical experiences – as discussed further below. Nevertheless, the theoretical framework is still built on the foundations of a “self-sustaining, market economy” and embedded in a more generalised, but still firmly neo-classical theory.

In relation to financial systems, the main “first order principle” is “sound money” (Summers, 2003; Rodrik, 2007). “Sound money” is defined as the first-order principle of “not generating liquidity beyond the increase in nominal money demand at reasonable inflation” (Rodrik, 2007, p.33). Institutions of relevance to finance include central banking, fiscal policy and regulation (Rodrik, 2007).

Finance can also be a binding constraint – that is the key constraint that prevents structural transformation taking place. For example, this might include constraints such as a high cost of financing of investment, low investment returns or low savings returns (Rodrik, 2007).

This approach has been developed into a more sophisticated framework that proposes an “optimal financial structure” for development. It is argued that the optimal financial structure is exogenously determined by the factor endowments of the real economy because they determine “efficient” mobilisation and allocation of capital. The optimal structure is also dynamic, changing as the endowment structure of an economy changes during development (Lin & Xu, 2012). The exogenous determinants of an optimal financial structure include firm size, risk and financing needs. If the financial structure does not complement the factor endowments of the real economy then the financial system is inefficient and hinders economic growth. Such a mismatch can be the cause of crisis. This includes mismatch through the failure of critical institution for finance, regulation (Lin, Xifang & Ye, 2011).
2.2 CRITIQIUNG EXISTING THEORIES

Theories of financial development have evolved. Early work did not address issues of causality between the financial sector and economic development, or were limited to addressing only selected variables and so do not present a sophisticated analysis of the financial system and its development.

Subsequent theories have aimed to develop such an analysis. Financial repression theory purports to examine how intermediation by the financial system between savings and investment allows efficient resource allocation within the economy, thus accelerating growth.

Stiglitz’s theory of asymmetrical information links information to the clearing of financial markets and examines how incomplete information leads to market failures, including credit rationing.

However, these theories present limited insights into financial systems and economic development. This is because they are underpinned by neoclassical economics where economic systems are represented as systems composed of optimising representative agents subject to constraints. In the strong version, this implies that an economic system is not more than the actions of individual agents and that there is no interaction between agents. In the weak version, the theory allows for interactions between agents to modify the economic system’s properties with a feedback loop to individual behaviour, providing for a system to be represented as a “network”. This is most explicit in Stiglitz’s work as discussed above (Bezemer, 2011).

However, two critiques can be made. Firstly, financial systems are not composed of independent agents or “networks” of agents. Financial “agents” are highly interdependent and this interdependency means that the financial system acts as a single system. This determines phenomena that are important in financial systems and cannot be adequately explained by theories relating to individual agents. These include market herding, pro-cyclical behaviour and processes underlying financial instability such as contagion and coordinated institutional failures.

Furthermore, a theory of financial markets – and particularly one that seeks to explain the links between financial systems and structural transformation – requires a framework of specified transmission channels. These are mechanistic in existing agent-based theories. For example, the critical intermediation functions of the financial system between savings and investment is
represented as a mechanistic process of choices by these independently-acting agents determined by simple variables such as interest rates or the level of “perfect” information. However, transmission channels within the financial system are more complex than this because financial institutions do not simply pass money on from saving to investment but, in addition to individual agents decisions, act in interdependent ways and respond to risk (Bezemer, 2011).

Secondly, these neoclassical-based theories present the economy as a system in equilibrium. The outcome of individual optimization processes is a stable equilibrium (or several equilibria) that only deviates from equilibrium due to external shocks. There is no endogenous instability or structural change. However, financial systems are not stable but are subject to repeated instability with endogenous origins (Minsky, 2008; Reinhart & Rogoff, 2009). Further, financial systems in developing countries are undergoing structural (not cyclical) change, which cannot be represented by an equilibrium model.

These criticisms are valid for the structural transformation approach where – consistent with neoclassical economics – finance and financial systems are represented as a pass-through from savings to investment. The pass-through is represented as mechanistic. The financial sector is absent as a system or a sector in its own right. The concept of “sound money” and binding constraints on finance are essentially monetarist views where money supply and demand move towards equilibrium as determined by interest rates. Institutions relevant to finance are limited to microprudential regulation of markets and the agents that comprise them. The approach does not take account of the repeated historical failures of such regulation (Toporowski et al., 2013; Rodrik, 2015).

The structural transformation approach does, however, have a number of key advantages over other neo-classical approaches. It defines growth through productivity change in the real economy, arguably the central process of economic development. It also incorporates the empirical findings about the importance of institutions in development discussed earlier.

This means that it provides a stronger framework than earlier approaches for explaining the diversity of historical growth patterns in developing countries. It does this by allowing common first-order principles to function effectively through multiple institutional forms. It can then explain, for example, the economic convergence in Asia that adopted policy that did not follow
the simplistic neo-liberal policies of earlier approaches but that still experienced strong and sustained convergence with advanced economies. It also allows insights into the development constraints in Africa and Latin America where – in contrast to Asia – neo-liberal policy approaches were adopted but sustained economic growth did not materialise (Rodrik, 2005, 2013, 2014, 2014a, 2015).

The approach allows a more nuanced role for governments in development, one which is compatible with historical experiences – especially in Asia – where governments played an active role in promoting industrial diversification and upgrading. The latter role is represented in the structuralist approach as government acting to solve coordination problems and manage externalities (Lin, 2012).

However – despite these advances over previous approaches – the structuralist approach provides weaker insights into financial systems and their relationship to structural transformation.

Firstly, this is because the central framework is focused on the real economy and presents a three-sector model of it that is comprised of agriculture, industry and services. There is no financial sector in the model and the financial sector remains the mechanistic pass-through of neo-classical economics.

In the extension of the framework that discusses the optimal financial structure, the approach is more sophisticated because it links the real and financial sectors through the interaction of finance with factor endowments and productivity. This is an important theoretical innovation and one that the thesis seeks to build on. However, the transmission mechanisms within the financial system that make this link remain unexplained.

The empirical support for these theoretical innovations also remains weak. For example, empirical studies define financial structure as the balance between banks and stock markets but with an undeveloped rationale as to why this parameter is the crucial factor that relates finance to factor endowments and productivity (Lin, Xifang & Ye, 2011; Cull & Xu, 2011; Lin & Xu, 2012). Instead, financial development remains largely defined by the growth of credit (Cull & Xu, 2011).

Also problematic is that – despite stating that one of the central aims of the approach is to explain historical development patterns (Rodrik, 2007) – the framework relating to financial systems
excludes one of its most notable features – financial instability and crisis. Instead, financial crisis – one of the most important experiences of developing countries in Asia and Latin America – is demoted to being just one possible “constraint” on savings and investment (Rodrik, 2007) or a problem of institutional weakness (Lin & Xu, 2012). Even after the 2007 financial crisis in advanced economies and the subsequent impact on developing countries, there was no rethink of this position (Rodrik, 2007, 2012).

These weaknesses in relation to incorporating finance and financial systems into the structuralist approach makes the insights it provides into finance – unlike those it provides into the real economy – limited.

2.3 AN ALTERNATIVE APPROACH: BALANCE SHEET ANALYSIS

These criticisms of existing theory are of particular relevance to developing economies. In such economies, the critical function of the financial system is its contribution to stable economic growth and structural transformation.

As we have seen, existing theory is of little assistance in understanding the ways that financial development interacts with structural transformation nor how financial fragility evolves and can result in a financial crisis. Their neo-classical analysis marginalises finance and financial systems to an essentially mechanistic intermediation of savings and investment, with binding constraints relating to the quantity of credit that is determined by interest rates.

However, there is an alternative offered by non-development economics, namely the “balance sheet” (also known as “flow of funds” or “stock flow consistent”) approach. This approach derives from the work of a number of heterodox economists including, most notably, Keynes (1936) and Minsky (2008) as well as Fisher, Veblen, Schumpeter, Kalecki, Tobin and Godley.

The approach seeks to examine financial systems through the balance sheets of the agents that interact with it. This includes the balance sheet assets and liabilities of households, firms and governments. The economy is represented as a system based on the interlocking balance sheets of all its agents (Allen et al., 2002; Eichengreen et al., 2005).
It argues that in the financial system, interlocking balances sheets are the transmission mechanisms for both economic growth and financial fragility. Such financial fragility results not from cost – as presented in the neo-classical view – but from a more sophisticated understanding of the balance sheet operations of financial institutions and the risk within them. This includes examination of liquidity, temporal and currency mismatches and their relationship to balance sheet structures (Cozzi & Toporowski, 2006).

Analysis using the balance sheet approach can take two forms. Firstly, it can use a simplified formal matrix that represents all financial transactions as double-entry booking-keeping based on credit or debit transactions, with the system represented as offsetting debits and credits between the interlocking balance sheets of multiple agents. These can be presented both as stock and flow matrices (Godley & Lavoie, 2007; Caverzasi & Godin, 2013).

The second approach in empirical research is to examine the aggregate ratios such as leverage, temporal and currency ratios. For example, the empirical analysis of aggregate ratios for the financial sector such as leverage and liquidity ratios can be examined (e.g., Cozzi & Toporowski, 2006). This second approach is the one adopted by this thesis.

This approach has a number of key advantages over other frameworks discussed in this chapter. It provides a sophisticated representation of the financial system and how its relates to the non-financial sector through a specified transmission mechanism – the interlocked and interdependent balance sheets of financial and non-financial agents – and places the financial structure of the economy at the core of its wider economic processes.

It nevertheless, rests upon agent-based micro-foundations, because agents continue to act in relation to their individual balance sheets. However, because the financial system is formed by the interlocking and interdependent balance sheets of the individual agents, the macroeconomy is fully integrated with its micro-foundations.

Research using these approaches has been used mainly in relation to advanced economies. However, they have also been deployed to examine developing economies, especially in relation to financial crisis. For example, Krugman (1999) explains the Asian crisis in terms of firms’ balance sheets with fragility resulting from leverage and mismatches in currency exposures (Krugman, 1999). Eichengreen et al. (2005) argue that developing country financial fragility
results from their inability to borrow in domestic currencies, thus resulting in currency mismatches with balance sheets (Eichengreen et al., 2005). Cozzi and Toporowski (2006) used the approach to examine the Asian financial crisis of 1997 through the interlocking balance sheets of firms and banks and their interdependence for liquidity.

We suggest that the approach can be extended beyond this focus in order to examine the process of financial system development where the central concern is how the financial system contributes to structural transformation. Such an analysis needs to move beyond the neo-classical approaches discussed earlier in this chapter that focus on the “quantity” of credit and related binding constraints. Instead a more sophisticated analysis is needed that examines the “quality” of intermediation as the key determinant of the financial system’s relationship to structural transformation.

This challenges the current definition and measurement of “financial development” in terms of the quantity of credit. Current typical quantitative indicators of “financial sector deepening” include the ratio of financial institutions’ assets to GDP, the ratio of liquid liabilities to GDP, and the ratio of deposits to GDP. No transmission mechanisms are specified or measured (source: World Bank’s Global Financial Development Database; Beck et al., 2008).

By contrast, we propose that a theory of financial sector development must specify the transmission channels through which it contributes to structural transformation and must be measured by its contribution to structural transformation and economic stability. Most explicitly, this includes its contribution to increasing and shifting resources from low to high productivity activities within the economy.

Because of these potential advantages, we adopt the balance sheet approach to guide our exploration of access to finance in developing economies. Therefore, much of what follows involves the detailed examination of the balance sheets of microfinance-orientated institutions and the “agents” – the institutions and poor households – that act upon them.

In recent years, improved financial access – measured by an increased proportion of households and firms that are able to use financial services if they choose to do so – has been linked to the broad financial sector and economic development with increasing frequency. Expansion of financial access has become a policy of many international development agencies and national governments based on the assumption that it can contribute to the development of a stable and efficient financial and economic system (Department for International Development, 2013). The African Development Bank, for example, describes financial access as “a driver of inclusive growth” and “necessary to ensure economic growth performance is inclusive and sustained” (African Development Bank, 2012, p.25). International development agencies that have adopted the expansion of financial access as policy include the World Bank Group, the G20 (through its Financial Inclusion Action Plan), the UK’s Department for International Development (DFID), the African Development Bank, and the United Nations. This chapter considers the theoretical and empirical evidence that supports this link. It will discuss this issue with a focus on sub-Saharan Africa, in the context of the thesis focus on Kenya.

As will discuss further in this chapter, the theoretical and empirical basis for this link is limited. In part, this results from the methodological challenges of determining the impact of microfinance. The methodologies employed have included comparative group studies, randomized control trails (RCTs) and pipeline studies. However, all suffer from methodological weaknesses (Department for International Development, 2011). Comparative group studies suffer from the problem of identifying a well-founded control group that permits an adequate comparison between those with access to microfinance and those without. Consequently, such studies are often unable to effectively isolate the effects of microfinance or access to finance from other possible factors. This is particularly the case because participants may exhibit selection bias, whereby individuals in a programme self-select or are selected by criteria that make them differ from the comparison population. Selection bias can be related to observable characteristics such as employment status, age, sex, educational attainment, or unobservable characteristics, such as
motivation, entrepreneurial ability or business skills (Armendáriz & Morduch 2007). Many early studies of this type found microfinance to be beneficial but the results are questionable because they failed to address these methodological problems with comparative groups and selection bias (Goldberg, 2005; Department for International Development, 2011).

Because of these issues, randomized control trials (RCTs) – which select random groups to receive or not receive microfinance in otherwise similar circumstances – were completed and also expected to provide a more robust methodology. They randomly assign subjects to either treatment or control group in order to ensure that potential outcomes are not contaminated by selection bias (Blundell & Costa Dias, 2008). Randomized control trial studies include: Duflo et al. (2008); Field and Pande (2008); Karlan and Zinman (2008); Banerjee et al. (2009); Mel et al. (2009); Dupas and Robinson (2009); and Karlan and Zinman (2010). However, methodological problems have undermined randomized control trials, such as ethical issues, pseudo-random allocations and attrition, and thereby made the results generated difficult to interpret (Department for International Development, 2011).

A further alternative method are “pipeline” studies which compare a sample from the population which has had access to finance to an equivalent population that is about to receive the treatment for the first time in order to combine an appropriate control group with randomised selection. Studies include: Coleman (1999, 2002, 2006); Copestake (2001, 2002, 2005); Cotler and Woodruff (2005), Kondo et al. (2008); and Deininger and Lui (2009). However, the study design has not been sufficiently rigorous (Department for International Development, 2011) and there has been a failure to replicate the results (Armendariz & Morduch, 2010).

Evidence limitations also relate to the fact that the majority of research has usually been directed at more constrained questions than the relationship between financial access and financial development. For example, much of the existing research to date has focused on the impact on poverty. This has explored the impact of financial access on microenterprises and pro-poor employment creation but with little enquiry into macroeconomic investment and employment. Similarly, there has been research into the savings behaviour of the poor but not savings mobilization at the macroeconomic level.
Limitations in methodology and scope mean that research into the relationship between financial access and economic growth has yielded ambiguous results. This is true even in relation to poverty alleviation and some studies have concluded that there is no clear quantitative evidence that microfinance programmes alleviate poverty (Armendáriz & Morduch, 2007, 2010; Sebstad & Chen, 1996; Gaile & Foster, 1996; Goldberg, 2005; Odell, 2010; Orso, 2011; Department for International Development, 2011).

Research results are made more ambiguous because microfinance can result in multiple outcomes. These include not only economic effects but also social outcomes, such as female empowerment or strengthened social relations (Armendariz & Morduch, 2010).

DFID concluded negatively, stating that it remains unclear under what circumstances, and for whom, microfinance has been and could be of real, rather than imagined, benefit to poor people … microfinance activities and finance have absorbed a significant proportion of development resources, both in terms of finances and people. Microfinance activities are highly attractive, not only to the development industry but also to mainstream financial and business interests with little interest in poverty reduction or empowerment of women … There are many other candidate sectors for development activity which may have been relatively disadvantaged by ill-founded enthusiasm for microfinance (Department for International Development, 2011, p.75).

Hence, whilst the thesis examines the links between financial access and financial development, there is no established framework to guide us. As a result, the thesis adopts an approach based on the basic functions of the financial system set out in Chapter 1 and the current academic literature relating to microfinance. Using this approach we have identified five hypotheses concerning the processes that may link the expansion of financial access to financial development as defined by its contribution to structural transformation. These are as follows:

- Financing investment: An essential function of the financial system that provides capital for increases labour productivity. This can be invested by households in small and medium-sized enterprises and agriculture or, via pooling of resources, in larger-scale investment for industrialization and the commercialization of agriculture.
- Mobilization of savings: An essential function of the financial system that provides a source of capital for pooling and intermediation to investment.
- Development of financial architecture: Which can contribute to financial development and stability.
- The building of institutional capacity: To ensure stable and effective institutions including financial, legal and regulatory institutions.
- Benefits for poor households: Which requires consideration because microfinance specifically target poor households.

These hypotheses will be discussed in more detail in the context of sub-Saharan Africa.

3.1 INVESTMENT FOR STRUCTURAL TRANSFORMATION

An essential function of the financial system is to intermediate mobilized savings into investment. In developing countries structural transformation requires investment to be directed at the transformation of low-productivity sectors into high-productivity sectors. This includes, for example, investment in establishing and developing manufacturing and service sectors, transforming agriculture from low-productivity subsistence agriculture to high-productivity agriculture, and building infrastructure.

In sub-Saharan Africa, such financing of investment is often absent for microenterprises and small and medium-sized enterprises and for important areas such infrastructure, agriculture and large-scale private sector investment (African Development Bank, 2012). For example, the African Development Bank (2012) reports that in sub-Saharan Africa, on average, only 22% of small and medium sized enterprises have a loan or a line of credit, compared to 43% in other developing economies. Similarly, 45% of firms cite access to finance as a “major constraint to growth” (Demirguc-Kunt & Klapper, 2012). Furthermore, this problem is more acute for smaller firms with the majority of domestically and internationally-generated credit flowing to large firms and 70% of small and medium-sized enterprises funding themselves through the exclusive use of internal funds (African Development Bank, 2012; OECD, 2006).
It has been proposed that expanding financial access will lessen these credit constraints and help close the “missing markets” in areas essential for structural transformation. Policy has focused largely on microenterprises and small and medium-sized enterprises because of the high level of informal and self-employed individuals amongst poor households in most developing countries (e.g., Collins et al., 2009; Banerjee & Duflo, 2007).

Research has provided ambiguous guidance, partially due to contradictory results and methodological issues leading to the ineffective assessment of impacts. Some studies have found positive correlations between access to finance and small and medium-sized enterprises’ performance\(^\text{10}\) (e.g., Thio et al., 2006; Ahiahar, 2013). Others have found positive impacts in the short term, but not in the long-term (e.g., Ssendi, 2009), or negative or neutral results in terms of small and medium-sized enterprises’ growth (Department for International Development, 2011).

A number of studies have suggested that finance may not be the binding constraint in growth in microenterprises and small and medium-sized enterprises. Instead, other binding constraints are identified, such as the relatively high risks faced by the small and medium-sized enterprise sector that causes financial institutions to refuse credit (Kauffmann, 2005) and that results in high rates of business failure, estimated at 40% in some sub-Saharan African countries (African Development Bank, 2012), and the quality of management and entrepreneurship (McKenzie, 2010).

As with microenterprises and small and medium-sized enterprises, credit for agriculture remains constrained. This is of particular relevance to sub-Saharan Africa because its economies remain concentrated in subsistence agriculture, representing 40% of GDP and 65% of employment (African Development Bank, 2012). Agricultural GDP growth in sub-Saharan Africa has accelerated from an average of 2.3 per cent per year in the 1980s to an average of 3.8 per cent per year between 2000 and 2005. However, this growth reflects the expansion of cultivated areas – not productivity increases – with farm yields remaining among the lowest in the world (source: World Bank). Furthermore, only 10% of Africa’s total private bank lending goes to agriculture

\(^{10}\) Impact studies examining household impacts are discussed in a subsequent section. However, it should be noted that given the nature of informal employment for poor households, there is an overlap between enterprises and households’ respective impact.
and agro-industries, a small fraction of which makes its way into rural subsistence agriculture (African Development Bank, 2012).

Recent policy has shifted from an emphasis on direct government financing of agricultural development to providing access to finance for agriculture via microfinance-orientated institutions (Morvant-Roux, 2011). Financing of agriculture requires access to finance in rural areas and credit suitable to agriculture. Both have been found by empirical studies to be inadequate. Financial access in sub-Saharan Africa’s rural areas remains stubbornly low with only 19% of the rural population having a banking relationship, compared to 34% of the urban population (African Development Bank, 2012), and insufficient levels of credit even where access is available (Morvant-Roux, 2011).

The credit available is also often unsuitable. Agriculture needs working capital to finance inputs throughout the agricultural cycle with repayments scheduled post-harvest. It also needs long-term finance for investments to improve productivity such as irrigation, soil enhancements and mechanization.

However, research has found many microfinance products are unsuitable for these agricultural financial needs. For example, repayment structures are not matched to agricultural cycles (Collins et al., 2009; Morvant-Roux, 2011). Credit suffers from small loan amounts and short maturities that are inadequate to address long-term investment needs (Miller et al., 2010). Specific case studies have confirmed these general results. For example, in Ethiopia, financing for agricultural cycles and value-chain finance for coffee farmers suffered from insufficient supply, excessive costs and inadequate timing, length and scale (Bastin & Metteucci, 2007; Rosengard, 2007). Overall, the impact of expanding financial access in rural areas has had a limited effect in terms of relieving constraints on agricultural finance.

Moreover, the empirical evidence suggests that micro-savings are used largely in consumption smoothing or short-term working capital for informal business (Dupas, 2010; Rosenberg, 2010), rather than the long-term investment needed for structural transformation. Such consumption smoothing may have benefits for the poor – as discussed further below – but it also suggests that most credit provided through expansion of access to finance is not being channelled into investments that drive productivity improvements in manufacturing, services or agriculture.
3.2 SAVINGS MOBILIZATION

Mobilization of savings by the financial system is fundamental to the provision of financial resources for investment. Savings by households provides a stable, low cost and low risk source of financing compared to, for example, international private capital flows (African Development Bank, 2009). Because of these advantages a key component of stable and efficient financial sector development is savings mobilization.

In relation to financial access, its role in the mobilization of savings within the economy is an explicit theoretical and policy goal. For example, the African Development Bank comments that improving “domestic resource mobilization ... will require deepening domestic financial intermediation to mobilize savings” (African Development Bank, 2009, p.1) and that “Domestic savings may turn out to be significant and, possibly, a cheaper alternative to external sources of financing (than bond financing)” (African Development Bank, 2009, p.3).

However, concerns have been raised about whether such savings mobilization is possible because, by definition, poor households have very limited surplus funds for savings. This dynamic of savings being constrained by income at a macroeconomic level was first raised by Keynes (1936), but can also be considered at a microeconomic level. Research in microfinance has argued that poor households with subsistence incomes had no saveable surpluses and that this was the reason for them having no savings (Bhaduri, 1977). More recent household survey data has found that the most frequently cited reason for not having a formal savings account is a lack of income (Financial Sector Deepening Program, 2009; African Development Bank, 2012). Also, there is some indication that formal savings may be pro-cyclical in relation to deposit bases as withdrawals are made rapidly in response to negative shocks to households (Consultative Group to Assist the Poor, 2009), although Consultative Group to Assist the Poor found that “under normal circumstances” aggregate balances for low-income savings accounts are stable.

However, there have been a number of challenges to this. Firstly, savings is a very common goal in the informal sector, including, for example, savings clubs or rotating lending organizations, and poor households actively use them to accumulate savings, especially for lump sum needs
as education, health care or life events, such as marriages or funerals (Collins et al., 2009). A number of studies of microeconomic financial behaviour have demonstrated that both within the formal and informal sector poor households have a savings capacity and are able to provide for non-subsistence expenditure (e.g., Patten and Rosengard, 1991; Rutherford, 2000; Banerjee & Duflo, 2007; Collins et al., 2009). Many microfinance-orientated institutions offer savings accounts, with 92% of microfinance-orientated institutions in 2008 having saving accounts, up from 41% in 2003, and research has indicated that, where specific and structured products are offered, these assist in helping the poor to achieve savings (Ashraf et al., 2006b; Collins et al., 2009; Duflo et al., 2006). Because of this, some researchers have suggested that savings from poor households may be able to contribute to savings mobilization and increases in capital stock (e.g., Karlan, 2009a; Central Bank of Kenya, 2010a; African Development Bank, 2009).

However, these studies examine short-term savings, but these results do not hold for long-term savings and asset accumulation. Research using “financial diaries” found that whilst poor households can save for short-term lump sums, they remain very constrained in their ability to save long-term (Collins et al., 2009). This suggests that the basic constraint of savings being constrained by income and consumption over the long run remains relevant.

This is further supported by macroeconomic level findings that savings – measured by, for example, savings as a percentage of GDP – are strongly correlated with increased income at both an individual and national level. Indeed for developing countries it is estimated that, with a doubling of income per capita, there is an increase in the long-run private savings rate of 10 percentage points of disposable income (Loayza et al., 2000). Furthermore, the use of formal financial services in developing economies is correlated with income, with adults in the top income quintile being five times more likely to save formally than the median household (African Development Bank, 2012). In addition, current savings rates have high serial correlation to past saving (Loayza et al., 2000), suggesting that savings are not only a function of disposable income, but also a habit which has to be established.
These access issues are reflected in low African savings rates, with a median savings rates for Africa of 10.2% of GDP, the lowest for any region globally with the exception of the Middle East (African Development Bank, 2012)\textsuperscript{11}.

Currently poor households’ savings remain largely outside of the formal banking system. Informal savings clubs are more common than formal savings accounts, with 100 million adults using them in sub-Saharan Africa and 34% of savers making only informal savings (African Development Bank, 2012). This continued dominance of informal savings amongst poor households means that intermediation and pooling of funds from them through the formal financial system remains limited.

Overall, it is possible that financial access could mobilise savings but this requires a shift of savings from informal to formal institutions. To date such a shift has been limited in sub-Saharan Africa. Further, income is an important barrier to formal savings by poor households and this is a problem that can only be solved by broader economic development.

### 3.3 The Development of Financial Infrastructure

An important feature of financial system development is the evolution of financial architecture. Financial architecture is the framework that strengthens financial systems through sound regulation and supervision, greater transparency, more efficient and robust institutions and markets. It promotes financial stability by reducing risks of financial distress and contagion. It includes legal structures, financial supervision, institutional and market practises and standards. It can relate to market integrity, crisis resolution, deposit insurance, insolvency, corporate governance, consumer protection, auditing and accounting and payments and settlement systems. It can include both domestic and international structures (Basel Committee, 2010).

\textsuperscript{11} A compounding problem for the growth of domestic savings in Africa countries, particularly commodity-exporting ones, is the high levels of capital flight (Ndikumana & Boyce, 2011). Indeed, Africa is the continent with the highest share of national wealth held abroad (Collier & Dollar, 2001) and a high ratio of offshore to onshore deposits (Beck et al., 2011).
In many developing countries, financial liberalization and deregulation was implemented to lift “financial repression”. In sub-Saharan Africa, this financial liberalization and deregulation was accompanied by a greater frequency of banking crisis throughout the 1990s (Aryeetey & Nissanke, 1998). Weakened and ineffective regulation were considered to be contributing factors in these crises, as well as broader corporate and public governance problems, such as corruption and bad banking practices (Laeven & Valencia 2008). Beck et al. [year], comment that “widespread fragility (was) mostly caused by governance problems at the bank level and at the regulatory level or simply by bad banking practices” (Beck et al., 2011, p.194).

Sub-Saharan regulatory frameworks have undergone significant legislative change since 2000 (Beck et al., 2011). For example, legislative reforms have imported “best practices” from international frameworks such as Basel Core Principles for Effective Banking Supervision (BCPs) (Beck et al., 2011; Murinde, 2012). These approaches are, however, problematic as, not only is there almost no relationship between BCPs and banking sector stability (Demirguc-Kunt and Detragiache, 2008), but, even when the application of these principles are well executed, they can be unsuited for African financial systems (Murinde, 2012). In addition, some commentators have found that they do not address adequately the problems of politically-connected corruption and fraud. Such issues have been at the core of a number of recent banking problems in Africa, including those in Nigeria (Cull et al., 2010), Cote D’Ivoire, Ghana and Kenya (Beck et al., 2011).

In relation to microfinance specifically, initially microfinance-orientated institutions were largely unregulated. However as microfinance has commercialized, microfinance-orientated institutions have increasingly converted into regulated entities with assets becoming concentrated into fewer (but larger) regulated financial institutions (Consultative Group to Assist the Poor, 2009). Development of regulation has also been driven by increased deposit-taking, which represents a risk to the depositors as opposed to lending where the risk is borne by the lending institution (Beck & Maimbo, 2013).

In 2010, the Basel Committee on Banking Supervision published guidelines for deposit-taking microfinance-orientated institutions and this has generally formed the basis of the enacted regulation and legislation. The guidelines highlight the need for regulation and legislation to “weigh the risks posed by this line of business against supervisory costs and the role of microfinance in fostering financial inclusion” (Basel Committee, 2010, p.1). The guidelines
examine the need for licensing and for setting of permissible activities and limitations on risk-taking relative to the risk management capacity of institutions and the risk characteristics of micro lending (Basel Committee, 2010). However, it offers little concrete guidance on the nature of such risks.

Different countries have adopted different regulatory regimes. Some have introduced specialist microfinance legislation and regulatory bodies, while others regulate microfinance-orientated institutions under general banking frameworks and regulators, with still others having no legislation or regulation of microfinance (Consultative Group to Assist the Poor, 2009).

This has included consumer protection and consumer credit bureaus. Consumer protection has also gradually developed, including deposit insurance, disclosure requirements and business practice standards. Deposit insurance aims to ensure financial stability by providing protection to the depositors from loss of deposit values up to a specified level in the event of bank failure, thus reducing the chance of bank runs and contagion effects. To date, only four countries in sub-Saharan Africa (Kenya, Nigeria, Tanzania, and Uganda) have an explicit deposit insurance system in place (IMF, 2009) and only some of these cover microfinance. Other aspects of consumer protection remain limited. Disclosure requirements exist in only 40% of African economies and microfinance-orientated institutions are often excluded from them (Beck & Maimbo, 2013). Similarly, business practices, such as advertising and debt management, remain poorly regulated (Beck & Maimbo, 2013).

Credit bureaus provide information-sharing mechanisms relating to the creditworthiness of borrowers. Potentially, they will allow poor households, who are unable to offer collateral, to establish good credit records, while excluding bad debtors. Equally, they can prevent multiple-indebtedness and over-indebtedness. However, in sub-Saharan Africa, only Burundi, Mozambique, Rwanda, South Africa, Tanzania, Kenya and Uganda have integrated microfinance-orientated institutions into credit bureau infrastructures, although most other countries have public or private registries (Beck & Maimbo, 2013).

The expansion of financial access poses a risk and offers an opportunity in relation to financial architecture. The opportunity is that the rising scale and capacity of microfinance-orientated institutions and regulators will enable the development of a financial architecture to support the
stable, efficient and fair expansion of financial access. However, the risk lies in the expansion of financial access without such strengthening of the financial architecture or that it expands without the architecture matching increases in scale or complexity. Indeed, according to Consultative Group to Assist the Poor, there is a “worrisome gap between the adoption and enforcement of new regulation” (Beck & Maimbo, 2013, p.28) and microfinance remains a “gap in regulation and supervision” (IMF, 2009), indicating that there is also a risk that expansion of financial access could create financial instability. This will be discussed further in Chapters 4 and 5.

3.4 INSTITUTIONAL CAPACITY BUILDING

The development of a dynamically stable financial system that contributes to economic development depends upon the soundness of its financial institutions. Strong and stable institutions underpin financial growth and stability. Conversely, weak and unstable institutions create, not only institutional failures, but also the contagion effects that can lead to coordinated systemic failure within the financial system.

The Bank for International Settlements Core Principles for Banking Supervision outlines key elements of institutional soundness. Of particular relevant to microfinance are principles relating to corporate governance, capital adequacy, operational risk, audit and internal control, accounting and compliance with supervisory standards (Basel Committee, 2012).

Thus, the contribution that the expansion of financial access will make to financial sector development is dependent upon the soundness of microfinance-orientated institutions. Microfinance-orientated institutions have rapidly increased their scale and complexity since 2000. While increase in scale and complexity leads to greater outreach, it must be matched by increasing institutional capacity. This is because such increasing scale and complexity places increasing demands on management capacity, operational ability and risk management within organizations.

To date, there has been little quantification of the institutional capacity of microfinance-orientated institutions in terms of academic research (Hermes & Meesters, 2011). This is partially because there are some weaknesses in methodologies required to measure “institutional capacity”.

12 Regulatory institutions are discussed in the section relating to financial architecture.
Methodology to date has sought to measure, for example, “strength of stakeholder ownership” or “effectiveness of organizational arrangements,” and has sought to measure these through, for instance, the presence of certain functions or processes or through household, customer or employee surveys (World Bank, 2011a). However, the “capacity” of an institution is, by its nature, “more than the sum of its parts” and has subjective – as well as objective – dimensions.

Alternatively, to research approaches, regulators assess institutional soundness – of which capacity is a part – as an aspect of their supervisory practises. Detailed approaches have been developed based on BIS standards under Basel III (Basel Committee on Banking Supervision, 2015). They typically use regulatory reporting – such as on capital and liquidity ratios – and audits of regulated institutions. However, the outcomes of such regulatory supervision are not public and so cannot be used for research.

Because of these issues, there is limited information with which to make an assessment of the institutional capacity of microfinance institutions. However, there has been some information published by the Consultative Group to Assist the Poor (a World Bank sponsored research body), including the “Microfinance Banana Skins” report13, a survey of opinions from microfinance-orientated institutions’ reporting to the Microfinance Information Exchange. The survey provides a subjective ranking of concerns from practitioners. Although it lacks a measure of the level of concern and is subjective, it nevertheless provides some useful information about institutional capacity.

Tables 1 and 2 below report information from these reports. Table 1 shows that practitioners report credit, liquidity and foreign exchange risk as being amongst their top concerns. Credit risk has been ranked as the top risk from 2009 to 2012. Liquidity risk was ranked as the second most concerning risk during 2010. Foreign exchange (FX) risk was ranked as the second most concerning risk during 2009.

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13 “Microfinance Banana Skins” is an annual survey of microfinance practitioners conducted by the Centre for the Study of Financial Innovation, a non-profit think-tank and is sponsored by Consultative Group to Assist the Poor and Citi Microfinance.
Table 1. “Microfinance Banana Skins” ranking of credit, liquidity and FX risk

<table>
<thead>
<tr>
<th>“Biggest Risks”</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit</td>
<td>10th</td>
<td>1st</td>
<td>1st</td>
<td>1st</td>
<td>4th</td>
</tr>
<tr>
<td>Liquidity</td>
<td>12th</td>
<td>8th</td>
<td>2nd</td>
<td>16th</td>
<td>10th</td>
</tr>
<tr>
<td>FX</td>
<td>20th</td>
<td>2nd</td>
<td>8th</td>
<td>24th</td>
<td>20th</td>
</tr>
</tbody>
</table>

Source: Consultative Group to Assist the Poor (2008-2012)

Table 2 shows that practitioners are concerned about dimensions that are related to institutional capacity. These include ranking “management quality” as the top concern in 2008 and “corporate governance” as the second concern in 2012 and 2008.

Table 2. “Microfinance Banana Skins” ranking of institutional capacity

<table>
<thead>
<tr>
<th>“Biggest Risk”</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Quality</td>
<td>1st</td>
<td>4th</td>
<td>4th</td>
<td>7th</td>
<td>3rd</td>
</tr>
<tr>
<td>Corporate Governance</td>
<td>2nd</td>
<td>7th</td>
<td>7th</td>
<td>4th</td>
<td>2nd</td>
</tr>
<tr>
<td>Staffing</td>
<td>5th</td>
<td>14th</td>
<td>14th</td>
<td>8th</td>
<td>14th</td>
</tr>
<tr>
<td>Managing</td>
<td>8th</td>
<td>15th</td>
<td>15th</td>
<td>11th</td>
<td>16th</td>
</tr>
<tr>
<td>Technology Back office</td>
<td>18th</td>
<td>22nd</td>
<td>22nd</td>
<td>13th</td>
<td>12th</td>
</tr>
</tbody>
</table>

Source: Consultative Group to Assist the Poor (2008-2012)
For microfinance-orientated institutions, credit risk is the key risk because of the inherently poor credit worthiness of poor borrowers. The Bank for International Settlements Core Principles for Banking Supervision in relation to credit risk set standards for “prudent policies and processes to identify, measure, evaluate, monitor, report and control or mitigate credit risk ... (During) the full credit lifecycle … (of) credit evaluation, and the on-going management of the bank’s loan and investment portfolios… problem assets, provisions and reserves and concentration risk and large exposure limits” (Basel Committee, 2012, p.27).

As discussed previously, traditional microfinance-orientated institutions have overcome this inherent poor credit risk through group lending. However, as commercialized microfinance-orientated institutions have increased the scale and complexity of their credit portfolios, the nature of their credit risk has altered because their group lending has declined in favour of individual lending. As shown in Table 3, from 2003 to 2008 all types of lending grew. However, individual lending grew most rapidly with the number of microfinance-orientated institutions involved exclusively in individual lending nearly quadrupling from 74 to 281 and the percentage increasing from 32% to 41%, with related assets increasing from $5.5 billion to $15.6 billion. Microfinance-orientated institutions offering both individual and group lending also increased from 96 to 272, although the percentage was stable at about 40%, with related assets increasing from $1.6 billion to $6.6 billion. In contrast, microfinance-orientated institutions offering only group lending increased in number from 61 to 125, but fell in percentage terms from 26% to 18%, with related assets growing more slowly that overall market growth from $0.3 billion to $1.9 billion. Overall, by 2008, 81% of all microfinance-orientated institutions offered individual lending with a majority offering only individual lending.

Table 3: Types of lending practices (2003 and 2008)
<table>
<thead>
<tr>
<th>Type of Lending Practice</th>
<th>MFOIs (% &amp; number)</th>
<th>Total Assets ($ billion)</th>
<th>MFOIs (% &amp; number)</th>
<th>Total Assets ($ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>32% (74)</td>
<td>5.5</td>
<td>41% (281)</td>
<td>15.6</td>
</tr>
<tr>
<td>Individual &amp; Group</td>
<td>41% (96)</td>
<td>1.6</td>
<td>40% (272)</td>
<td>6.6</td>
</tr>
<tr>
<td>Group lending only</td>
<td>26% (61)</td>
<td>0.3</td>
<td>18% (125)</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Source: Microfinance Information Exchange elaborated by the author.

This shift towards individual lending in microfinance-orientated institutions has meant a growing exposure to uncollateralized lending to individuals with low incomes in circumstances where formal contracts or collateral are uncommon, and, if they exist, problematic to enforce, meaning that in the event of default there is little recourse available to lending institutions. Some microfinance-orientated institutions have resorted instead to new debt collection techniques, such as public humiliation of those in default, but such techniques have proved controversial and led, in extreme cases, to negative political and social repercussions. These events are discussed further in Chapter 5.

In addition – and little discussed by either practitioners or academics – more complex risks such as portfolio credit risk are increasing in scale and complexity and may not be complemented by increasing institutional capacity or more rigorous regulatory approaches. This is discussed further in Chapters 6 and 7.
3.5 BENEFITS FOR POOR HOUSEHOLDS

Structural transformation is defined by macroeconomic outcomes, which have microeconomic foundations within firms or households. The foundations of microfinance and access to finance have been examined largely at the household level because of the focus on poverty alleviation. This section will discuss two themes identified by others\(^\text{14}\) from this literature relevant to financial sector development, namely poverty alleviation, risk management, and coping strategies.

We adopt an alternative approach to these themes based on research into the financial lives of the poor. This approach evolved from earlier qualitative work that related to broader interests in the lives of the poor compared to their financial lives. For example, “Voices of the Poor” (Narayan et al., 2000), a World Bank-assisted study, conducted direct interviews with the poor in a number of countries. It describes the poor’s need to create an “adequate and secure livelihoods” as the “central concern of poor people’s well-being” (Narayan et al., 2000, p.45). Income is low and volatile with “constant juggling and struggle” (p.45). The poor seek to manage by diversifying income sources, often through informal employment. Informal credit and moneylenders are frequently used as an important coping mechanism in relation to volatile income and are commonly used for managing daily necessities and emergencies, but not entrepreneurship. Fear of debt and its consequences “run deep” and “the act of borrowing itself can set people on a downward slide rather than providing them with a bridge to a better life” (Narayan et al., 2000, p.58). The study also sought out interviews specifically with the minority who had improved their situation and were relatively affluent compared to their communities. Where circumstances have improved substantially for more than a minority, this was attributed to “changes in government economic and social policy” (Narayan et al., 2000, p.63). However for individuals “entrepreneurship”, income diversification and “building assets and developing secondary

\(^{14}\) For example, the Africa Development Bank comments that access may enable “individuals and businesses currently excluded from the formal financial sector … to engage in income-generating activities and manage risks associated with their livelihoods” (African Development Bank, 2012, p.23).
sources of income” (p.63) are the “most frequent paths out of poverty”. Individuals considered credit as a minor factor in their success.

These approaches are philosophically close to the work of Amartya Sen who discusses the concepts of “capabilities” and “unfreedoms” (Sen, 1999). He describes “unfreedoms” as constituted by the “prevalence of preventable disease, needless hunger, premature mortality, unceasing illiteracy, social exclusion, economic insecurity and the denial of political liberty” (Sen, 1999). He describes the poor’s ability to participate in economic growth as being dependent upon a variety of “enabling social conditions” (Sen, 1999). He comments that, “if one has no capital (not even a tiny plot of land in the absence of land reform), and no access to micro-credit (without the security of collateral ownership) it is not easy to show much economic enterprise”. Although this lists lack of access to micro-credit as one of the “unfreedoms”, Sen places it in the context of an enabler of social and political freedoms and empowerment.

Such perspectives can be criticized because they lack a strong quantitative approach. This has been partially resolved by the adoption of mixed methodologies in recent studies. For example, “Portfolios of the Poor: How the World’s Poor Live on $2 a Day” (Collins et al., 2009) uses financial diaries to generate a much richer understanding of the financial lives of the poor and to gather quantitative and qualitative longitudinal data. The study collected year-long financial diaries from hundreds of low income households in South Africa, India and Bangladesh and sought to understand the assets and cash flow of the poor, the types of risks they sought to manage and the methods by which they did so. The study presents a rich picture of the sources of financial vulnerability of the poor. In particular, it highlights that the poor are impacted by low and volatile income, high vulnerability to shocks and a lack of long term assets to provide for security and life events.

Of particular interest regarding the financial vulnerability of the poor in developing countries is their employment. Typically, the poor work in informal employment. Such employment includes subsistence agriculture and informal sector work, and is characterized by low productivity, low capital intensity and low incomes combined with susceptibility to shocks. At a macroeconomic level, both are impacted by the existence of surplus labour or “disguised employment” (Robinson, 1937) and are highlighted in development economics in theories of surplus labour (e.g., Lewis, 1954).
The diaries show us how the poor manage these issues through the frequent use of informal financial services. Such informal services vary widely between countries, but often include various community savings and lending organizations, moneylenders and informal trade associations. Such organizations typically address the need for borrowing and savings over short time periods and for relatively small amounts. They are crucial to the financial lives of the poor and enable “risk management” of low and erratic income (Collins et al., 2009). Low levels of access to formal financial services are balanced by the high use of informal financial services such as savings clubs, moneylenders and social networks. Financial diaries have become a common focus of research and are likely to provide valuable findings. When financial services are placed in this context, the potential it offers to assist the poor in managing their “portfolios” becomes clear. For example, the need to provide safe and reliable savings, insurance and flexibility that reflect volatility in cash flow and shock management are more important needs of the poor than simple credit.

Overall these studies have the key advantage of providing a richer qualitative and quantitative approach to examining the financial lives of the poor, including greater engagement with the reality of poor people’s lives and placing their “voices” as central to research. Issues such as the importance of credit for daily cash management, the preference for informal credit and the importance of stabilizing income with credit can be better understood. It is for these reasons that the thesis has adopted a mixed methodology approach that roots it in the context of the “voices” of the poor in regard to their financial lives.

3.5.1 Poverty Alleviation

Poverty alleviation is not an element of economic development, but its goal. If broadening of financial access alleviates poverty then, ipso facto, it contributes to economic development.

Research into the relationship between poverty alleviation and financial access has not provided consistent results. For example, Banerjee et al. (2009) in a study of urban India found no statistically significant relationship between household consumption and access to finance (Banerjee, 2009). Kaboski and Townsend (2009) in a study in Thailand found no increase in investment income and, although they did find increases in short-term consumption, the study
was unable to differentiate if this was simply financed by debt. Similarly, the United States Agency for International Development (USAID) sponsored a research program in Peru, India and Zimbabwe, and found net income gains in Peru and India but no impact in Zimbabwe (Snodgrass & Sebstad, 2002). Further studies have found no impact on average income, combined with a wide dispersion of results around the average with some people being made worse off by microfinance (Roodman, 2010). For example, Banerjee et al. (2009) found evidence that some microcredit programs may be harmful, because they push the poor into excessive debt.

In addition, in a different type of study, little correlation has been found between the growth of microfinance and economic development. For example, a study by Banerjee and Duflo (2007) of MIT’s “Poverty Action Lab” in Bangladesh, where in 2001 approximately one out of four households had at least one microloan, showed that microcredit had little impact on the country’s relative development performance. In 1991, for example, Bangladesh ranked 136th on the United Nations Development Programme’s Human Development Index (a measure of societal well-being). Fifteen years later it ranked as 137th. Banerjee and Duflo assigned this to microfinance growing via increased consumption rather than income generation. It is, however, difficult to interpret these results as the studies fail to take into account that many factors other than microfinance are related to broad economic development. Nevertheless, they raise the question of whether microfinance plays any significant role in economic development and poverty alleviation.

### 3.5.2 Risk Management & Coping Strategies

The financial lives of the poor are dominated by risk and uncertainty. The risks that are managed include the need to manage incomes that are not only low, but also highly volatile, due to their reliance on informal employment and subsistence agriculture. In agriculture, there is a high vulnerability to shocks from agricultural prices and weather. Such low and volatile income therefore creates a need for coping strategies, including consumption smoothing. Non-financial strategies include: relying on family and social networks to receive and give assistance; resources rationing; asset pawning; usage and sale; and income diversification and migration. However, these strategies, while allowing short-term coping, deplete available resources and livelihoods over the long term (Cekran, 1993; Bird, 2002; Dercon, 2002).
Studies indicate that improved access to both formal and informal financial services can help the poor to cope with these risks. Informal services can address the need for borrowing and savings over short time periods and for relatively small amounts amongst community groups in order to smooth consumption by matching borrowing to erratic and uncertain incomes (Collins et al., 2009; Dupas & Robinson, 2010; Rosenberg, 2010). Similarly, savings clubs or trade associations allow the poor to accumulate or borrow lump sums for important needs, although they are poor at facilitating long-term asset accumulation (Collins et al., 2009). As such, informal finance plays an important, but incomplete, role in risk mitigation and coping strategies for the poor (Collins et al., 2009). Other research suggests that such non-credit services, including savings and insurance, may be more valuable than credit in poverty alleviation as they facilitate asset accumulation that can act to smooth consumption, finance lump-sum expenditures (such as school fees), or to provide “self-insurance” against shocks (Armendariz & Morduch, 2010).

Recent innovations in microfinance have addressed these needs by providing insurance. This includes health insurance and, for agriculturalists, weather and crop price insurance. Studies to date indicate the positive effects of insurance. For example, Janze et al. (2013) report that drought insurance reduces asset depletion and maintains nutritional intake during droughts in Kenya. However, to date, evidence for the effectiveness of insurance products remains under-researched, with preliminary analysis suggesting limitations on effectiveness, especially since the poorest households may not be able to afford it (Mosley, 2009).

3.6 **CONCLUSION**

Limited theoretical and empirical research links the expansion of financial access to broader financial and economic development. This is partially due to limitations in methodology and research questions. However, it also relates to the fact that existing theories of financial sector development lack specific financial transmission channels to link financial sector development to structural transformation.

Five channels by which financial access might contribute to financial development have been identified. They include increasing investment, savings mobilization, the development of financial architecture, the development of institutional capacity, and the impact on poor
households. However, empirical research into each presents, at best, ambiguous results in relation to the impact of expansion of financial access on structural transformation through these channels. Increases in investment in microbusinesses and small and medium-sized enterprises (SME) because of increased financial access may be quite limited and linked most closely to increases in short-term working capital and consumption smoothing. Savings mobilization in the formal financial system through microfinance-orientated institutions has been limited and appears more closely correlated to income than to financial access. Financial architecture and institutional capacity have increased as microfinance-orientated institutions have increased scale and complexity, but remain challenged by the increasing risks that accompany it. The impact on poverty also remains ambiguous, although there does appear to be stronger evidence that financial access improves poor households’ ability to cope with risk and allows them to execute coping strategies which can bring considerable welfare benefits. These five channels through which financial access can contribute to financial development and structural transformation will be examined further in the fieldwork.

Financial crises have repeatedly occurred since monetary and financial systems started to emerge in early stage capitalist economies and have been consistently accompanied by deep and prolonged recessions that have been very damaging to economic prosperity and growth (Rogoff & Reinhart, 1999; Kinderberger, 2005; Boissay et al., 2013). These financial crises have been associated with many causes and processes. These include macroeconomic policies – such as inflation, currency imbalances, large current account deficits and high levels of public debt – and excessive credit booms, large capital inflows, and balance sheet fragilities.

Since 1990 the frequency of financial crises in developing countries has increased in middle-income countries, causing sharp recessions with prolonged recovery periods. If fact, middle-income countries have experienced such frequency of financial crises in the post-1990 period that it has been colloquially termed the “Great Volatility” (Ocampo et al., 2010).

However, despite these problems and the increase in the expansion of financial access as policy, the role played in financial stability by the expansion of financial access has not been widely researched (Khan, 2011; Adasme et al., 2006), despite its importance in ensuring economic stability as well as growth.

This chapter will discuss this issue. It will start with a discussion of the existing scholarship and includes a consideration of a possible complementary relationship between financial stability and financial access, or of a trade-off between them. The chapter will then prepare the context for the fieldwork further by discussing the causes and processes of financial crises relevant to the expansion of financial access.

Three particular aspects have been identified as relevant for the following reasons:

- Balance sheet soundness: As discussed in Chapter 2, we have adopted the balance sheet as the theoretical framework that underpins financial development and stability. Understanding how financial instability impacts the balance sheet of financial institutions is, therefore, important in examining its relationship with financial access.
• Impact of private capital flows: As will be discussed later, private capital flows, and especially cross-border flows, have been repeated causal factors in financial crises in developing countries. Private capital has also been the key source of financing behind the recent expansion of microfinance-orientated institutions. Thereby, we seek to examine the relationship between them and financial instability.

• Contagion between banking institutions: Contagion is the transmission process that creates financial instability through the interlocking and interdependent balance sheets of economic agents and therefore is the most relevant process in financial crises for our discussions. We focus on contagion between banking institutions – as opposed to through financial markets – because financial systems in developing countries remain largely bank-based and because banking institutions (both formal and informal) form the basis of the expansion of financial access.

These three aspects will be explored by building on frameworks that take institutions’ balance sheets as the basis of financial stability or fragility, so that the financial system is presented as a system of interdependent balance sheets (Krugman, 1999; Mishkin, 2001; Eichengreen, et al. 2003, 2005; Kregel, 1998; Arestis & Glickman, 2002; Cozzi & Toporowski, 2006). The approach has been used in a number of contexts, including examining the role of corporate leverage and currency mismatch in the Asian Crisis of 1997 (Krugman, 1999; Mishkin, 2001; Cozzi & Toporowski, 2006; Kregel, 1998; Arestis & Glickman, 2002; Cruz et al., 2005) and currency and maturity mismatches in sovereign debt (Hausmann & Panizza, 2003).

Various definitions are given for a systemic crisis but generally the consensus is of default within individual institutions broadening through contagion to cause widespread institutional failures. For example, the European Central Bank defines a banking crisis as “An event during which the financial sector experiences bank runs… (and) sharp increases in default rates, accompanied by large losses of capital” (Boissey et al., 2013). The IMF defines a systemic banking crisis as an event when “A country’s corporate and financial sectors experience a large number of defaults and financial institutions and corporations face great difficulties repaying contracts on time. As a result, non-performing loans increase sharply and all or most of the aggregate banking system capital is exhausted… In some cases, the crisis is triggered by depositor runs on banks, though in
most cases it is a general realization that systemically important financial institutions are in distress” (Laeven & Valencia, 2008, p5).

We will define financial crisis, financial fragility and institutional failure in terms of events, rather than by empirical measures (following Rogoff & Reinhart, 1999)\(^\text{15}\). Institutional failure is defined as a financial institution suffering from events that lead to the significant curtailment of its deposit-taking or lending, or its closure, forced merger with other institutions or takeover by the public sector. Financial crisis is defined as bank deposit or borrower runs (Bond & Ashok, 2009) that lead to a significant curtailment of deposit-taking or lending activity or closure, forced merger or takeover by the public sector of one or more financial institutions or large-scale government assistance of an important financial institution (or group of institutions), which marks the start of a string of similar outcomes for other financial institutions. Financial fragility is defined as a state where the pre-determinants of institutional failure or financial crisis are present, making a financial institution or financial system susceptible to failure or crisis.

4.1 **Financial Access and Financial Instability**

The relationship between the expansion of financial access and stability has three possible forms. Financial access could: enhance stability; increase financial fragility and instability; or have no impact. If increased financial access creates financial instability it is highly likely to damage GDP growth and poverty alleviation (Rogoff & Reinhart, 2009).

Financial instability has already been associated with microfinance (discussed in Chapter 5 in more detail), leading to a need to examine whether there is a systematic relationship between them. However, despite the rapid expansion of financial access and these episodes, there has been little empirical research on their relationship thus far. This is partly because of difficulties in measuring both financial access and stability on a consistent basis across different countries and

\(^{15}\) Two approaches can be adopted in research in order to define “crisis”: an empirical approach, such as measures of GDP declines, or an event-based approach. I favour the latter for the thesis because it encompasses a more complete range of events. The empirical approach, while potentially providing an objective definition, does not always capture the full range of events required. It can, however, be useful in some instances such as, for example, its utility when defining “crisis” or “shocks” for policy responses (Velde et al., 2011).
over time (Cull et al., 2012). The balance sheet framework we adopt presents an alternative to these methodologies.

Despite this lack of empirical research, there has been discussion of these possible relationships, especially among regulators to whom this is an important concern. Some commentators have proposed that the expansion of financial access may enhance financial stability (Adasme et al., 2006; Thorat, 2010; Khan, 2011; Calice, 2012; Cull et al., 2012). A number of transmission mechanisms have been proposed to support this conclusion. These overlap with the arguments discussed in Chapters 2 and 3, suggest that expansion of financial access could simultaneously contribute to financial development and financial stability. The specific transmission mechanisms proposed by these authors – although not necessarily concurred with by the author – include the following:

- Microfinance assets reduce balance sheet risks among microfinance-orientated institutions because the portfolios of small lenders are more diversified and creditworthy than a portfolio of larger lenders (Khan, 2011). For example, in a study of Chilean banks it was suggested that systemic risk resulting from losses on small loans is low, relative to less predictable and infrequent losses on large loans (Adasme et al., 2006).
- Deposit bases will grow and become a more stable source of financing for financial institutions because small savers lead to a diversified and more resilient financial sector, especially during crises when other sources of liquidity can be scarce (Khan, 2011).
- Financial inclusion improves the effectiveness of monetary policy transmission that is an instrument for managing economic growth and stability (Khan, 2011; Calice, 2012).
- Financial inclusion promotes the shift from informal institutions to formal ones, which are more stable and susceptible to effective regulation (Cull et al., 2012; Khan, 2011; Calice, 2012).

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16 Khan comments: “Financial inclusion facilitates greater participation by different segments of the economy in the formal financial system. The presence of a large informal sector can impair the transmission of monetary policy as a significant segment of financially excluded households and small businesses make financial decisions independent of, and un-influenced by, the monetary policy actions of the central bank. As the share of the formal financial sector increases through greater financial inclusion, it yields an important positive externality by making monetary policy transmission more effective” (Khan, 2001, p.4).
Financial inclusion increases the efficiency of intermediation by increasing the number of transactions and participants, thus allowing economies of scale to develop (Khan, 2011; Calice, 2012).

Commentators have also proposed that the expansion of financial access carries a negative relationship to financial stability and suggest a trade-off between stability and access for the following reasons:

- Quality of credit portfolios may be poor because lending to less developed, low income markets is subject to greater information asymmetries associated with customers who are typically without collateral or a credit history. Parallels have been drawn to the sub-prime crisis where, in the portfolios of small lenders, correlated risks resulted in material losses at a portfolio and capital level (Khan, 2011).
- Institutions involved in the expansion of access are subject to increased credit risks, including concentration risk and liquidity risks (Khan, 2011).
- Financial innovations involved in the expansion of financial access increase risk. Specific issues include outsourcing of financial inclusion services, new technology platforms and reputational risks (Khan, 2011).

There are also dependencies that would allow financial access to be achieved without adverse or positive effects, on financial stability. These include the need for sound institutions, regulation, and risk management. Khan (2011), for example, comments that “financial inclusion and financial stability must coexist… (But) increasing financial inclusion is difficult unless banks and other financial service providers are sound, financial markets are functioning normally and financial market infrastructure is robust” (Khan, 2011, pp. 6, 17) and that what is required is “a risk-mitigating framework to exploit the complementarities while minimising the conflicts” (Khan, 2011, p.18).

In a more specific prescription of the required mitigants, Thorat, the Deputy Governor of the Bank of India, comments that financial inclusion can work within the framework of mainstream banking within a sound regulatory framework. Regulations have been used to facilitate financial inclusion without subventions or compromising on prudential and financial integrity norms. Regulations
have been proportional to the risks… (and) have been adopted after careful assessment of risks to the banks and to customers. The preference has been to restrict deposit-taking to banks and non-bank financial companies are encouraged to focus on innovative approaches to lending under a lighter regulatory framework, with additional regulations for systemically important non-banking financial institutions. Non-banking non-financial institutions are encouraged to be partners and agents of banks rather than principal providers of financial services. Fair and transparent code of conduct enforced through an effective grievance redress system and facilitated by financial literacy and education are the cornerstones for ensuring consumer protection which is an overarching objective of financial regulation in the context of financial inclusion (Thorat, 2010, p.30).

Similarly, Adasme et al. (2006) emphasizes the role that credit risk management can play in ensuring that loan portfolios are well managed and that appropriate capital levels are set for microfinance-orientated institutions.

4.2 Balance Sheet Soundness
The structure of financial institutions balance sheets is the basis of their financial soundness or fragility. Financial fragility in individual institutions is important because if the institutions through which financial access is expanding are fragile, this will contribute to financial fragility. Individual institutional financial fragility and failure is also important in microfinance because microfinance-orientated institutions serve the poor and so, for financial development to be pro-poor, sound institutions are important for ensuring that reliable services are provided and that the poor’s deposits are safe.

Africa has experienced repeated and damaging financial instability with, between 1990 and 2009, 141 systemic crises including 44 banking crises, 71 currency crises, 25 sovereign debt crises, 22 twin crises (banking and currency) and four triple crises (banking, currency and debt) (Rogoff & Reinhart, 2009). Table 4. shows that banking crises – with their roots in institutional failure – were most common between 1990 and 2009 when, out of the 47 sub-Saharan African countries, 27 (or 57%) experienced institutional failures within the domestic financial system. The impact of crises is estimated to be an average of 10% of GDP but have been as high as 25% of GDP (in
Cote d’Ivoire in 1988) (Caprio & Klingebiel, 2003). In contrast to the sovereign debt crisis of the 1980s, post-1980s financial fragility was concentrated in smaller, domestic private sector institutions. Causes of banking crisis have been identified as macroeconomic weaknesses and structural problems. Structural causes in the private sector that have been identified include: inadequate regulation and supervision; poor governance; loss of value due to competition from new entries; contagion between banks; and illiquidity and insolvency (Mezui et al., 2012).

Table 4. Post-1990 institutional failures in sub-Saharan Africa

(NPLs are non-performing loans).

<table>
<thead>
<tr>
<th>Country</th>
<th>Dates</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>1992-1996</td>
<td>2 banks insolvent</td>
</tr>
<tr>
<td>Benin</td>
<td>1988-1990</td>
<td>3 banks insolvent &amp; NPLs reached 80%</td>
</tr>
<tr>
<td>Botswana</td>
<td>1994-1995</td>
<td>Banks merged, liquidated or recapitalized</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>1988-1994</td>
<td>Banking system NPLs at 34%</td>
</tr>
<tr>
<td>Burundi</td>
<td>1994-1995</td>
<td>Banking system NPLs at 25%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1987-1998</td>
<td>Banking system NPLs at 60-70%</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>1993</td>
<td>Banking system NPLs at 30%</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>1988-1999</td>
<td>Banking system NPLs at 40%</td>
</tr>
<tr>
<td>DR Congo</td>
<td>1992-1994</td>
<td>Banking system NPLs at 75%</td>
</tr>
<tr>
<td>Rep of Congo</td>
<td>1992</td>
<td>2/3 of countries banks closed</td>
</tr>
<tr>
<td>Cote D-Ivories</td>
<td>1988-1991</td>
<td>Banking system NPLs at 90%</td>
</tr>
<tr>
<td>Gambia</td>
<td>1995</td>
<td>1 bank closed</td>
</tr>
<tr>
<td>Gabon</td>
<td>1992</td>
<td>1 bank closed</td>
</tr>
<tr>
<td>Country</td>
<td>Period</td>
<td>Condition</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Ghana</td>
<td>1982-1989</td>
<td>7/11 banks insolvent</td>
</tr>
<tr>
<td>Guinea</td>
<td>1993-1994</td>
<td>8/9 of countries banks insolvent</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>1995</td>
<td>Banking system NPLs at 90%</td>
</tr>
<tr>
<td>Kenya</td>
<td>1992-96</td>
<td>Banking system NPLs at 30% &amp; interventions needed in local banks</td>
</tr>
<tr>
<td>Liberia</td>
<td>1991-1995</td>
<td>Banking system NPLs at 60% and 7/11 banks not operational</td>
</tr>
<tr>
<td>Mauritius</td>
<td>1997</td>
<td>2/12 banks closed due to fraud</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1992-1997</td>
<td>Banking system NPLs at 20% but 50% of banks in financial distress</td>
</tr>
<tr>
<td>Rwanda</td>
<td>1991</td>
<td>One bank failed</td>
</tr>
<tr>
<td>Senegal</td>
<td>1988-91</td>
<td>Banking system NPLs at 50% &amp; 7 banks failed</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>1990</td>
<td>Banking system NPLs at 50%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>1995</td>
<td>3 banks required bailouts</td>
</tr>
<tr>
<td>Uganda</td>
<td>1992-2002</td>
<td>50% of banks insolvent</td>
</tr>
<tr>
<td>Zambia</td>
<td>1995</td>
<td>1 bank failed</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1995</td>
<td>2/5 banks with high NPLs</td>
</tr>
</tbody>
</table>


Recent commentators have been positive about the soundness of sub-Saharan African financial institutions. For example, Beck et al. (2011) describe African banking institutions as “stable”, “well capitalized and liquid” although still with “problems of scale and volatility… (and) limited intermediation”. However, financial instability has continued in recent years. For example, in Nigeria in 2009, there was a major banking crisis in which a boom in banking, with high levels
of consolidation, new equity issues and regional expansion, collapsed and by 2009 nine institutions required government guarantees and bailouts, including state injections of capital and forced mergers (Sanusi, 2012). Furthermore, post-2009, there has been a region-wide surge in non-performing loans in many countries, including Tanzania, Kenya and Gambia (Lunogelo et al., 2009; Central Bank of Kenya, 2013; IMF, 2010).

Banks’ susceptibility to institutional failure is dependent on their balance sheet structures (Minsky, 2008; Bock & Demyanets, 2012). Sub-Saharan African banks’ balance sheet structures have characteristics that make them less susceptible to institutional failures. They typically have traditional balance sheet structures, funding themselves primarily through deposits with a “hold-to-maturity” lending portfolio and have high levels of low risk assets (such as government securities, liquid and foreign assets) and lower levels of lending to the private sector (Beck et al., 2010). Sector lending is biased towards lower-risk trade, commerce and construction with an underrepresentation of higher-risk agricultural lending and infrastructure (Beck et al., 2010). However, these aspects of the banks’ balance sheets, whilst protective for individual institutions, collectively create “missing markets” in sub-Saharan Africa such as for long-dated or private sector lending (Beck et al., 2010).

Table 4 shows that, despite these protective features, multiple institutional failures have occurred following deteriorating asset quality as indicated by the high levels of non-performing loans (NPLs). In developing countries asset quality is negatively influenced by lower economic growth, exchange rate depreciation, weakening terms of trade and reversal of portfolio inflows (Bock & Demyanets, 2012).

Institutional fragility has been associated consistently with increasing leverage both within institutions and the overall banking system, making banks more vulnerable to shocks (Thakor, 2005; Adrian & Shin, 2009; Toporowski, Tyson & Shabani, 2013). Prior to the 1990s, developing country leverage was associated largely with sovereign debt. During the developing country debt crisis of the 1980s, there were defaults on public debts following the shocks of sharp falls in commodity prices and sharply rising interest rates (Rogoff et al., 2009).

Since the 1990s developing country crises has become increasingly associated with leverage in the private sector, rather than the public sector (McKinley & Tyson, 2014). For example, the 1997
Asian financial crisis was characterized by balanced government finances but institutional failures resulting from private firms and financial institutions which borrowed excessively in short term foreign currency, using funds to invest in long term in domestic assets (Griffith-Jones, 2000). Because of this, and as microfinance-orientated institutions are largely private sector institutions and have been subjected to increases in leverage, we focus on institutional fragility in the private sector, including through leverage.

Research examining these transmission links and processes in sub-Saharan Africa banking failures are limited to the basic data presented in Table 4. There are examples, drawn from Table 4 and from the database presented in Laeven and Valencia (2008), which illustrate links between asset deterioration and macroeconomic factors. For example, in Chad in 1983, banking sector insolvency problems were linked to a collapse of world cotton prices which resulted in the quasi-state monopoly exporter of Chad cotton experiencing a collapse in revenues causing arrears on repayments of its debt. In 1992, the Chadian banking system almost collapsed again due to macroeconomic contraction after a period of credit expansion. Non-performing loans peaked at 35% and the output loss was 37% of GDP. In 1998, in the Cote d’Ivoire, a recession and falling cocoa and coffee prices (the main exports) substantially increased private sector non-performing loans. Non-performing loans peaked at 50% of GDP. In Ghana, during the 1980s, there was a rapid increase in domestic bank credit, a fixed exchange rate, high inflation, and a prolonged recession followed by deterioration in cocoa exports and a large depreciation of the currency. By 1983 non-performing loans had reached 35% of GDP. In 1987, in Mali, a surge in credit was followed by a collapse in cotton prices, Mali’s major export, which caused a surge in non-performing loans, including at its largest private bank, caused a systemic liquidity squeeze. Non-performing loans peaked at 75% and the output loss was 6% of GDP.

As can be seen from these examples, common causes of asset deterioration in the banking sector in sub-Saharan Africa have included recession, excessive leverage, export concentration and price volatility and interrelated foreign exchange rate volatility. Many of these issues remain risks to sub-Saharan Africa economies including, for example, susceptibility to excessive credit expansion, commodity export dependency, banking concentration and macroeconomic instability. The IMF (2013) noted downside risks to economic growth in their 2013 Regional
Economic Outlook, reporting that sub-Saharan African economies remain vulnerable to risks such as global monetary tightening, high domestic inflation and commodity price volatility.

These issues mean that sub-Saharan African financial institutions remain vulnerable to institutional failures due to the deterioration in asset quality and other balance sheet structures. Similar financial fragility arising from asset deterioration linked to macroeconomic aggregates has also been a feature of microfinance-orientated institutions. This is discussed further in Chapters 5 and 6.

4.3 Banking Contagion

Contagion within financial systems is relevant to the expansion of financial access because it is the process whereby individual institutional failures are transmitted to other institutions and is – as conceptualised in the theoretical framework in Chapter 2 – the transmission channel that links the interdependent balance sheets of agents. It is of relevance here because microfinance-orientated institutions have suffered from contagion, transforming failures at individual institutions into systemic crises in the industry. This is discussed in detail in Chapter 5.

Contagion can occur in relation to banking institutions or financial markets. In sub-Saharan Africa financial markets remain underdeveloped and illiquid. There are stock exchanges in only 12 sub-Saharan Africa countries17 and only three national commodity or agricultural exchanges. Trading is very limited and market capitalization and listings are at very low levels (Beck et al., 2011). Derivative markets in sub-Saharan Africa are also very limited, despite some growth in derivative markets in other developing countries. In 2010, average daily turnover in emerging market derivatives was $1.2 trillion or 6.2 per cent of GDP, compared to $13.8 trillion or 36 per cent of GDP in developed economies (Goyal et al., 2011). Turnover is primarily in foreign exchange derivatives, as opposed to the dominance of interest-rate derivatives in developed countries (Goyal et al., 2011). There have been some policy initiatives, such as by the IMF, to initiate derivative markets in sub-Saharan Africa, including in commodities and foreign exchange,

17 These include Botswana, Ghana, Kenya, Malawi, Mauritius, Mozambique, Namibia, Nigeria, Tanzania, Uganda, Zambia and Zimbabwe
claiming that low-income countries would benefit through “self-insurance” against volatile commodity prices, foreign exchange and capital flows (Adelegan, 2009). However, the only exchange that has been established has been a commodity exchange in Abuja, Nigeria, which is inoperative. These factors limit the contagion risk in financial markets in sub-Saharan Africa because it requires liquidity for transmission.

Bank-based contagion is of much greater relevance in sub-Saharan financial systems because they remain predominantly bank-based (Beck et al., 2010). The most common mode of contagion in banking is a bank run. A bank run is defined as a series of unexpected cash deposit withdrawals caused by a sudden decline in depositor confidence or fear that the bank will be closed with many depositors withdrawing cash simultaneously. Such a collapse in confidence may be caused by common or correlated lending exposures leading to asset deterioration in multiple institutions simultaneously, or by herd behaviour amongst depositors. Bank runs are usually driven either by a panic situation amongst depositors who lose confidence in the institution, or because of deterioration in asset quality due to, for example, collapsing asset prices and increased bankruptcies in the nonfinancial sector (Rogoff & Reinhart, 2009). In both circumstances depositors rush to withdraw monies and the bank cannot meet their demands because of the “borrowing short and lending long”18 structure of their balance sheet. This causes an institution to become illiquid and leads to its failure. Banking institutions are vulnerable to such runs and financial history is rich with numerous instances of them leading to institutional failures, and following on from this systemic crises, especially in early-stage financial systems. This includes the recent periods whereby between the 1980s and 2000 73% of the IMF’s member countries suffered some form of banking crisis (Lindgren et al., 1996) including bank runs (Kaminsky & Reinhart, 2000).

Banking contagion can be caused by other processes. This includes a contraction in liquidity – or more colloquially a “credit crunch” – whereby as confidence in the soundness of institutions declines, providers of liquidity become increasingly risk adverse and reduce or stop lending to financial institutions, causing them to become insolvent (Aacharya & Naqvi, 2010). There can

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18 This is also known as “maturity mismatch” where short-term deposits can be withdrawn immediately or in the short-term, but loans have longer maturities and cannot be liquidated to meet the demands from depositors for withdrawal, thus causing the bank to be unable to meet cash demands from depositors.
then be a feedback loop between liquidity and insolvency problems in financial institutions that further deepen financial crisis. Such events were an important transmission process during the Asia financial crisis of 1997 and the financial crisis in advanced economies in 2007 and 2008 (Independent Commission for Banking, 2011).

As for individual institutional financial fragility, susceptibility to banking contagion is dependent upon banks’ balance sheet structures. Sub-Saharan African banks’ balance sheet structures have characteristics that make them less susceptible to contagion. For example, balance sheets display relatively short maturities for both deposits and assets, with over 80% of deposits and 60% of loans having a maturity of a year or less and only 2% of both loans and deposits having a maturity of over 10 years (Beck et al., 2010). Such shorter maturities in the balance sheet structures reduce the maturity mismatch within banks and make them less susceptible to bank runs.

However, contagion risk is also dependent upon market structure. For example, market concentration in banking increases contagion risks because of the presence of more systemically important – colloquially termed “too big to fail” – institutions. Unfortunately, in this regard, banking concentration in sub-Saharan Africa financial markets is high with a limited number of institutions with high market shares in small domestic markets. Indeed, the Herfindahl index (\(T = \text{the sum of the squares of market shares with higher numbers indicating higher market concentrations}\)) shows that 50% of sub-Saharan Africa countries have an index value above 2,000, compared with 20% with an index above 2,000 in other developing regions (Beck et al., 2011). These findings of highly concentrated markets have also been replicated in many country studies (e.g., Okeahalam, 2002; Mugume, 2010; Kabango et al., 2010; Aburime, 2008; IMF, 2010). This can also be observed in Table 4, where the number of institutions in countries is low. This means that there is a heightened susceptibility to contagion because of the presence of systemically important institutions.

This issue – and the issue of private sector capital flows discussed further below – is also compounded by the small size of domestic financial markets relative to GDP in many sub-Saharan

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19 Although short-term lending has negative effects on the effectiveness of the financial system by reducing their effectiveness in their role in maturity transformation, thus creating reduced long-term investment funds. This “missing market” has been observed in a number of developing countries where the availability of long-term investment funds is constrained (e.g., Beck et al., 2011).
African economies. The average ratio of private sector credit to GDP is 16% for sub-Saharan Africa, compared to 49% for non-African developing countries, and intermediation levels are low with loan-deposit ratios of only 74% compared to 109% for non-African developing countries (Beck et al., 2011).

As for institutional failures, some commentators have been complacent regarding the probability and impact of systemic banking crisis caused by contagion because they see the recent deepening of sub-Saharan African financial systems as protective (Beck et al., 2011). Honohan and Beck comment, “Strengthened by an extended wave of reforms over the past decade, financial systems in many African countries have begun to diversify their activities, deepen their lending and increase their reach…” (Honohan & Beck, 2007, p.2). Similarly, the IMF associate financial deepening with greater stability, albeit with more caution, commenting that

Deepening is widely believed to confer important stability benefits to an economy, albeit with caveats. For instance, by increasing transaction volumes, it can enhance the capacity to intermediate capital flows without large swings in asset prices and exchange rates. But it can also attract volatile capital inflows, complicating macroeconomic management… It can lower the reliance on foreign savings and attenuate balance sheet mismatches by increasing the scope to raise funds in domestic currencies and at longer maturities… Deeper markets can provide alternative sources of funding during times of international stress, limiting adverse spill-overs, as evidenced in the global crisis... At the same time though, deepening can occur too quickly, leading to credit booms and subsequent busts (Goyal et al., 2011, p.4).

Certainly, it is correct that sub-Saharan African financial systems have “deepened” against standard measures. For example, the average ratio of private credit to GDP has risen consistently, from 2% in 1990 to 16% in 2012 (although it remains low compared to other regions where the average is 49% for non-African developing countries) (Honohan & Beck, 2007). However, in other regions, it is the transition period away from an underdeveloped financial system when financial systems are most vulnerable to financial crisis, although the reasons for this empirical finding has not been fully examined (Velde & Griffith-Jones, 2013). Furthermore, as illustrated by the financial crisis of 2007 in developed economies, financial depth does not prevent crisis (Independent Commission for Banking, 2011).
Overall, it could be concluded that sub-Saharan Africa financial systems remain vulnerable to contagion, which can lead to financial crisis through the interdependency of agents’ balance sheets.

4.4 **The Role of Private Capital Flows**

Private capital flows are an important part of the mobilization of resources for development because of their potential contribution to higher investment rates, which can have a positive contribution to structural transformation. They have been a particular source of financing for microfinance-orientated institutions – as will be discussed in Chapter 5 – and so their role in financial fragility and stability are of particular relevance to our discussion.

Domestic capital flows are important, but primarily so for advanced economies. By contrast, in developing countries, and especially in low-income countries, domestic capital is limited. Consequently, given the scale of estimated capital requirements for development, cross-border private capital flows are seen as a key source of capital. For example, their importance was reiterated in the Monterrey Consensus and the Doha Declaration (United Nations, 2013a). Cross-border private capital flows can also facilitate investment mobilization indirectly through assisting in capital market deepening and technological transfer (World Bank, 2014).

Cross border private capital flows are made up of several components. Foreign direct investment (FDI) is one of the major capital flows to developing countries and is considered the most desirable for development as it provides a stable and long-term source of investment funds. There is empirical evidence that FDI contributes to long-term growth because it is more stable, while it complements domestic investment, both in production and through positive spill-over effects, and because it may have positive impacts through the transfer of technology and efficiency (Griffith-Jones, 2000).

Private capital flows also include portfolio flows, composed of investment in equity and bonds by various investor types\(^\text{20}\) and financial flows, which are primarily net bank lending. They are

\(^{20}\) Including, for example, pension funds, mutual funds, insurance companies and hedge funds and commercial banks (IFF, 2013).
considered less desirable than FDI as they can be short-term and volatile. This is because portfolio flows are often attracted by short-term opportunities for speculation and investment in equity and bond markets. They have been associated with asset bubbles, particularly in real estate and stock markets, and with financial crisis in developing countries (Griffith-Jones, 2000).

In this section we discuss post-1980 trends in cross-border capital flows to developing countries and their relationship to financial stability. We also examine recent trends in sub-Saharan Africa. This discussion sets the context for the next chapter where the impact of cross-border capital flows into microfinance-orientated institutions will be discussed, including their role in creating balance sheet financial fragility and crises in microfinance.

4.4.1 TRENDS IN CROSS-BORDER PRIVATE CAPITAL FLOWS TO DEVELOPING COUNTRIES

There has been a long-term trend towards increases in cross-border capital flows to developing countries (Ocampo, 2005; Lane, 2012; McKinley & Tyson, 2014). This is illustrated in Figure 1 below.

Figure 1. Net capital flows to developing countries by flow type (1980-2013)
Prior to the mid-1990s, all types of flows were limited, with an average of only $53 billion annually. FDI and bank lending were 27% and 37% of the total respectively, but low in absolute terms. By contrast, portfolio flows were relatively unimportant at 5%. Flows were stable and exhibited relatively low volatility.

These patterns reflected a number of factors. Banks in advanced economies were suffering from losses and risk aversion because of developing country debt defaults that suppressed bank lending from advanced economies to developing economies in the 1980s and early 1990s. These debts had been accumulated during the 1970s because surplus capital accumulated by oil-producers was re-circulated by advanced countries’ banking systems into developing economies. However, by the early 1980s, following surges in interest rates as advanced economies tightened monetary policy in order to tackle inflation and foreign exchange volatility, developing countries were unable to repay their debt and there were widespread defaults, especially in Africa and Latin America. In Africa, the external debt burden increased significantly between 1970 and the early
1980s from just over $11 billion in 1970 to over $120 billion by 1980 and, between 1980 and 1994, the average debt to GDP ratio of Africa rose from 38 per cent to 70 per cent (United Nations Commission on Trade and Development, 2004). The IMF and other international financial institutions required a comprehensive program of structural adjustment as a condition to extend financing and this policy resulted in further increases in debt to a peak of about $340 billion in 1995, the year immediately preceding the launch of the original Heavily Indebted Poor Country Initiative (HIPC) which sought to restructure and forgive debt. Over the period 1970-1999, total debt service paid by the continent increased from about $3.5 billion per annum to a peak of $26 billion per annum, a trend that further added to debt arrears. As advanced economy banks contracted credit in the face of such defaults, Latin America and Africa experienced a sharp reduction in GDP and a subsequent collapse of living standards, seeing the onset of a “lost decade” of economic development.

There were a number of debt relief and debt-workout initiatives. The Paris Club addressed the debt of middle-income countries. In 1996, the IMF and the World Bank created the HIPC Initiative to assist low-income countries with unsustainable external public debt burdens. The goal of the HIPC Initiative was to reduce the external public debt burden of all “eligible” countries to sustainable levels in a reasonably short period of time. Since then, initiatives to reduce external debt have continued, although they have continued to be criticised as inadequate by some commentators (United Nations Commission on Trade and Development, 2004), and some small and fragile states still continue to have excessive debt burdens, such as the Caribbean nations (United Nations, 2013). In 2005, in order to help accelerate progress toward the United Nations Millennium Development Goals (MDGs), the HIPC Initiative was supplemented by the Multilateral Debt Relief Initiative (MDRI). As a result, debt relief was agreed for many low-income countries by 2010. The MDRI allows for 100 per cent relief on eligible debts by three institutions – the IMF, the World Bank, and the African Development Fund (Part of the African Development Bank) – for countries completing the HIPC process. In 2007, the Inter-American Development Bank (IADB) also decided to provide additional (“beyond HIPC”) debt relief to the five HIPCs in the Western Hemisphere (United Nations Commission on Trade and Development, 2009). By the early 2000s, because of these initiatives, public debt levels had been significantly reduced for many developing countries and appeared to be more sustainable as a result. For
example, in sub-Saharan Africa debt had been reduced, on average, from a peak of 69% of GDP in 1994 to 24% by 2012\textsuperscript{21} (Tyson & McKinley, 2014).

From the mid-1990s to 2007, there was a cyclical upswing in capital flows to developing countries. FDI represented 51% of total flows and provided a stable source of capital flow to developing economies. FDI was attracted by perceived investment opportunities in developing economies. However, FDI was concentrated in rapidly industrialization countries, especially in Developing Asia and Latin America which receiving 43% and 27% respectively of all global FDI from 1991 to 2013. These were critical factors in their rapidly expanding economies during this period with, for example, China achieving GDP growth rates of between 7.8% and 14.2% per annum (Ffrench-Davis, 2010).

Financial flows, composed mainly of bank lending, were also an important component of flows in this period, making up 38% of the total. However, it was much more volatile than FDI (McKinley & Tyson, 2014) and was to become associated with both the liberalization of financial markets, especially capital accounts, and as a causative factor in a series of financial crises in developing countries, including in Asia and Latin America (Griffith-Jones, 2000).

By 2008, the financial crisis in developed countries had spread to developing countries. Private capital flows were a key channel for the transmission of the crisis from developed to developing countries, along with trade and commodity prices (Ocampo et al., 2010). FDI responded with a sharp contraction from a peak of $472 billion in 2008 to $330 billion in 2009, before returning and then exceeding pre-crisis levels from 2010 to 2013 (Tyson et al., 2014).

Financial flows – primarily bank lending – contracted sharply in response to the crisis but, unlike FDI, did not recover. Financial flows fell from a peak of $853 billion in 2007 to a mere $9 billion in 2008. Subsequently, banking lending has been volatile with peaks and troughs throughout the period, including a net outflow in 2012. This pattern reflects the shock of the crisis and subsequent risk retraction experienced by international banks in advanced economies, including losses from

\textsuperscript{21} However, sovereign bond issuances for sub-Saharan Africa surged in 2013 and 2014 (Tyson et al., 2014).
credit shocks in real estate markets and the Euro-crisis, as well as regulatory reforms that curtailed leverage (Tyson et al., 2014).

Portfolio flows were also growing pre-crisis but were minor compared to FDI and financial flows, although they experienced a sharp contraction during the crisis. In a structural change from the pre-2008 period, they have become much more material – but volatile – component of private capital flows. Expansion of portfolio flows was particularly strong in 2010 and 2011, with a sharp contraction in 2012, before resuming in 2013. These factors reflected push factors in advanced economies as investors – especially investors in the shadow banking systems such as private equity funds and hedge funds – sought yield opportunities outside of advanced economies where quantitative easing (QE) drove down interest rates, as well as periodic speculation relating to the reversal of quantitative easing, especially in early 2013 (Tyson et al., 2014). As will be discussed in the next chapter, microfinance, including in sub-Saharan Africa, has been a major recipient of such portfolio flows in the post-crisis period.

Another important impact of the financial crisis for developing countries was that, not only were flows impacted, but their costs – reflected in interest rates – also surged (Ocampo et al., 2010). This reoccurred in 2013, amid speculation relating to the reversal of quantitative easing and loose monetary policy in advanced countries. This drove rapid deterioration in both liquidity and debt costs for developing countries, including sub-Saharan Africa (Tyson et al., 2014). Such events can cause problems for developing countries, as reliance on private capital flows means that the cost and availability of financing cannot be ensured and is subject to volatile market sentiment (Tyson et al., 2014).

The opening of capital accounts has been associated in sub-Saharan Africa with acting as a negative conduit for capital flight and high levels of pro-cyclicality in capital flows (Weeks, 2012). Capital flight, as a share of GDP for sub-Saharan Africa between 1980-2008, averaged 6% of GDP for petrol exporters, 9.7% for conflict-affected countries and 4.7% for other countries (Ndikumana & Boyce, 2011). Such issues indicate that capital account liberalization can also lead to capital outflow, draining resources from capital intended for structural transformation.

Finally, an interesting structural shift was partially driving these trends: the rise of South-South financing. This trend has been noted both in relation to inter-governmental lending and in the
private sector. For example, the United Nations Development Programme’s 2013 report, “The Rise of the South,” comments on these trends, seeing them as important in providing concessional finance, infrastructural investment and technology transfer; from 2002-2012, nearly half of infrastructure financing in sub-Saharan Africa was financed by interregional governments and regional funds (United Nations Development Programme, 2013). China has been particularly active in making finance available to sub-Saharan Africa and made investment commitments in sub-Saharan Africa in 2006 and 2007 of more than $7.0 billion and $4.5 billion respectively. Their financing was highly concentrated by country (30% in Nigeria and a further 40% in Angola, Ethiopia, and Sudan combined) and by sector (power, water and telecommunications) (Foster et al., 2008). This trend of increasing south-south capital flows continued, with only a brief pause during the crisis, and by 2012 outflows from China accounted for 31% of global outward FDI (United Nations, 2013a). Similarly, other south-south financing has included increased outflows from Brazil and South Africa (United Nations, 2013a). Sovereign wealth funds are also believed to be active in such financing, in particular from the Middle East, but there is little transparency regarding their investments (Griffith-Jones & Ocampo, 2008; unpublished Chatham House material, 2014).

4.4.2 CROSS-BORDER PRIVATE CAPITAL FLOWS & FINANCIAL STABILITY

Despite the positive impact that private capital flows can potentially have in providing a source of investment capital, aspects of cross-border capital flows remain problematic, especially for financial stability. In particular, there is controversy surrounding the ideal composition of flows between FDI, financial and portfolio flows, because of their relative impact on development and their differential volatility. As noted previously, FDI is typically considered the most desirable because of its relative stability, but financial and portfolio flows are considered less desirable as they can be short-term and volatile. However, recent empirical investigation shows that the volatility of cross-border capital flows has increased for all types of flows given the growth and liberalization of the global financial system and the integration of developing countries into that framework (IMF, 2011; McKinley & Tyson, 2014). Such volatility in cross-border private capital flows has been associated with macroeconomic disruptions in relation to trade, exchange rates and inflation, and boom-bust cycles in financial markets, as well as financial and economic crises.
International institutional investors have been perceived as contributing to this volatility due to short-term, speculative motives which have added to the volatility of international capital flows (e.g., Basel Committee, 2010; Griffiths-Jones, 2000; Tyson & McKinley, 2014).

Causative factors identified in relation to such problems include financial liberalization – particularly liberalization of capital accounts that have allowed volatile in- and out-flows of private capital. Diaz-Alejandro (1985) found a positive relationship between financial liberalization and the financial crisis in relation to Latin America, which was characterized by “widespread bankruptcies, massive government interventions or nationalization of private institutions” (Diaz-Alejandro, 1985, p.2). Demirguc-Kunt and Detragiache (1998) examined crisis determinants for 53 countries between 1980 and 1995 and found that financial liberalization had a strong, positive relationship on the probability of a banking crisis, with the probability of a crisis increasing five times following liberalization. Kaminsky and Reinhart (1999) examined dual currency and banking crises and found them to be associated with financial liberalization, including increased access to international capital markets which appeared to act by fuelling the boom phase of “boom-bust” financial crisis, especially the asset price bubbles that often precede institutional failure and, through contagion, financial crises. Specific causative factors identified included capital account liberalization and the boom-bust cycles in cross-border private capital markets (e.g., Diaz-Alejandro, 1985; Arestis et al., 1999; Ocampo at al., 2010) and asset markets, including in stock and real estate markets (Griffith-Jones, 2000; Toporowski et al., 2013; McKinley & Tyson, 2014).

A further causative factor has been that the scale of inflows has often contrasted with the relatively small size of recipient domestic markets, causing market instability (Griffith-Jones, 2000). Indeed, the relative scale of capital inflows compared to domestic markets may be one reason behind the apparent susceptibility of middle-income countries to financial crisis, compared to both low-income countries and advanced economies, creating a period of “growing pains” for a developing economy as it reaches middle-income country status (Velde & Griffith-Jones, 2013).

The identification of these issues relating to financial instability can also be deduced from an examination of specific historical crises. This includes the Asian crisis of 1997-98 where countries experienced rapid and large-scale inflows into speculative asset markets via financial
intermediaries, followed by a sharp contraction when investor sentiment reversed. The countries hit by the subsequent crisis (South Korea, Indonesia, Malaysia, Thailand and the Philippines) experienced a reversal of more than 10 per cent of their combined GDP. Such outflows caused havoc in national macroeconomics, including foreign exchange and balance of payments crises and sharp contractions of GDP (Griffith-Jones, 1998). Similarly, flows to Latin America declined sharply, including in the late 1990s (Griffith-Jones, 2000), following the Argentine default in 2002, and subsequent crises in Mexico, Russia, Brazil, Argentina and Turkey that were driven by public debt in combination with international capital inflows (e.g., Rogoff et al., 2009; Griffith-Jones et al., 1995).

The frequency of crises and the impact of the global financial crisis have been more severe for middle-income countries than for low-income countries due to their relative integration into international private capital markets and trade (Ocampo et al., 2010; United Nations, 2013). By contrast, low-income countries have not been integrated into international financial markets and have experienced much lower levels of cross-border private capital flows and less frequent and less severe crises. This has raised the issue of whether there is a transition phrase for developing financial systems whereby as they emerge and integrate into international financial systems, they have a period of increased vulnerability to financial crisis (e.g., Velde & Griffith-Jones, 2013). However, to date, no new theory relating structural transformation and financial fragility in developing countries has been proposed.

4.4.3 Sub-Saharan Africa cross-border private capital flows (2003-2013)

In common with the experience of low-income countries, sub-Saharan African countries continue to have limited links to international financial systems, and receive substantially less private capital inflows than other regions (Tyson et al., 2014). Indeed, sub-Saharan Africa countries remain on the periphery of the international financial system.

Nevertheless, there has been increasing trends in cross-border capital flows to sub-Saharan Africa in the last decade. Figure 2 illustrates these trends in private capital flows to sub-Saharan Africa for FDI and portfolio flows.
Figure 2. Net cross-border FDI & portfolio flows\footnote{Financial flows are not available by country for WDI. However, the World Bank commented that increased overall flows were primarily due to portfolio flows, with bank credit remaining subdued while improving in 2013 (World Bank, 2014; IMF, 2014b).} to sub-Saharan Africa (2003-2013)


(Note: Bars on the chart represent USD billions and is read on the left hand axis, while the line represents GDP percentages and is read on the right hand axis).

FDI grew steadily from 2004, with a lull during the financial crisis, reaching approximately $30 trillion by 2012 and, as a percentage of GDP, FDI grew from 2.4% in 2004 to 4.7% in 2012 (Tyson et al., 2014). Trends in FDI included increased participation in FDI sourced from other

\footnote{Financial flows are not available by country for WDI. However, the World Bank commented that increased overall flows were primarily due to portfolio flows, with bank credit remaining subdued while improving in 2013 (World Bank, 2014; IMF, 2014b).}
developing countries, notably China, India and the UAE, as well as growing inter-regional FDI from South Africa, Kenya and Nigeria (United Nations, 2013b). There has also been some diversification away from previous concentrations in extractive industries towards services, including tourism and the financial sector (source: Financial Times).

Figure 2 indicates that portfolio and financial flows to sub-Saharan Africa were negligible pre-crisis. However, in 2011 and 2012 these rose, driven by sovereign bond issuances including from Tanzania, Kenya, Rwanda, Mozambique and Uganda (Tyson et al., 2014). These flows were driven by the search for alternative, high yielding investments by international funds, including a number of newly-established “frontier market” funds. Improved macroeconomic fundamentals and growth expectations were also important. These private sector issuances had shorter maturities and higher costs than previous concessional financing. The 2013 issues had an average maturity of 8 years, compared with 28 years for existing debt, and an average interest rate of 8.2% compared to 1.6% for existing debt, reflecting their non-concessional terms (Stiglitz & Rashid, 2013; Hou et al., 2014). They were almost exclusively denominated in US dollars, leaving foreign exchange risk with sovereign borrowers (Tyson et al., 2014). However, the period of improvement in portfolio flows remains short – only two years – and it remains to be seen if will be sustained.

These trends represent an opportunity for sub-Saharan Africa to mobilize resources for structural transformation. In particular, the trends can potentially support pro-development investment in the private sector (Velde et al., 2013). However, such portfolio flows carry risks, given their close association with financial instability in middle-income countries in Asia and Latin America. Indeed, this risk was partially realized in 2008 when the financial crisis in developed countries caused African portfolio investment flows to become net negative (Arieff, 2010).

4.5 CONCLUSION
This chapter reviewed the current literature linking the expansion of financial access to financial stability and fragility. It has found that a number of transmission mechanisms and processes are proposed in relation to both, but that the existing research remains limited and it is not possible
to conclude if they are complementary or whether there is a trade-off between financial access and stability.

The chapter prepared the context for the fieldwork by discussing three issues that our theoretical approach based on balance sheets suggests are relevant to the expansion of financial access and its impact on financial stability: soundness of individual institutions; the impact of private sector capital flows; and banking contagion between institutions. In Chapter 5, we discuss how these factors have played important roles in financial fragility and crisis in microfinance.
5. THE APPLIED IMPACT OF THE EXPANSION OF FINANCIAL ACCESS

In this chapter we will examine microfinance and the expansion of financial access in practice. This will build on the earlier discussion relating to the balance sheets approach and the relationship of financial access, development and stability.

We first set the context for the discussions by presenting a brief overview of the origins of microfinance in social and community movements. These movements sought to provide opportunities for the poor to help themselves through self-employment. While such aspirations were not fully realized, they inspired microfinance to be adopted as policy by development agencies. The policy evolved to encompass the twin goals of policy alleviation and financial sector development including the expansion of access.

This drove a significant expansion in the scale of microfinance in many developing countries. Development agency pressurised microfinance-orientated institutions to be profitable – the term used is “sustainable” – and, combined with commercially attractive returns, microfinance attracted large private capital inflows from domestic and international sources. These flows have become the predominant source of finance for the expansion of financial access rather than through deposit mobilization.

The impact of these changes – and especially the inflows of private capital and accompanying pressures for commercial returns – was increased growth in more commercially attractive activities, the rapid expansion of lending, and intensified competition. There were a number of consequences of these changes that can be identified:

- “Mission drift”: A microfinance-orientated institution increases its lending to wealthier clients and increases its average loan size for reasons other than progressive lending and cross-subsidization (Armendáriz & Szafarz, 2009) and this threatens to undermine its social and community mission.
• The restructuring of microfinance-orientated institution balance sheets: There has been a decline in lending standards and a deterioration in credit portfolio quality at some institutions. Inflows of private capital have been predominantly in debt and have increased leverage, liquidity and other risks in microfinance-orientated institutions, resulting in foreign exchange losses and liquidity pressures. In the worse cases this has led to institutional failures and financial crisis in the microfinance sector.

• Declining “pro-development” lending: Incentives to increase lending in commercially attractive sectors has led to increases in consumption lending while self-employment and business lending has fallen.

• Limited impact on financial access: Although there have been increases in levels of participation in the formal financial system, absolute levels of participation remain stubbornly low in many developing countries, including sub-Saharan Africa.

5.1 THE ORIGINS OF MICROFINANCE
Community and sector-based banking has a long history in most major developed economies, including UK building societies, credit unions and cooperative banks, US savings and loans societies, Germany Landschafen and Japan sector credit schemes, all of which were inspired by the goal of self-help amongst the aspirational poor. In today’s developing countries, as early as the 1950s movements had begun in South East Asia. Often led by well-established local organizations, many with religious origins, these organizations sought to incorporate microfinance into their broad-based community and self-help organizations. Such organizations firmly embedded microfinance in social and community programs as part of education and health initiatives, and community development projects such as agricultural land improvements or village water and hygiene schemes. They embodied a philosophy of self-help and empowerment through community solidarity and cooperation. Examples of such groups include the self-help groups (SGH) in India (Wilson, 2002), Sarvodaya of Sri Lanka and Southern India (Ariyaratne, 1999), and Bangladesh’s “Comilla Model” of village and sector-based cooperatives in poor rural communities (Yousaf, 2007).
All of these movements had a similar goal: namely, to allow the poor to escape the poverty trap created by money lending. The trap results from surplus income from work earned by the poor above a subsistence level being skimmed off by the high interest rates charged by moneylenders. This traps the poor in a vicious cycle of borrowing and repayment that removes an ability to accumulate sufficient capital to start the next income-generating cycle. Such cycles can result in land seizure in the event of default, leading to moneylenders often being important local landowners (Roth, 1983).

The contemporary microfinance movement dates to the early 1970s when Mohammad Yunus established Grameen Bank, which developed into one of the world’s largest microfinance organizations. His original small-scale projects in poor rural villages in Bangladesh focused on lending small, uncollateralized sums for income-generating activities at low interest rates. Such loan activities enabled the poor to create their own income-generating activities and retain the surplus. These projects developed into much larger scale microcredit lending, including the use of group lending – where members of a community-based group were held jointly liable for repayments – and an exclusive focus on women. The latter was developed as women were considered to be better at repayment and in their handling of additional income for more developmentally-focused uses, such as family health and education (Yunus, 1999). Equally important was the philosophy realized in the policy and practice of the Grameen Bank. Yunus comments “Grameen is committed to social objectives – eliminating poverty, providing education, health-care, employment opportunities, achieving gender equality by promoting the empowerment of women … Grameen dreams about a poverty-free world” (Yunus, 1999, p.218). Many of the Grameen Bank’s activities reflect this philosophy, as credit is only one of the activities promoted alongside, for example, education and health programs.

By the 1980s, NGOs adopted microfinance as part of their work and the movement began to spread internationally. Many of these organizations copied the Grameen Bank model, providing low-interest rates, income-generating uncollateralized loans to the poor, often with a focus on women and group lending. Again, these groups embedded microfinance into and as a part of their organization’s social and community goals. Quotes from the mission statements of some organizations illustrate this. For example, ProMujer, a major Latin American microfinance organization, give the following statement of their mission: “ProMujer is an international
women’s development and microfinance organization whose mission is to provide Latin America’s poor women with the means to build livelihoods for themselves and futures for their families through microfinance, business training, and healthcare support. … ProMujer supports the health of its clients and their families and helps women build their self-esteem…. (and) links women (with) their communities“ (Promujer, 2010). Similarly Freedom from Hunger, another NGO with a broad program (including microfinance) comment,

Freedom from Hunger works with local partners to offer microcredit loans to poor women … The key difference between Credit with Education and similar programs is the emphasis on providing education to the women … about health, nutrition, family planning and sound business practices. In combination with their additional business income, the women act on this knowledge and begin to break the cycle of chronic hunger and poverty. Providing access to these resources in a single integrated program simultaneously teaches women how to help her children and earn the money they need to act on their knowledge.

5.2 MICROFINANCE & FINANCIAL SYSTEMS DEVELOPMENT
In parallel with the microfinance movement, from the 1990s onwards the development community came to see microfinance as a method to contribute to the development of the formal financial sector and the “financial systems approach” to microfinance was widely adopted as policy at development agencies. The United Nations declared 2005 “The Year of Microfinance”. The policy was supported by the World Bank which has, through the International Bank for Reconstruction and Development and the International Development Association (Part of the World Bank Group), sponsored microfinance projects including direct funding to microfinance-orientated institutions, indirect (such as interbank) funding and technical support. In addition, it co-sponsored the creation of Consultative Group to Assist the Poor (CGAP), which has produced important research and policy work relating to financial access and microfinance.

A component in these policy changes was a de-emphasis of the social mission and community context of early microfinance initiatives. Instead, microfinance became a stand-alone activity within financial sector development and the critical goals of its refashioned image was to maximize “outreach” and to be “sustainable”, i.e. commercially profitable, without subsidies from
international development agencies and other donors. As part of this transition, scale became an important goal in order to both expand access and to achieve economies of scale. As a result, and as shown in Figure 3, from 1995 to 2012 microfinance loans and deposits grew from negligible levels to more than $1.2 trillion globally.

Figure 3 Microfinance loans and deposits (1995-2012)

![Graph showing the growth of microfinance loans and deposits from 1995 to 2012.](image)

Source: Microfinance Information Exchange elaborated by the author.

Microfinance-orientated institutions offered increasingly comprehensive financial services. This included the increasing importance of non-income generating lending (such as for housing, health and education), savings and micro insurance. The Microfinance Information Exchange (Microfinance Exchange, 2010) reported that by 2008, 92% of microfinance-orientated institutions provided saving accounts, up from 41% in 2003.
This expansion saw a shift of microfinance activities into regulated entities. In the earlier stages, microfinance was largely unregulated. Development agencies and regulators sought to ensure institutional soundness through the expansion of microprudential regulation to incorporate microfinance-orientated institutions. This was particularly promoted because of increased deposit-taking where, in the event of institutional failure, the customer is exposed to the risk of losing their deposit. This contrasts with lending-only microfinance-orientated institutions where the risk of losses is borne only by the institution and not the customer.

Figures 4 and 5 show that as regulated and non-regulated institutions loans and deposits grew strongly, there was an increasing concentration of microfinance-orientated institutions assets in large-scale, regulated microfinance-orientated institutions. Loans and deposits at regulated microfinance banks and financial institutions – defined as banks, regulated non-banking financial institutions, credit unions and cooperatives – have grown rapidly and by 2012 held the majority of loans and deposits within these entities holding 62% of loans and 66% of deposits.
Figure 4. Loans by institutional type (1995 to 2012).

Source: Microfinance Information Exchange elaborated by the author.

Figure 5. Deposits by institutional type (1995 to 2012).

Source: Microfinance Information Exchange elaborated by the author.
Faced with these structural changes, regulators sought to develop an appropriate regulatory regime for microfinance-orientated institutions. This has evolved largely through microprudential not macroprudential regulation (Christen, 2003). This has included creating “enabling institutions”, building credit information systems and land registration schemes (Demirguc-Kunt, Beck & Honohan, 2008; Consultative Group to Assist the Poor, 2010). Different countries have taken different approaches. For example, Bangladesh has created dedicated regulatory institutions, whereas India, Peru and Bolivia have incorporated microfinance within the existing banking regulatory framework. However, the costs and institutional capacity required of regulators are straining the capabilities of many developing countries (Consultative Group to Assist the Poor, 2010).

In sub-Saharan Africa, these trends have been apparent. By 2009, the number of microfinance-orientated institutions (as reported to Microfinance Information Exchange) had grown to 153 with $5.2 billion in deposits and $4.7 billion in loans. Assets were concentrated in a few, large microfinance-orientated institutions (defined by Consultative Group to Assist the Poor as over $8 million in gross loan portfolios), which accounted for 85% of all borrowers and deposits, but only 8% of institutions by number (Consultative Group to Assist the Poor, 2011a). These dominant institutions were also predominantly private institutions and, in particular, banks with private institutions holding over 70% of the total gross loan portfolio and 71% of total deposits, of which banking institutions held 53% of loans and 60% of deposits (Consultative Group to Assist the Poor, 2011a).

Regulatory frameworks have been developed in sub-Saharan Africa in relation to this expansion. All but three countries have legislation or regulations in place for microfinance. Regulation frameworks have been enacted that are either specialized for microfinance or incorporate microfinance into broader banking or non-banking financial institutions legislation. This has

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23 Gross loans are defined as the outstanding principal balance of outstanding loans, including current, delinquent, and restructured loans, but not loans that have been written off or interest receivable. Net loans are gross loans less provisions for bad and doubtful debts (as defined by portfolio-at-risk) (CGAP, 2003).
included the Central Bank of the West African Monetary Union (BCEAO) that revised the microfinance law in 2007 in an effort to strengthen licensing requirements, supervision, and reporting standards. The revised law was adopted in 2009 by Burkina Faso, Guinea-Bissau and Senegal. Legislation has also been enacted by the Bank of the Republic of Burundi, the National Bank of Rwanda and the Banque Centrale du Congo of the Democratic Republic of Congo (DRC) and in Uganda and Tanzania. Regulation of branchless banking has also been considered because of its high growth rates in sub-Saharan Africa, including mobile banking and use of agents, but such regulation has not been as widely adopted as that of banking institutions (Consultative Group to Assist the Poor, 2011a). Eighty-four per cent of sub-Saharan African countries have laws and regulations, including addressing customer protection (such as disclosure requirements, customer complaints and dispute resolution) and selling practices. However, all the legislative regimes have some limitations and remain to be fully implemented (Consultative Group to Assist the Poor, 2011a).

5.3 The Role of Private Capital Flows
This large expansion of microfinance required capital to finance it. Deposit mobilization is the optimal form of capital for expansion of a financial institution due to its relatively low cost and high stability. However, deposit mobilization remains low in many developing countries, especially in low-income countries (Demirgüç-Kunt, Beck & Honohan, 2008) and, as a consequence, the expansion of microfinance-orientated institutions required alternative sources of financing.

Development agencies have provided financing to microfinance-orientated institutions as part of their policy support for the expansion of financial access. However, the required level of capital has not been available from development agencies because of the scale required and due to the shift in policy at development agencies from direct financing to leveraging private capital. As a consequence, capital has been sought from the private sector. In particular, given the scarcity of domestic capital sources, private sector capital has been sought from international investors. The development agencies involved have included the UK’s Department for International Development, the United States Agency for International Development (USAID), the World Bank and the Inter-American Development Bank (El-Zoghbi & Gonzalez, 2013).
Private funds have been sourced from “socially responsible investors” (SRI) whose goals are to seek both a financial and a “social” return as measured by outreach (i.e. number of customers) or percentages of female versus male customers and a “double bottom line” of financial returns and social goals (Consultative Group to Assist the Poor, 2011). These funds include Responsibility, Triodos and Oikocredit and, by 2011, an estimated $6.4 trillion had been sourced from SRIs (El-Zoghbi & Gonzalez, 2013; Microfinance Information Exchange, 2013).

However, microfinance has also increasingly attracted purely commercial private investors. This is because of the perceived high returns, their attractiveness as “alternative investments” – uncorrelated to major financial markets – low default levels and high interest rates. Private investors have often been sourced through unregulated, private funds run by global investment banks, including Deutsche Bank, Credit Suisse and Citibank. In addition, a number of private equity funds have sought to invest in microfinance in developing countries directly. The extent of these private capital inflows is illustrated in Table 5. Since 2005 there has been a quadrupling of capital flows from private financial sector investors with, by 2012, annual flows reaching $8.7 billion and the number of investing funds reaching 111. Growth was slowed, but not stopped, by the global financial crisis.

Table 5. Microfinance investment funds (2005-2012).

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>61</td>
<td>75</td>
<td>93</td>
<td>111</td>
<td>109</td>
<td>102</td>
<td>99</td>
<td>111</td>
</tr>
<tr>
<td>Assets Under Management ($bn)</td>
<td>$2.4</td>
<td>$4.0</td>
<td>$5.4</td>
<td>$6.6</td>
<td>$8.2</td>
<td>$6.9</td>
<td>$7.5</td>
<td>$8.7</td>
</tr>
</tbody>
</table>

The majority of this financing has been in the form of debt, not equity. Debt is typically less desirable from the perspective of institutional stability compared to equity. However, as illustrated in Table 6, although 90% of private capital flows have been in debt, the debt was primarily lower-risk. 90% of debt was in lower risk “vanilla” debt and 3% being in low risk “hybrid” subordinated
debt (a hybrid quasi-equity debt). Only 6% of debt was in higher risk forms of debt. These included overdrafts, which can create liquidity risk because they can be withdrawn at short notice, and publically issued bonds on capital markets that are subject to unstable investor demand.

Table 6. Microfinance institutions debt (2009).

<table>
<thead>
<tr>
<th>Type of Financing</th>
<th>USD millions</th>
<th>% of total funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subordinated Debt</td>
<td>610</td>
<td>3%</td>
</tr>
<tr>
<td>Bond Issuance</td>
<td>364</td>
<td>2%</td>
</tr>
<tr>
<td>Vanilla Debt</td>
<td>15,909</td>
<td>90%</td>
</tr>
<tr>
<td>Bank Borrowing (Overdrafts)</td>
<td>759</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Microfinance Information Exchange elaborated by the author.

These private capital flows have created additional risks in the balance sheet structures of microfinance-orientated institutions. For example, the majority of debt has been in “hard” currency, leaving microfinance-orientated institutions with foreign exchange risk because there is a mismatch between their liabilities to pay interest and capital amortisation on foreign currency debt and the local currency income flows that must finance those payments. This leaves microfinance-orientated institutions exposed to foreign exchange risk and, because of the unavailability of liquid hedging instruments, this has led to losses at microfinance-orientated institutions (Crabb, 2002; Cavazos, 2004; Barres, 2006; Abrams & Schneider-Moretto, 2007).

24 “Hard currency” is defined as currencies that are widely traded and liquid in major financial markets in both cash and derivative forms. They include the US Dollar, the Euro, the Japanese Yen and the UK Pound.
Similarly, debt has been predominantly short-term. This has increased liquidity risk at institutions because when debt matures it typically needs to be replaced, leaving microfinance-orientated institutions exposed to investor sentiment in relation to liquidity and cost on each occasion when the debt matures, termed “rollover risk” (Abrams & Schneider-Moretto, 2007). Liquidity risk has also been increased in relation to rollover risk because private capital flows have been pro-cyclical with, for example, MIVs hoarding cash during the financial crisis (Consultative Group to Assist the Poor, 2010). Risks such as these have been important in previous developing country financial crises. For example, short-term, “hard” currency debt which was mismatched to income flows was an important causative factor in the Asian crisis of 1997 as, when investor sentiment became negative, it was rapidly withdrawn. When the crisis developed local currencies collapsed. This means that banking institutions were left with both a liquidity crisis and large foreign exchange losses that drove them into bankruptcy (Griffiths-Jones, 2000). The risks arising from private capital inflows are apparent in the balance sheet structures of microfinance-orientated institutions.

Capital has also been sought from international private capital markets, including through complex transactions to raise both debt and equity financing. Selected examples are given in Table 7 below. They include public listings on stock exchanges and securitizations. However, this ability to access private capital markets is limited to the largest and most profitable microfinance-orientated institutions – termed by investors “Tier 1” microfinance-orientated institutions – which are estimated at only 150 to 200 microfinance institutions globally. These have included SKS, Equity Bank of Kenya and Compartamos (source: Deutsche Bank, 2007).

Table 7. Selected complex capital market transactions.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Country</th>
<th>Type</th>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Bank</td>
<td>Kenya</td>
<td>IPO²⁵</td>
<td>2006</td>
<td>Kes6.5bn</td>
</tr>
</tbody>
</table>

²⁵ IPO is an initial public offering where the equity is listed for the first time on a stock exchange.
Banco Compartamos  Mexico  IPO  2007  $468m

Financiera Independencia  Mexico  IPO  2007  $300m

SKS  India  IPO  2010  $350

ICICI -Share Microfin  India  Securitization  2006  $4.9m

BRAC  Bangladesh  Securitization  2006  $180

ProCredit  Bulgaria  Securitization  2006  E48m

ICICI –Spandana  India  Securitization  2008  $75m

ICICI –SKS  India  Securitization  2008  $110m

ICICI –SKS  India  Securitization  2009  $55m

Source: CGAP, Wall Street Advisors Services and the Financial Times.

Transactions of this type have created risks in the balance sheet structures of microfinance-orientated institutions. Initial public offerings have not generally raised new equity capital. Instead, they have involved the listing on public stock exchanges of previously privately-held equity held by the original equity investors in microfinance-orientated institutions. Although this does not create a negative impact on microfinance-orientated institutions (and it could be argued that it help with future equity raising), it does not provide new or increased equity either.

Risk has been increased through securitizations. Securitizations offer microfinance-orientated institutions the potential benefit of being able to “recycle” capital by selling assets that they have originated to third party investors, thus returning capital and financing to the microfinance-orientated institutions for new lending. However, securitization also creates complex risks that may be beyond the institutional capacity of microfinance-orientated institutions to manage. For example, securitizations have typically left the “first loss” tranche – that is the liability to absorb credit losses before other investors bear any losses – with the microfinance-orientated institutions. Such first loss tranches are held on the balance sheet of the microfinance-orientated institutions, but are very high-risk instruments because of the high leverage in their structure. When credit...
deteriorates their value falls rapidly and in the event of defaults the losses are borne by the investor until the value of their tranche is nil. Similarly, whilst securitization shifts the ownership of credit assets from the microfinance-orientated institutions to the investor, the responsibility to manage the borrower remains with the microfinance-orientated institutions. Failures to manage this type of risk involved in securitization were important contributing factors to the financial crisis in advanced economies in 2007 onwards. Then, financial institutions with relatively high levels of institutional capacity – especially compared to even the most capable Tier-I microfinance-orientated institutions – were unable to manage these risks. This led to institutions needing to write-off first tranche assets from securitization, reducing their capital base, and being unable to manage securitized assets effectively. Such issues contributed to institutional failures and market contagion (Independent Commission for Banking, 2011; Toporowski, Tyson & Shabani, 2013).

In sub-Saharan Africa, the growth in the microfinance sector has been driven by private inflows. Although deposit mobilization is higher than in other regions, with an average deposit to loan ratio of 55% in 2009, $2.5 billion of investor funds had been committed to sub-Saharan African microfinance-orientated institutions and there were 63 microfinance investment funds active in the region (Consultative Group to Assist the Poor, 2011a). Of this $2.5 billion, only $82m or 3.2% was provided in equity with the remaining £2.4 billion or 96.7% of private capital being in debt. As a consequence, the majority of equity has been built from retained earnings and this has proved challenging for many institutions because of their continued lack of profitability (Consultative Group to Assist the Poor, 2011a). Investments in sub-Saharan Africa are also concentrated by country with, in 2008 and 2009, eight countries (Ethiopia, Kenya, Uganda, Mozambique, Mali, Tanzania, Nigeria, and Ghana) receiving 40 per cent of total cross-border funds committed to sub-Saharan Africa (Consultative Group to Assist the Poor, 2011a).

5.4 THE APPLIED IMPACT OF EXPANSION OF FINANCIAL ACCESS
The expansion of financial access by mobilising private capital has introduced new pressures to expand scale and to be “sustainable” – that is profitable on a stand-alone basis without grants or subsidies – in order to provide commercial returns to investors. As this section will discuss, this has, arguably, led to “mission drift”, affected the structure of microfinance-orientated institutions balance sheets and lending composition, but provided only limited gains in financial access. These
impacts are examined more deeply in the fieldwork that is presented in Chapters 6, 7 and 8 in relation to Kenya.

5.4.1 “Mission Drift”: The Extent of Lending to the Poor

Mission drift has two dimensions. Firstly, it refers to a tendency for microfinance-orientated institutions to reduce lending to the poor and increase it to wealthier clients, contrary to their social mission to serve the poor. This definition is the one most commonly used by researchers (e.g., Consultative Group to Assist the Poor, 2001). Secondly, it refers to a tendency towards reduced lending for purposes that contributes to long-term poverty alleviation and structural transformation, such as lending for microenterprises and increased lending for purposes contributing less (or not at all) to these goals, such as consumption. These two aspects of mission drift are examined separately, with the impact on lending for purposes relating to structural transformation considered in a separate section.

Most empirical research has focused on whether pressures for profitability cause microfinance-orientated institutions to move “upmarket” and away from lending to the poor. This is because profits can be reduced by high levels of bad debt and arrears and by small loans that incur relatively high average management costs. By contrast, lending to wealthier customers presents less credit risk and lower average management costs. In relation to this, mission drift can be seen as when an institution increases its lending to wealthier clients and increases its average loan size and this occurs for reasons other than progressive lending and cross-subsidization (Armendáriz & Szafarz, 2009). Such shifts in lending then threaten to undermine the institutions social and community mission.

Academic research has consistently found a significant correlation between profitability and reduced outreach to the poor, using average loan size as a proxy for the poverty level of customers so that smaller loans indicate poorer customers. For example, Cull et al. (2007) completed a regression analysis of 124 institutions in 24 countries with disaggregated data in three categories of lending (group-based lending, individual-based lending, and village banking) and found that there was a negative trade-off between profitability and the proportion of poor clients. These results were replicated by Cull et al. (2008) using a different dataset which examined data from
346 microfinance-orientated institutions and by Gonzalez and Rosenberg (2006) using a database of 2,600 institutions with both studies finding a negative correlation between profitability and outreach.

These correlations have also been supported by profitability differentials by institutional type with greater profitability associated with “high end” clients. For example, for the period 2003 to 2008 the average global annual profit margin of microfinance-orientated institutions for “high end” clients – as reported to Microfinance Information Exchange – was +2.3% compared to a net loss of 20.4% for “low end” clients (Microfinance Information Exchange, 2010). This negative correlation between profitability and the degree of poverty of the client is to be expected, as credit risk for wealthier clients is lower due to their higher and more regular income to service debt and their ownership of assets that have the potential to provide collateral. In addition wealthier clients typically have large loans that are cheaper to manage per dollar of lending.

However, the interpretation of this correlation in relation to mission drift is difficult. Firstly, from a methodological perspective, there is no consensus that loan size is an appropriate proxy for lending to poor people, undermining the basis for the regression analysis. Secondly, there are alternative interpretations of the correlations found above. For example, it has been proposed that this correlation relates to expansion of progressive lending, whereby repeat customers progressively increase the size of their loans because they have successfully used funds to grow businesses and then borrow further, larger amounts to continue the expansion of their businesses (e.g., Gonzalez et al., 2009). “Progressive lending” can thus been seen as an indicator of the success of the social mission of microfinance – helping the poor start and grow income-generating businesses – rather than of mission drift.

Secondly, there are alternative explanations of the correlation that provide reasons unrelated to mission drift. For example, some studies have proposed that the correlation is due to a deliberate business strategy of cross-subsidization where microfinance-orientated institutions achieve profitability by serving wealthier and more profitable clients in addition, rather than instead of, poorer clients. Similarly, it has been proposed that the correlation is due to the ability of microfinance-orientated institutions to achieve economies of scale through managing fewer, larger loans more cheaply that more numerous smaller loans, leading to higher total profitability for the same total loan portfolio (Cull et al., 2008).
Overall, the academic interpretation of these studies in relation to mission drift is difficult (Armendáriz & Szafarz, 2009), although practitioners continue to discuss this concern (e.g., Consultative Group to Assist the Poor, 2001; Women World Banking in Frank, 2008). However, we do not examine mission drift in detail.

5.4.2 IMPACT ON THE BALANCE SHEET STRUCTURE OF MICROFINANCE-ORIENTATED INSTITUTIONS

5.4.2.1 Asset Structure
Assets at microfinance-orientated institutions are primarily composed of loan portfolios. Loan portfolio quality is reflected in the levels of arrears and bad debts within portfolios, as measured by portfolio-at-risk26 – where loans are experiencing repayment problems such as debt service arrears but may ultimately be recoverable – and bad debts, where loans are not expected to be recovered.

As noted, microfinance-orientated institutions have been under pressure to become sustainable and many have sought to do this through increasing scale, allowing potential economies of scale to be achieved. Expansion in scale has been driven by inflows of private capital that has led to pressures to rapidly expand lending and there is evidence that, as lending has expanded, asset quality has declined. For example, between 2002 and 2008, 7.3% of all microfinance-orientated institutions had experienced a crisis – defined as 30-day portfolio-at-risk plus write offs exceeding 20% -- and 1% failed outright (Rozas, 2011). The most frequently provided reason for this is that in the most commercially attractive markets there has been intensifying and “excessive”

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26 Portfolio-at-risk is defined as the value of loans outstanding that have one or more instalments of principal past due more than a certain number of days as a percentage of the total loan portfolio. It includes the entire unpaid principal balance, including both past-due and future instalments, but not accrued interest. Portfolio-at-risk (PAR) is usually divided into categories according to the amount of time passed since the first missing principal instalment e.g. 30-day, 90-day (source: CGAP).
competition between microfinance-orientated institutions that has led to declining lending standards and over-indebtedness amongst clients. These issues can be illustrated by examples taken from countries that have experienced declining asset quality as a response to commercial pressures and the expansion of microfinance.

One of the earliest countries to experience these problems was Bolivia. Prior to 1999, Bolivia was considered a model of microfinance success with microfinance experiencing rapid growth (Robledo, 2008). Microfinance-orientated institutions such as BancoSol, Banco Los Andes Procredit, FFP Fie and FFP Prodem were major national financial institutions. This expansion took place against a background of macroeconomic instability from 1985 to 1998. It included hyperinflation and rising unemployment resulting from a decline in primary sectors, including agriculture, mining and state employment. In this environment microfinance expanded rapidly and was supported by the government who saw it as a path to creating new employment (Marconi & Mosley, 2006). The expansion of microfinance was originally based in NGO-led organizations, but increasing profits attracted new private entrants, including consumer finance companies (FFPs). Competition amongst institutions was high and, in particular, there was competition for the most profitable urban clients. The FFPs also introduced larger loans, including for purchasing consumer durables, and lowered lending and repayment capacity assessment standards. Under the pressures of competition, more established microfinance-orientated institutions also lowered lending standards and increased loan size. These factors led to the microfinance sector suffering from over-indebtedness and overlapping debts (Consultative Group to Assist the Poor, 2001). As financial crises impacted Latin America in 1998 and 1999, the macroeconomic situation deteriorated amid rising political instability. The government instigated deregulation of customs tariffs, which undermined many creditors’ businesses, and debt forgiveness and debt-service limitation programs, seen by some as having encouraged the default that was growing throughout the financial sector, including in microfinance. In this context, a number of debtor cartels sprung up to resist debt collection. Such cartels undertook a series of protests and engaged in formal discussions with banker groups from 2001 to 2003. Despite this history, by 2009 similar issues were again being reported in the Bolivian financial market, including a decline in lending standards leading to lax credit practices, oversaturation of markets and resurgence in consumption lending. Commentators assigned this to excessive competition (Robeldo, 2008). In addition microfinance-orientated institutions were routinely making loans in US dollars, thus passing on
foreign exchange risk to borrowers and effectively converting foreign exchange risk to credit risk for the institution, and financing high growth with high leverage in microfinance-orientated institutions (Robeldo, 2008).

This pattern of crisis was to repeat itself in a number of countries. Globally, 30-day portfolio-at-risk increased to 3% by 2008 (source: Microfinance Information Exchange27). Specific countries impacted by 2009 included Nicaragua, Morocco, Bosnia-Herzegovina and Pakistan. In all these countries microfinance sectors experienced very similar patterns of high growth rates of between 33% and 67% annually from 2004 to 2008, largely funded by debt capital from international investors (Consultative Group to Assist the Poor 2010), which led to excessive competition in and over-saturation of the most profitable (typically urban) markets and multiple debts and the over-indebtedness of many borrowers.

However, the worst crisis that has resulted from these pressures has been in Andhra Pradesh in India in 2010 and 2011. Andhra Pradesh has long had a high concentration of microfinance-orientated institutions in India. By 2006, it was headquarters to four of the largest microfinance-orientated institutions in the country and more than half of all India’s self-help groups were located in the state. By early 2005, borrowers made complaints to the regulators relating to exploitative practices. In particular, high interest rates were criticized at a time when microfinance-orientated institutions were lobbying for exemption from interest rates caps under money lending laws on the grounds that they made their businesses unsustainable. There were also complaints relating to debt collection practices (Ghate, 2007). In March 2006, an initial crisis occurred when the state regulators moved to close down branches and seize the records of 57 branches of microfinance-orientated institutions. Repayments rates plummeted to 10-20% as rumours that debts were now not repayable circulated amongst borrowers. The Reserve Bank of India (RBI) and the state government became involved in resolving the problems concerning microfinance-orientated institutions. After conceeding lower interest rates by microfinance-orientated institutions and a determination of a code of fair practice by the RBI, the crisis dissipated and repayments recovered. However, problems re-emerged in 2010 when SKS, one of


the largest and most profitable microfinance-orientated institutions in India was criticized for aggressive debt collection techniques which were alleged to have driven a number of clients to suicide. Following political anger and agitation, default rates reached 90% and $2 billion in the state\textsuperscript{28}. New legislation was implemented by the state, which restricted how microfinance-orientated institutions lend and collect money and putting caps on interest rates that had previously been unregulated.

These events were accompanied by political responses. Vijay Kumar, the State’s Minister for Rural Development, commented, “These institutions are using quite coercive methods to collect … They aren’t looking at sustainability or ensuring the money is going to income-generating activities. They are just making money”\textsuperscript{29}. Reddy Subrahmanyam, a senior official who helped write the Andhra Pradesh legislation, accused microfinance companies of making “hyper profits off the poor,” and said the industry had become no better than the widely despised village loan sharks it was intended to replace. “The money lender lives in the community,” he said. “At least you can burn down his house. With these companies, it is loot and scoot”\textsuperscript{30}. Mohammed Yunus, a Nobel Prize winner, described the SKS flotation as the “new money lending” and Daley Harris of the Microcredit Summit Campaign commented that it was “about how well investors and the microfinance institutions are doing and not about ending poverty”\textsuperscript{31}. Vijay Mahajan, Chairman of BRAC, even undertook a “yatra” or spiritual journey, relating to “soul searching on the need to reinvent microfinance”\textsuperscript{32}.

Although there has not been so severe a crisis, similar problems have been experienced recently in sub-Saharan Africa. Portfolio-at-risk has been steadily rising since 2007, reaching, by 2009, 30 day portfolio-at-risk of 15% of total loan portfolios, 90-day portfolio-at-risk of 8% of total loan portfolios and write-offs of 3.4% of total loan portfolios (Consultative Group to Assist the

\begin{verbatim}
\footnotesize
\textsuperscript{29} Ibid.
\textsuperscript{30} Ibid.
\textsuperscript{32} http://cfi-blog.org/2011/03/01/vijay-mahajan-treading-carefully-in-indian-microfinances-troubled-landscape/
\end{verbatim}
Poor, 2011a). The Consultative Group to Assist the Poor also note that it is likely that portfolio-at-risk is underreported due to “poor reporting and control systems”. These issues are examined further in the fieldwork detailed in Chapter 6.

Problems in sub-Saharan Africa have also led to multiple institutional failures, although not systemic crises, which have required government bailouts, takeovers or closure of institutions. For example, in Benin, its largest microfinance-orientated institution, the project for the promotion and support of the development of micro-enterprises (PADME) experienced strong credit growth, but its portfolio quality declined following an economic slowdown in 2006 and 2007. In late 2007, the Ministry of Finance ordered an audit of PADME’s operations and found evidence of fraudulent lending practices. This led to a government takeover. In Ghana, in 2008, Artemis, a microfinance-orientated institution, collapsed due to weak management processes, internal fraud and “uncontrolled” growth. It had over 100,000 clients and an 80% delinquency rate on collapse. Problems included “improper client evaluation, inappropriate use of staff incentives, weak reporting systems, overly large increases in loan amounts between lending cycles” as well as management fraud where senior executives made loans to family and friends without proper internal controls (Rozas, 2011, p.9). In Nigeria, in 2009 Fuegonord, a deposit-taking microfinance-orientated institution, collapsed. Problems identified included its management having “no experience” and consequently allowing uncontrolled and rapid growth in lending. In addition, funds had been misused in speculative real estate and stock market investments (Rozas, 2011). The Nigerian regulator was subject to criticism because it had imposed low entry requirements and the rapid expansion of the industry was beyond its capacity to oversee. By 2001, the Nigerian Central Bank had to withdraw 224 microfinance banking licenses in order to control the situation (Rozas, 2011). In 2010, the regional central bank for west Africa reported that 13 microfinance providers were in threat of collapse and required to be placed under government administration (Consultative Group to Assist the Poor, 2011a). In Cameroon, in 2010 multiple microfinance-orientated institutions were placed under government administration and required to submit recovery plans to the regulator (Consultative Group to Assist the Poor, 2011a). Furthermore, according to Consultative Group to Assist the Poor “the number of failed, yet officially operational, financial service providers is even greater than the number of those formally under government administration” (Consultative Group to Assist the Poor, 2011a, p8). Overall, these on-going problems indicate financial fragility in microfinance-
orientated institutions in sub-Saharan Africa. They will be examined in more detail in relation to Kenya in the following chapters.

Some researchers have sought to incorporate these events into a conceptual framework of financial fragility in microfinance. In particular, they have been conceptualized as “borrower runs” (Bond & Ashok, 2009) where, drawing on the conventional depositor runs – where a bank collapses due to panic withdrawal by deposits as confidence in a bank’s soundness collapses – however, in this instance collapsing confidence in a microfinance institution leads to lenders stopping repayments because there is no expectation of effective default penalties being imposed or of future lending being made once current loans expire. However, these borrower runs differ from a conventional collapse for two reasons. Firstly in a conventional bank default the bank has collateral that creates a floor under potential losses. Secondly conventional banking defaults are slower to accumulate as there are genuine disincentives for borrowers to default, such as legal or reputational penalties including the seizure of collateral. However, in the case of borrower runs there is little or no penalty for borrower default as there is no collateral and, if an institution collapses, no loss of, for example, future borrowing ability. This means that a borrower run can create a very rapid collapse in the loan portfolio quality from a very high to a very low repayment rate and means that this can accelerate institutional collapse far more quickly and completely that in a conventional banking run.

5.4.2.2 Liability Structure

Chapter 4 argued that the financial stability of a financial institution is dependent upon its balance sheet structure, including its liabilities. An ideal liability structure is considered as one that includes a high percentage of deposits because they are more stable and cheaper. However, they can make a financial institution susceptible to depositor runs, especially where the institution has long-dated assets and, hence, maturity mismatches between its asset and liabilities. Equity financing is also considered desirable, because equity represents permanently committed funds and is an essential part of the capital base of an institution available to absorb losses.
Debt is also a funding source. It can be sourced from both public and private sources. Debt’s desirability has a number of dimensions dependent upon its type. Debt that contributes to an institution’s stability would ideally be long-dated, fixed and low cost. However, debt that is short-term, although providing liquidity, can be unstable in relation to both availability and cost. For example, short-term debt can be obtained from interbank markets, including overnight, but is subject to rapid fluctuations in price and availability.

This is particularly true of debt from private investors and markets because it can be pro-cyclical. For international investors, such cycles can be driving factors relating to the fundamental creditworthiness of an individual borrower and by market sentiment and contagion. Such cycles were important causative factors in the financial crisis in advanced economies in 2007 and 2008 where interbank and capital markets became illiquid and investor risk appetite suffered a sharp contraction. The resultant “credit crunch” forced institutions into bankruptcy including Lehman Brothers, Bear Stearns and Northern Rock (Independent Commission for Banking, 2011). As discussed in the previous chapter, debt markets for microfinance have been subject to these pro-cyclical cycles in investor sentiment. For example, there was a contraction in liquidity available from microfinance investment funds in 2007 in response to the financial crisis in advanced economies followed by a cyclical upswing as international investors have sought alternative investments in “frontier markets” (Tyson et al., 2014).

In sub-Saharan Africa, in 2009 microfinance-orientated institutions had high levels of deposits with a ratio to loans of 55% and high equity levels with a capital to asset ratio of 24%. However, equity was largely sourced from retained earnings with only six investments between 2007 and 2009 being equity investments. Debt to equity ratios averaged 2.41 and, although equity and deposits were strong, microfinance-orientated institutions remain dependent upon debt (Consultative Group to Assist the Poor, 2011a).

In sub-Saharan Africa, debt has been predominantly sourced from private capital investors and markets. This is illustrated in Figure 6 below, where 55% of debt in sub-Saharan African microfinance-orientated institutions is sourced from private investors, a level similar to global rates. It is also notable that sub-Saharan Africa microfinance-orientated institutions have a higher percentage of their debt from banks and funds – that is to say from commercially orientated investors – compared to socially-responsible investors (SRIs).
Figure 6. Debt structures of microfinance-orientated institutions (2009).

Source: Microfinance Information Exchange.

These higher levels of debt in the liability structures of microfinance-orientated institutions in the region indicate potentially greater susceptibility to financial fragility than if there were greater levels of equity and deposits. However, a firmer conclusion cannot be drawn without examining the composition of debt – such as maturity, foreign currency, mismatch, and so forth – and its relative stability compared to deposits. This issue is examined in more detail in the fieldwork presented in Chapter 6.

5.4.3 Impact on Composition and Purpose of Lending

Commercialization through private capital inflows has – arguably – created shifts in lending composition that have reduced or removed the contribution that microfinance might make to long-term poverty alleviation and structural transformation. This is because profit-seeking incentives lead to increased lending concentration in the most attractive commercial business sectors and markets.
In particular, there are concerns that commercialization has led to a shift towards consumption lending. According to one academic, many heads of microfinance programs now privately acknowledge what John Hatch, the founder of FINCA International (one of the largest microfinance institutions), has said publicly – that 90% of microloans are used to finance current consumption rather than to fuel enterprise (Ogden, 2007). Consumption lending can help the poor by facilitating consumption smoothing (Collins et al., 2009). However, some commentators criticize such lending as providing short-term assistance, but not a long-term path out of poverty or a contribution to structural transformation through investment.

Empirical work examining the relationship between expansion of financial access through private capital and shifts in sector composition of asset portfolios is limited. In one example, in sub-Saharan Africa Consultative Group to Assist the Poor highlight that the concentration of assets in banks has been associated with high levels of consumption lending (Consultative Group to Assist the Poor, 2011a). However, there is little empirical research to quantify consumption lending and one of the key contributions of this thesis is a quantified analysis of consumption lending in Kenyan microfinance-orientated institutions. This will be discussed in Chapter 7.

5.4.4 Levels of Financial Access

Given the growth in the microfinance sector and policy support, it might be expected that there has been a significant increase in financial access in recent years. However, access has remained stubbornly low in many developing countries. Table 8 shows access levels as measured by accounts per thousand people at regulated banks. In lower middle-income countries and low-income countries the average number of accounts per thousand people is 570 and 148 respectively compared to 2,004 in high income countries. In sub-Saharan Africa there are only 261 bank accounts per thousand adults, the lowest of any region.

Table 8. Accounts per thousand adults at regulated banks (2008-2010).
Using other measures of financial access that include post office and cooperative bank accounts in addition to regulated banks, in sub-Saharan Africa fewer than 20% of people had access to formal financial services in 2006 (Demirguc-Kunt, Beck & Honohan, 2008). There was little improvement three years later when the 2009 “Financial Access” report showed that access levels in many poor countries for deposits and loans remained around 20% (Demirguc-Kunt, Beck & Honohan, 2008).

There are also significant intra-country differences in financial access levels, differentiated by income. “Banking sectors target mainly the richest inhabitants, leaving the more numerous poor with few options. Worldwide, an ‘access gap’ excludes the world’s poorest from the formal financial sector, leaving the majority of accounts owned by the rich” (Demirguc-Kunt, Beck & Honohan, 2008, p.13).

There has been research into what blocks improvement in access. Some research assigns exclusion as due to “voluntary self-exclusion”, defined as having services available but choosing not to use them. A variety of reasons are proposed as to why customers would choose to exclude themselves, but many appear insubstantial or poorly defined. For example, they include “no need” and “cultural or religious” reasons (such as haram under Islamic law; Collard et al., 2001; Whitley et al., 1998). “Psychological” barriers are also proposed, such as “many people on low incomes feel quite disengaged from banking” (Kempson et al., 2004).
However, the majority of research attributes barriers to involuntary exclusion. Involuntary exclusion focuses on those who have demand for services but are either refused them or are unable to access them. For example, financial institutions may impose barriers that create exclusion. These include requirements to open and maintain an account. This may include requirements for formal identification, minimum balances, fees and collateral requirements. All of these are common features of formal banking services. Such features help banks manage risks such as taking collateral and seeking identification that help manage credit and reputation risk. Others practices, such as fees, seek to maximize returns, or are actively designed to include only commercially-attractive, affluent customers, such as minimum balances. Banking institutions also consider costs in making business decisions resulting in them limiting branch networks to areas with affluent and concentrated populations, such as richer, urban areas and not having a presence in poor or rural areas with disbursed populations.

Many of these requirements and conditions cannot be met by the poor, excluding them from financial access. In many developing countries there is a lack of formal documentation such as identity documents or land registration. Costs and minimum balances can be prohibitively expensive for the poor. For example, in the sub-Saharan countries, the average minimum balance for opening and maintaining a deposit account is 49% of per capita GDP and average annual fees are 10% of per capita GDP. For loans, the minimum average loan made is 140% of per capita GDP for consumer loans and 996% of per capita GDP for small and medium-sized enterprises loans (Demirguc-Kunt, Beck & Honohan, 2008).

Practitioners and micro-finance orientated institutions have sought to address these barriers in their business practices, including moderating interest rates and other fees. This has meant institutions trying to build a “high-volume, low-cost” business model. The most successful innovation to help achieve this has been mobile banking that reduces costs and removes physical barriers to financial access (such as the distance to a bank) and so has allowed economies of scale to be achieved by microfinance-orientated institutions. However, cost structures for many microfinance-orientated institutions remains high due to high staffing levels, inefficient processing and poor or little-used technology platforms (CGAP, 2012a).

Policy has tried to address these issues via an “enabling environment” with better-defined and enforced creditor and property rights (including reform of property registration and bankruptcy
and collateral seizure procedures) or to build information infrastructure such as credit bureaus and identity cards. However, often such “best practices” from developed countries have proved difficult to transplant. For example, land ownership is shared or communal in many developing countries, making collateral based on individualized property rights ineffective.

Finally, it has also been suggested that an important barrier for the poor is a lack of “financial literacy”, defined as knowledge and understanding of financial products and services. The World Bank describes financial literacy as “empowering the poor” and their policy has included financial literacy training for potential customers in response to these issues.

The issue of what are the barriers to the expansion of access remain open to discussion and these will be discussed in relation to Kenya. In particular, Chapter 8 will examine the issue of what are the barriers to financial access from the perspective of the poor themselves and consider whether the barriers are voluntary or involuntary and how this has interacted with the expansion of financial access.

5.5 CONCLUSION

In this chapter, we have examined how the theoretical frameworks relating to the expansion of financial access to financial development and stability can be applied in practice. We discussed how, following expansion based on the original social mission of microfinance-orientated institutions and its absorption into financial sector development policy, pressures for commercialization has attracted inflows of private capital, particularly in the form of debt which has led to a rapid expansion of lending and intensified competition.

The consequences of these pressures include a tendency for “mission drift” with a decreasing proportion of lending to the poor and increasing levels of consumption lending compared to income-generating lending. However, research in relation to mission drift can be difficult to interpret due to the issues of progressive lending and cross-substitution strategies at microfinance-orientated institutions. Also problematic is that levels of financial access remain low, especially in sub-Saharan Africa. Debate continues regarding the nature of the barriers to access.

From the perspective of financial sector development and stability, these pressures have created restructuring in the balance sheets of microfinance-orientated institutions that are affecting
institutional soundness. Assets have declined in quality with rising portfolio-at-risk levels globally and, in some countries, institutional failures and crisis. In sub-Saharan Africa these trends have been repeated with rising portfolio-at-risk and multiple instances of institutional failures, although there have been no systemic crises in the region to date.

In relation to liability structures, the inflows of private capital have been predominately in “hard” currency debt. This increases foreign exchange and liquidity risk at institutions. However, a fuller analysis of the structure of debt is required in order to conclude on the impact of changes in the debt structures of microfinance-orientated institutions.

In the next three chapters, the thesis will discuss the fieldwork in order to develop these themes. In Chapter 6, it will examine the institutional impact of the expansion of finance using private capital in microfinance-orientated institutions in Kenya, including examining changes to their balance sheet structures. In Chapter 7, the thesis will discuss the implications of these changes for systemic stability. In Chapter 8, the thesis will examine the role of financial access in the “financial lives of the poor”, including whether barriers are voluntary or involuntary.
6. THE INSTITUTIONAL IMPACT OF THE EXPANSION OF FINANCIAL ACCESS IN KENYA

6.1 INTRODUCTION TO THE FIELDWORK
Chapters 6, 7 and 8 will present the fieldwork conducted in Kenya. It has been divided into three sections: Chapter 6 discusses institutions, Chapter 7 the financial system and Chapter 8 individuals.

In this chapter, we start with an overview of the Kenyan financial system in order to provide a context for the subsequent discussion. We then examine the impact of the expansion of financial access on microfinance-orientated institutions. The expansion of financial access has driven rapid expansion in the scale and number of microfinance-orientated institutions. It has been accompanied by declining quality in assets, particularly in credit portfolios. Liabilities have been restructured because of limited success in funding growth through equity and deposit mobilization, leading to increased private sector debt. We discuss the changes on institutional capacity and financial architecture. We conclude that, whilst institutional capacity has strengthened in some institutions, there is an overall increase in institutional risk because of weaknesses in regulation and because some institutions are struggling to build capacity.

6.1.1 THESIS METHODOLOGY FOR CHAPTERS 6 AND 7
Chapters 6 and 7 present a balance sheet analysis of microfinance-orientated institutions with interpretative material. The analysis draws on two sources, namely data from financial statements and fieldwork interviews in order to generate a sample of institutions.

The section of the sample included three types of institutions. These were:

1. Microfinance-orientated banking institutions (MFOBs). These are regulated banks designated as being microfinance-orientated by the Central Bank of Kenya based on the predominant customer base. All microfinance-orientated banking institutions were included in the sample.
2. Deposit-taking microfinance institutions (DTMs). These are a defined regulatory category of non-banking financial institutions designated by the Central Bank of Kenya as microfinance-orientated and licensed to take deposits. All deposit-taking microfinance institutions were included in the sample.

3. All other non-regulated microfinance institutions that were members of the Association of Microfinance Institutions in Kenya (AMFI)\textsuperscript{33} Details are given in Table 9 below of the individual institutions in the sample. Financial statements and interviews were sought from the full sample. The table shows for which institutions financial statements were obtained (column marked “Financials obtained?”) and those that were interviewed (column marked “Interviewed (if yes, with date)”).

Table 9 Sample institutions with details of interviewees & financial statements.

<table>
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<th>Category</th>
<th>Institution</th>
<th>Financials obtained?</th>
<th>Interviewed (If yes, with date)?</th>
<th>Interviewee name and other comment</th>
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<td>Cooperative Bank</td>
<td>Yes</td>
<td>No</td>
<td>Refused / No response</td>
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<tr>
<td>banking institutions</td>
<td>Family Bank</td>
<td>Yes</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td></td>
<td>K-Rep Bank Ltd</td>
<td>Yes</td>
<td>Aug. 11</td>
<td>Albert Ruturi, Managing Director</td>
</tr>
<tr>
<td></td>
<td>Equity Bank</td>
<td>Yes</td>
<td>Aug. 11</td>
<td>Sam Makome, Risk Manager</td>
</tr>
<tr>
<td>Deposit-taking microfinance</td>
<td>Faulu Kenya</td>
<td>Yes</td>
<td>Aug. 11</td>
<td>Anne Kimari, Chief Financial Officer; Raphael Lelolool, Head of Audit</td>
</tr>
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<td></td>
<td></td>
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</table>

\textsuperscript{33} Some members are not microfinance institutions.
<table>
<thead>
<tr>
<th>MFI</th>
<th>Response</th>
<th>Date</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>KWFT</td>
<td>Yes</td>
<td>Oct. 11</td>
<td>Rose Muyanga, Risk &amp; Audit</td>
</tr>
<tr>
<td>SMEP</td>
<td>Yes</td>
<td>Aug. 11</td>
<td>Symon Mwangi, Chief Financial Officer; Simon Gathecah, Head of Audit</td>
</tr>
<tr>
<td>Rafiki</td>
<td>No</td>
<td>No</td>
<td>Start-up &amp; not yet operational</td>
</tr>
<tr>
<td>Remu</td>
<td>No</td>
<td>No</td>
<td>Start-up &amp; not yet operational</td>
</tr>
<tr>
<td>Uwezo</td>
<td>No</td>
<td>No</td>
<td>Start-up &amp; not yet operational</td>
</tr>
<tr>
<td>BIMAS</td>
<td>Yes</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td>Opportunity</td>
<td>Yes</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td>International</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECLOF Kenya</td>
<td>Yes</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td>Jamii Bora</td>
<td>Yes</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td>Juhudi Kilimo</td>
<td>Yes</td>
<td>Aug. 11</td>
<td>Nat Robinson, Chief Financial Officer</td>
</tr>
<tr>
<td>KADET</td>
<td>Yes</td>
<td>Oct. 11</td>
<td>Joseph Keverenge, Chief Financial Officer</td>
</tr>
<tr>
<td>Micro Africa Limited</td>
<td>Yes</td>
<td>Oct. 11</td>
<td>Tim Carson, Managing Director</td>
</tr>
<tr>
<td>Pamoja Women</td>
<td>Yes</td>
<td>Aug. 11</td>
<td>Jackson Wangombe General Manager; Stephen Mungai, Chief Financial Officer</td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme (PAWDEP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taifa Option</td>
<td>No</td>
<td>No</td>
<td>Refused / No response</td>
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<td>MFIs</td>
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</tr>
<tr>
<td>Institution</td>
<td>Available</td>
<td>Published</td>
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<tr>
<td>ADOK TIMO</td>
<td>No</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
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<td>Yehu MFIs Trust</td>
<td>No</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td>Molyn Credit</td>
<td>No</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td>Blue Limited</td>
<td>No</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td>U &amp; I MFIs</td>
<td>No</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td>Musoni</td>
<td>No</td>
<td>No</td>
<td>Mobile MFI located in Netherlands</td>
</tr>
<tr>
<td>SISDO</td>
<td>No</td>
<td>No</td>
<td>Only pre-2006 FS available; Refused / No response</td>
</tr>
<tr>
<td>Sumac Credit</td>
<td>No</td>
<td>No</td>
<td>Refused / No response</td>
</tr>
<tr>
<td>Canyon Rural Credit</td>
<td>No</td>
<td>Oct. 11</td>
<td>Trizah Kiarie, Head of Finance</td>
</tr>
</tbody>
</table>

Source: Author.

The financial statements were obtained from websites or through requests for hard or soft copies of all 28 sample institutions. Of these, 15 institutions financial statements were obtained and included in the data analysis presented in Chapter 6 and 7. These were comprised of four (100%) microfinance-orientated banking institutions, three (50%) deposit-taking microfinance institutions and eight (47%) microfinance institutions. The remaining 13 institutions were excluded either because they were not yet operational or because no published financial statements were available. This included three deposit-taking microfinance institutions which were new start-ups in 2012 and not yet operational and 10 microfinance institutions which had no websites, had websites but without financial statements, and who either refused or did not respond to requests to provide them. These were largely small private or NGO-based institutions and because their balance sheets are relatively small, it is not likely that their exclusion has materially distorted the analysis in these chapters.
Once the financial statements had been obtained, data and narrative information was taken from the balance sheet, the profit and loss statements and the notes to the accounts. The latter included details of portfolio-at-risk, debt financing and sector analysis of loan portfolios. Details that map the specific analysis that will be presented in Chapters 6 and 7 regarding their specific sources in the financial statements is given in Table 10 below.

Table 10. Financial statements sources used.

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Source – detail</th>
<th>Source – detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans</td>
<td>Balance sheet</td>
<td>Net and gross loans</td>
</tr>
<tr>
<td></td>
<td>Notes to accounts</td>
<td>Sector analysis of the loan portfolio</td>
</tr>
<tr>
<td>Deposits</td>
<td>Balance sheet</td>
<td>Gross deposits</td>
</tr>
<tr>
<td>Equity Capital</td>
<td>Balance sheet</td>
<td>Composition of equity capital including tier I and II capital</td>
</tr>
<tr>
<td>Debt financing</td>
<td>Notes to accounts</td>
<td>Individual loans with names, principal and interest rate details</td>
</tr>
<tr>
<td>Portfolio-at-risk</td>
<td>Notes to accounts</td>
<td>Portfolio-at-risk, classification of loans by risk, balance sheet reserves, profit and loss charges for reserves and write-offs of loans in the period.</td>
</tr>
</tbody>
</table>

Source: Author.

The use of such financial statements presented a number of advantages. Firstly, as noted in the introduction, there is a lack of data relating to financial development beyond measures such as
credit to GDP – which only captures credit growth. In particular, there is a lack of information that provides any insight into the transmission mechanisms from such credit growth to structural transformation. The use of financial statements potentially provides a much greater level of granularity in terms of transmission mechanisms.

Secondly, such financial statements provide a source of data that is reliable. The financial statements were audited. This includes by international auditors – such as Price Waterhouse and Ernst and Young – and local Kenyan audit firms. The financial statements were prepared under International Accounting Standards (IAS) that are set by the International Accounting Standards Board and are widely-used globally. Some countries have national accounting standards as well – such as the United States or the United Kingdom. However, Kenya does not, and IAS is widely used in Kenya. The use of financial statements that are both audited and prepared under IAS means that a reasonable level of reliance can be assumed.

In completing the analysis it was also noted that other sources of data that are based on financial statements were found to be unreliable. In particular, CGAP provide an online database that is also based on financial statements of microfinance institutions. The author initially sought to use this database rather than compiling a new database from original financial statements. However, the data in the CGAP database was found to be inaccurate. This was discovered because the author started to reconcile the financial statements of individual organizations to the CGAP database and found a significant number of errors. For example, data was simply misstated or missing either in whole or in part, such as for particular times series or data sets. In addition there was reporting in multiple currencies with some entities reporting in local currency (Kenyan shillings) and some in dollars. Where the reporting was in dollars, inconsistent exchange rates had been applied which was considered material because of the volatility in the Kenyan shilling exchange rate. These errors in the CGAP database appear to have resulted from a number of problems. Firstly, it was voluntarily self-reported by institutions but their reporting was incomplete or inaccurate. Secondly, CGAP does not seem to have performed any review or established standards for the self-reported data. For example, there were no guidelines for the basis of reporting – such as a standard for reporting of foreign currency values – resulting in inconsistencies between reporting institutions. The lack of work to verify or reconcile the data reported – such as by reconciling back to the financial statements as the author did – meant that errors had not been detected and
corrected. The author eventually concluded that the level of errors in the database was such as to render the database results to be materially misstated and the decision was made to create a new database specifically for the thesis. The database is included in the Appendix.

However, although using the financial statements presented significant advantages, there were also some disadvantages. This included in relation to the definition and consistency of categories for the sector analysis of loan portfolios.

For this analysis, information was taken from the detailed notes to the accounts in the financial statements that include a sector analysis of the loan portfolio. This is a compulsory disclosure under IAS and was available for all institutions from which financial statements were obtained.

However, IAS does not define the sectors that the disclosure needs to adopt. Instead it allows each institution to determine the sectors that it considers relevant to its business. This resulted in inconsistencies in the definition of sectors between institutions. In particular, the category of “businesses” presented difficulties. This was because the majority of institutions did not provide a definition of “business” in their financial statements. Thus consistency could not be checked between them. Further, some entities included multiple categories that could be considered general business categories such as “microenterprises”, “retail”, “wholesale”, “trading” and so forth. The approach adopted by the thesis was to include these as “business” and there is further comment in Chapter 7.

This was discussed with a number of interviewees to confirm the reasonableness of this approach. It was also raised with the Central Bank supervisors. They confirmed that there is confusion about the classification and, in addition, some overlap between “business” and “consumer” loans. This was due to the sector analysis being based on the declared intention of the borrower about the purpose of their loan and so some may declare it to be a personal loan but use it in their business, while others may apply for a business loan but use it for personal consumption. However, overall they believed this overlap netted out and was not material. Nevertheless, in examining the analysis in the thesis, these inadequacies, which could not be fully resolved, should be noted.

In relation to the interview material, interviews were conducted with regulators, practitioners and investors. Invitations were sent in various ways. Financial Sector Deepening (FSD) Kenya
assisted with introductions to a number of institutions. (In return a working paper was written for them relating to the issues faced by microfinance institutions in transforming their institutions into regulated entities). The African Economic Research Council introduced me to the Governor of the Central Bank who then asked his various staff members to be interviewed and to make introductions for me to some financial institutions including at K-Rep, KWFT and Equity Bank. Invitations were also send by “cold calling,” including via internet sites, email, phone and in person at offices by the author. The IFC, Oikocredit and some microfinance institutions accepted such invitations. The acceptance rate was 100% for invitations via FSD and the Central Bank but was lower for cold-calling. As detailed in Table 11, 10 institutions accepted invitations. This included two microfinance-orientated banking institutions (Equity Bank and K-Rep Bank), three deposit-taking microfinance institutions (Faulu Kenya, Kenya Women’s Finance Trust and the Small and Medium Enterprises Program) and five non-regulated microfinance-orientated institutions. Other interviewees included officials at the Central Bank of Kenya – including those responsible for DTM licencing, DTM supervision, the supervisor for Equity Bank and the senior manager of the Supervisory Department – and the investors International Finance Corporation and Oikocredit.

The interviews were structured around the questionnaire detailed in Table 11 below. It was written in advance based on the literature review presented earlier (particularly in Chapters 3 and 5). Interviewees were provided with the questionnaire in advance with a request for a face-to-face interview. One interview provided only written answers (Oikocredit) and declined to be interviewed in person. All others agreed to meet in person and interviews were typically about one hour long, although some lasted for two hours. A pilot questionnaire was not prepared. However, in general the pre-prepared questionnaire proved satisfactory and was largely adhered to, although interviewees could add topics and comments of relevance as they chose. Detailed transcripts of the interviews are included in the Appendix.

Table 11. Institutional interview questionnaire.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Risk</td>
<td><strong>What is the history of portfolio-at-risk defaults? Can data including time series be provided?</strong> Examples of possible responses: Business failures, general or sector recessions, agricultural problems, over indebtedness, consumption lending, export conditions, natural disasters, political events.</td>
</tr>
<tr>
<td></td>
<td><strong>Question: What action and procedures are followed to prevent and manage non-payment?</strong> Examples of possible responses: At origination, customer profiling, relationship &amp; methodology, credit scoring; On default, officer visits to clients, escalation to senior managers, legal action; portfolio-at-risk reserving and loan loss recognition policies.</td>
</tr>
<tr>
<td></td>
<td><strong>Question: Are there portfolio concentrations that can potentially drive high portfolio-at-risk? What are the factors that deterioration in these concentrations might relate to?</strong> Examples of possible responses: Sector or regional concentrations, urban or rural concentrations, large individual borrowers.</td>
</tr>
<tr>
<td></td>
<td><strong>Question: What management procedures are followed to assess the overall portfolio?</strong> Examples of possible responses: Static pool analysis (delinquency, prepayments and rate of return); Measuring and monitoring sector and geographical concentrations; risk management committee reviews; stress testing or identification of tail events; correlation analysis.</td>
</tr>
</tbody>
</table>
Liquidity risk

**Question:** To what extent does liquidity risk exist in the balance sheet of the bank? What are the key sources of financing? Examples of possible responses: Extent of liquidity risk within the portfolio; Comment on availability and sources of liquidity (e.g. Development or NGO financing, local banks or capital markets, microfinance investors, deposit base).

**Question:** How do you quantify FX risk levels? If available, can data or reports be provided that quantifies liquidity risk? Examples of possible responses: Maturity and interest rate mismatch; VaR; stress testing.

**Question:** To what extent is liquidity risk actively managed & what techniques are used? Examples of possible responses: Internal treasury; Risk management committees; Risk management approach & funding polices; Funding and hedging instruments.

**Question:** What are the barriers to actively managing liquidity risk? Examples of possible responses: Lack of flexibility in funding sources, lack of money market hedging instruments; low levels of perceived risk; technical expertise; Deposit base building.

**Question:** How did the Global Financial Crisis affect liquidity and financing? Examples of possible responses: Contraction of commercial funding; Stability or commitment of financiers including investors.

**Question:** Where a deposit base has been established, what are the advantages and disadvantages of it as a liquidity source and how was it established? Examples of possible responses: Stability and scale of deposits; Issues and their resolution in building the deposit base; Approaches in technology & management.
Question: What are the sources of FX risk? Is there any history of significant gains or losses on FX positions? Examples of possible responses: FX funding and other financing; FX lending to borrowers; FX denominated assignments or securitizations; data on historical FX gains and losses including realised and unrealised gains and losses.

Question: How do you quantify FX risk levels? If available, can data or reports be provided that quantifies FX risk? Examples of possible responses: Notional values of FX liabilities, notional values of mismatched currency positions, value-at-risk, stress testing.

Question: How do you manage and hedge FX risk? What are issues in executing hedging? Examples of possible responses: Use of FX limits (including national limits, balance sheet limits, VaR-based limits); FX futures or options; risk management committee and approval structures; Issues: cost, liquidity, availability of appropriate instruments, expertise, collateral.

Question: Where FX risk rises from financing sources in “hard” currency, what are the barriers to local currency financing? Examples of possible responses: Unwillingness of financiers to lend in local currency; lack of commercial bank financing or local deposit base.
Question: Where do building risk management capabilities rank versus other challenges and priorities facing your MFI today? Examples of possible responses: More critical or difficult issues than need to be addressed before risk management capabilities.

Question: What are the formal channels for risk management at the MFI? Examples of possible responses: Formal risk management limits, approval or committees, internal processes and procedures, VaR or stress testing limits.

Question: What are the “lessons learnt” by the MFI relating to building risk management capabilities? What are the critical barriers to this? Examples of possible responses: Successful approaches and projects; Issues of building staff expertise, management information systems platforms, technology platforms; Usefulness of technical advice or training.

Question: Are staff provided with performance related compensation relating to risk management? What are the pros and cons of this in assisting appropriate risk management? Examples of possible responses: Performance bonuses for lending, portfolio-at-risk or deposit taking targets.

Source: Author

6.1.2 THE KENYAN FINANCIAL SYSTEM

At independence the Kenyan financial system was an offspring of its colonial past. It had an oligopolistic market structure, dominated by former colonial banks (Engberg, 1965), and the East African Currency Board (EACB) who, in the absence of an established central bank, had a limited function of maintaining a strict parity between the East African shilling and the British Pound. The financial system had been developed to finance trade and settler agriculture and had very
limited monetary and financial independence and little engagement with the Kenyan indigenous population (Upadhyaya, 2011).

Immediately upon independence in 1963 the new government reformed the financial system. This included establishing the Central Bank of Kenya, which was given supervisory powers and control of monetary policy and the newly created Kenyan shilling. The financial sector was heavily dominated by government or quasi-government institutions, whose primary mandate was development. The government actively managed the financial system through direct policy and regulation. Controls included ceilings on domestic interest rates, control of the foreign exchange markets, and restrictions on bank borrowings (Ngugi, 2000). Government-owned banks were established, including specialist institutions for development and agricultural financing. These included the National Bank and Grindlays Bank, which were nationalized to create the Kenya Commercial Bank and two new state banks, the Cooperative Bank and the National Bank of Kenya. Specialized development financial institutions established by the government included the Industrial & Commercial Bank for Cooperation, the Industrial Development Bank, the Agricultural Finance Corporation and the Development Finance Corporation of Kenya (Grosh, 1991). Foreign banks, including Barclays and Standard Chartered, were generally allowed to continue to operate as part of the Kenyan government’s approach to retaining and attracting foreign capital and preventing capital flight.

From 1963 to 1970, real GDP growth was strong and averaged 8.4% with low inflation at 2.3% (source: World Bank). This is illustrated in Figures 7 and 8 below. The growth was driven by agricultural exports and helped by “relatively market friendly, growth-promoting” economic policies under the Kenyatta administration (Mwenga & Ngung’u, 2008, p.329).
Figure 7. Kenya GDP growth and inflation (1963-2011).

Source: World Bank
During this period of strong macroeconomic performance, the financial system showed consistent growth. Domestic credit relative to GDP grew from 13% to 30% between 1963 and 1979, as illustrated in Figure 9 below. However, the loan to deposit ratio remained low (Upadhyaya, 2011) and the market structure remained oligopolistic (Ndung’u & Ngugi, 1999).

Figure 8 Kenyan inflation with index 35 (2006-2011)

Source: World Bank

35 Used for inflation-adjusted figures in Chapters 6 and 7.
However from 1973, following the global oil shocks, economic performance deteriorated with high inflation and declining GDP growth, which from 1978 to 1991 averaged only 3.8% (source: World Bank). This poorer performance has been assigned to a number of factors, including the Moi administration policies that, from 1978 until 2002, “pursued redistribution and political power at the expense of private investment... (that) was paralys(ed) by a combination of increased corruption, policy uncertainty ... and deteriorating relationship with donors” (Mwenga & Ndung’u, 2008, p.329). The advent of multi-party politics in 1991 introduced a period of generally-stalled political and economic reforms (Mwenga & Ngung’u, 2008). Financial sector
growth stagnated with private credit remaining broadly static at about 30% of GDP and investment levels “almost stagnating” (Ngugi, 2000).

In the financial sector, this period was characterized by weak credit fundamentals and political interference and abuse (Ndung’u & Ngugi, 1999). This includes the “Goldenberg Scandal” when over 10% of GDP was lost through corruption at high levels of government (Wrong, 2010) and a series of banking scandals and failures where, between 1985 and 1989, 15% of the financial system liabilities were insolvent and a number of institutions failed or required interventions (Reinhart & Rogoff, 2009).

Given the broader weakening macroeconomic fundamentals, reforms were made under pressure from the World Bank. This included making stabilization and structural adjustment programs in the financial, agricultural and industrial sectors aimed at introducing market-orientated reforms. Such reforms were a condition for the World Bank extending the 1989 Financial Sector Adjustment Credit (FSAC) and the accompanying IMF standby facility.

In the financial sector, the exchange rate was gradually floated and interest rates were deregulated. The Banking Act was upgraded in 1985, 1988 and 1989. In 1986, the Deposit Insurance Fund was established. From 1988 onwards, government-dominated banks were privatized. This included non-specialist banks such as Kenya Commercial Bank (Bowbridge, 1998), and specialist financial institutions, such as the Development Finance Corporation. Some institutions remained under government control. The World Bank imposed strengthening of the legislative mandates and capacity of the regulatory department of the Central Bank of Kenya. There was restructuring of nine insolvent institutions out of an identified 28 institutions with severe problems (although there was a planned restructuring of a further ten institutions which was never implemented) (World Bank, 1992; Ndung’u & Ngugi, 1999).

The results of the financial reforms and privatizations were generally considered to be disappointing with little impact on savings mobilization and resource allocation within the economy (World Bank, 1992; Ndung’u & Ngugi, 1999). In 1992 Kenya suffered a banking crisis (Honohan & Laeven, 2005; Reinhart & Rogoff, 2009). The 1992 World Bank report on the reform program in the financial sector concluded that it was “Overall ... unsatisfactory” and – as
discussed in Chapter 2 in relation to “augmented” liberalization – assigned these failures to shortcomings in implementation, including sequencing and political infeasibility.

However, there was an alternative explanation that focuses on structural issues including “failure(s) to achieve macro-stability and strengthen the capital base” (Ngugi, 2000, p.70). Ndung’u et al. (1999) found that these disappointing results were due to

   inherent structural weakness in the economy ... (that) has limited the transmission channels and mechanisms and dynamism in the economy (and that) the reform program replicated to a large extent the suggested sequencing ... however, financial liberalization was implemented before attaining macroeconomic stability. As such, the reform process was characterized by macro-instability (p.489).

This included excessive fiscal and monetary expansion that fuelled inflation and excessive liquidity within the financial system.

Today (2014) the financial system remains limited in its depth and functioning with the financial system is fragmented, with many small banks servicing niche markets and limited the outreach (Beck et al., 2011).

In 2007, the Government of Kenya published “Kenya Vision 2030” (Government of the Republic of Kenya, 2007) which sought to set out a long-term national planning strategy for Kenya’s economic, political and social development. President Mwai Kibaki proclaimed a plan for “accelerating the transformation of our country into a rapidly industrializing middle-income country by the year 2030”. (Government of the Republic of Kenya, 2007) Economically, it aims to develop sectors where Kenya has competitive advantages, including high-value agriculture, manufactured goods and tourism, supported by a program of public investments and a sound and accountable political system. Important in the goals set out in the “Kenya Vision 2030” is the expansion of financial access to mobilize domestic savings (Collier & Ndung’u, 2010) to improve stability, enhance efficiency and expand access to Kenyan households (Beck et al., 2010). In reality, however, this vision was impeded by the post-election violence between different ethnic groups in late 2007 and 2008. It was compounded by drought and poor agricultural production, threat of famine in Kenya’s remote eastern regions, and security tensions on its eastern borders.
6.1.3 Institutions Serving the Poor

Prior to the mid-1980s, financial access in Kenya was very limited and the majority of the population used informal financial services. Informal financial services and institutions have a deep-rooted history in Kenya and their presence was noted in the colonial period (Colony and Protectorate of Kenya, 1950). The International Labour Organization (ILO) study of informal employment in 1972 noted that it was well-established at that time (ILO, 1972). Informal finance is often linked to agriculture, such as part of marketing or distribution cooperatives or cooperative groups in trading, transport (matatus) and teaching (Johnston, 2004).

Today, such informal and small scale self-help groups remain very important, with current estimates of between 3,000 to 5,000 unregulated saving and credit cooperative societies (SACCOs) (Central Bank of Kenya, 2010) and they remain the dominant provider of financial services to poor households (Financial Sector Deepening Program, 2009).

However, there were important exceptions to this. Firstly, there was the presence of cooperative banks that from the colonial period onwards were important institutions for the poor, particularly for agricultural finance, and were incorporated and sponsored by government policy. Indeed, from the colonial period on, the issue of moneylending and agricultural credit constraints to productivity were apparent (Atieno, 1994), and policy formulation focused on problems that are the same as those addressed by the present-day expansion of financial access. For example, policy papers in the 1950s discuss the need for “granting and recovery of loans on reasonable terms to replace the widespread and pernicious effect of the general employment by the community of the private moneylender” whilst seeking to ensure “all possible safeguards against establishing conditions of general and hopeless indebtedness… which result in … living permanently in advance of their income and under the continual fear of foreclosure” (Colony and Protectorate of Kenya, 1950, pp.1-2). Subsequently, cooperative credit schemes were included in economic plans for 1954, 1965, 1966-74 and 1970. Plans included establishing organizations to execute government-led credit policy through cooperatives, such as the African Land Development Board, the Agricultural Corporation and the Cooperative Bank of Kenya. In 1975, the Central Bank of Kenya established minimum lending percentages to agriculture for regulated banks.
Important aspects of policy included both government bureaucracy and the establishment of special credit organizations.

However, the expansion of credit was disappointing (Atieno, 1994). In 1973, the World Bank offered policy support to such credit schemes, assigning the cause for “missing markets” in agricultural credit as the requirements for land collateral and non-farm sources of income that could not be met (World Bank, 1992). However, these institutions also suffered from many problems, including inefficient and corrupt administration, poor lending practices and lending for non-policy purposes. There were institutional failures and widespread bad debts (Atieno, 1994).

In addition, there was also the case of the Post Office Savings Bank, which was established in 1910. It continued after independence under the Kenya Post Office Savings Bank Act that limited it to being a savings-only institution with no lending provision. It has been highly successful in mobilizing deposits as it uses its extensive national network of post offices as agents for deposit-taking. In 1990 the Post Office Savings Bank established an affiliate, Post Bank Credit, but this was closed down in 1993 after a large overdraft to a politically-connected borrower was not serviced. It appears that the affiliate was used fraudulently as a conduit for channelling funds from the National Social Security Fund into campaigning for the 1992 elections in the Goldenberg Scandal (Bowbridge, 1998). Nevertheless, it remained the “single most important institution” for low-income clients until the mid-2000s, as it provided a nationwide network and low cost transactions (Financial Sector Deepening Program, 2009). However, it has not been competitive in mobile banking and has not grown as quickly as microfinance-orientated banks and consequently has declined in relative importance with a fall in its share of household deposits from 2006 to 2009 ranging from 5.6% to 2.5% per annum (Financial Sector Deepening Kenya, 2009).

In the private sector, non-banking financial institutions have also been important in serving the poor, especially from the 1980s onwards. Non-banking financial institutions engage in a variety of activities including hire purchase, leasing, mortgages and trade financing. They are not allowed to offer checking accounts, but offer interest-bearing deposit accounts which are also their primary source of funding. In the 1980s regulatory changes were enacted, including low capital requirements and limited interest rate controls which stimulated a move of deposits from banks to non-banking financial institutions (Ngugi, 2000). The non-banking financial institutions
expanded rapidly with assets tripling between 1980 and 1985 (World Bank 1992) with expansion concentrated in unsecured and longer term (relative to banks) lending to the small and medium-sized enterprises.

However, these institutions were weak and poorly managed and a significant number of non-banking financial institutions suffered from insolvency problems. Twenty-one institutions failed between 1984 and 1996, including 11 in 1993 alone (Upanishida, 2011). Problems resulted from weak asset quality in lending portfolios and inadequate capital bases. The inadequate capital bases related directly to the lower regulatory requirements for these types of institutions that had been established to encourage their establishment and growth. The poor asset quality was caused by a number of factors, including inadequate credit analysis, excessive risk concentration and weak and ineffectively enforced regulation. The latter allowed unsecured and excessive insider lending and other persistent violations of regulations. Insiders included senior politicians such as government ministers and also featured outright fraud relating to the 1992 elections where pre-shipment export finance and export compensation facilities at the Central Bank of Kenya were used to fraudulently extract funds from the institutions. The most notorious of these fraudulent schemes was the previously mentioned Goldenberg Scandal.

Other asset quality issues arose from poor lending practises such as inadequate evaluation, documentation and collateral. Given the low regulatory requirements for capital and low levels of enforcement, relatively small levels of asset impairment created insolvency. The World Bank comments that “interest liberalization ... created over-competition ...and encouraged many weak financial institutions to invest in riskier assets, thereby adding to their already severe financial difficulties” (World Bank, 1992, pp. v-vi). For example, Rural Urban Credit Finance had extended largely unsecured loans to slum dwellers to purchase *matatu* (minibuses), plots of land and real estate. Other institutions suffered from asset concentrations or multiple pledging of collateral (Bowbridge, 1998). Such institutions were amongst those that failed.

Liquidity was also mismanaged, with issues such as investment in illiquid assets (mainly real estate and fixed assets), excessive depositor concentration and maturity mismatches.
Loopholes in accounting contributed to institutions obscuring their real financial situation such as bolstering revenues through the continued accrual of interest on non-performing loans or inappropriate revaluation of assets (Upadhyaya, 2011).

The failures exposed the poor standard of regulation and supervision. The World Bank comments that the proliferation of institutions outstripped the capacity of the Central Bank of Kenya and resulted in falling supervisory standards (World Bank, 1992). In addition, the influence of senior politicians in ensuring regulations were circumnavigated was extensive (Wrong, 2010).

Following these institutional failures in the non-banking financial institutions, their regulations were gradually brought into line with regulated banks, including capital and cash ratios and interest rate restrictions. In 1994 all non-banking financial institutions were required by the Central Bank of Kenya to convert into regulated banks or to revert to their “true status” as non-banking financial institutions (Central Bank of Kenya, 1996). Changes included outlawing unsecured insider lending, restricting investment in real estate, equity and speculative assets and giving powers to the Central Bank of Kenya to remove and appoint managers when the institution was not being run appropriately. Overall, the debacle of the non-banking financial institutions created deep distrust in the formal banking system that, as will be discussed later, remains prevalent today.

Unregulated microfinance-orientated institutions started to be formed from the 1980s onwards, but proliferated in the 1990s and 2000s in response to the non-banking financial institutions failures. They became more widely trusted institutions due to their stronger integrity and social mission. The majority of microfinance-orientated institutions started as charitable or social self-help organizations, typically organized by community groups, NGOs or church organizations and were usually small and with localized operations.

This is the case for the three main deposit-taking microfinance institutions (DTMs) who have origins as charitable or church-based organizations. For example, Kenya Women’ Finance Trust (KWFT) started its operation in 1981 with a group of women professionals who sought to set up services for women entrepreneurs. The Small and Medium Enterprise Projects (SMEP) was started in 1999 by the National Council of Churches of Kenya (NCCK) to assist slum dwellers.
who needed financial aid to buy food and then later developed into helping in business enterprises for employment (source: interview material & websites).

Prior to 2006, microfinance-orientated institutions were unregulated. In 2006 the Microfinance Act initiated regulation of deposit-taking microfinance-orientated institutions (DTMs), including licensing and supervision by the Central Bank of Kenya. The Act became operational in 2008. As at the close of 2012, there were three microfinance-orientated institutions that have transformed into deposit-taking microfinance institutions and five new deposit-taking microfinance institutions. Institutions which transformed to deposit-taking microfinance institutions (DTMs) from unregulated microfinance-orientated institutions since the 2008 legislation are the Kenya Women’s Finance Trust (KWFT), Faulu (Swahili for “success”) and SMEP. These are all participated in the fieldwork interviews. The five new start-ups provide relatively little public information relating to their ownership and funding structures but are wholly commercial organizations (source: interview).

Regulated banks have also been involved in low-income markets. Prior to 2005, their loan portfolios were heavily concentrated in low-risk lending such as wealthy private customers and in secured, short-term lending. In the 1980s, foreign banks, such as Barclays, expanded into rural areas with the goal of mobilizing rural deposits as a source of low-cost funding for high yielding loans and investments in urban areas. The operations did not appear to be profitable and there was retrenchment back into urban and richer client bases.

Subsequently, from the mid-2000s onwards regulated banks started to “downscale” into microfinance markets and are now dominant in the microfinance sector. This was achieved by two types of entrants. Firstly, there were new entrants, notably Equity Bank. Equity Bank’s operations date from 1993, but the bank expanded hugely in the 2000s to become the dominant institution in the microfinance sector. K-Rep Bank was established in 1999 but, following strong growth up to 2005, is now a second-tier player whose growth was impacted following senior management fraud in the mid-2000s. Secondly, entrants into the market emerged because established banks who saw the success of new entrants like Equity Bank, took a strategic decision to downscale into the microfinance sector. This included the Cooperative Bank and Family Bank, who are both well-established banks with national operations and have origins as cooperative banks or building societies, dating back to 1965 and 1984 respectively.
In 2009, the Central Bank of Kenya established a defined category of microfinance-orientated banks (MFOB). This currently includes Equity Bank, Cooperative Bank, Family Bank and K-Rep. Microfinance-orientated banks are defined as large, regulated banks whose business is concentrated in microfinance and are regulated as banks under the Banking Acts. Microfinance-orientated banks have, as will be discussed, accounted for over 80% of growth in the sector between 2006 and 2011 (Financial Sector Deepening Program, 2009, 2013).

6.1.4 Current Access to Finance

There are now a wide variety of institutions active in Kenyan microfinance. They include microfinance-orientated banks, deposit-taking microfinance institutions, unregulated microfinance-orientated institutions, the Post Office and informal savings and credit cooperative societies. In addition, mobile banking has become very widely used for money transfer services.

Nevertheless, access levels remain limited. The Financial Sector Deepening Program 2009 and 2013 household surveys provide data summarised in Table 12. Although the total percentage of the population using formal finance has increased, usage is concentrated in mobile banking and regulated banks. Mobile banking is very widely used in Kenya, mainly for transactions, but not for savings (Financial Sector Deepening Program, 2013). Microfinance-orientated institutions had increased market share from 2006 to 2009, but stagnated thereafter. Most importantly, informal finance, in both registered saving and credit cooperative societies (SACCOs) and informal arrangements, predominate.

Table 12. Use of financial services (2006-2013).

<table>
<thead>
<tr>
<th>Type of service</th>
<th>2006</th>
<th>2009</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulated banks</td>
<td>13.5</td>
<td>17.1</td>
<td>29.2</td>
</tr>
<tr>
<td>Unregulated MFIs</td>
<td>1.7</td>
<td>3.1</td>
<td>3.5</td>
</tr>
<tr>
<td>M-PESA</td>
<td>0.0</td>
<td>28.4</td>
<td>61.6</td>
</tr>
</tbody>
</table>
The Financial Sector Deepening Program household surveys of 2009 and 2013 report that access remains concentrated in certain groups. There is an urban and rural divide. In 2009, 17.8% of the rural population had access to formal services, compared to 40.3% of the urban population. By 2013, 25.2% of the rural population had access to formal services compared to 46.6% of the urban population. There is differential access between provinces with high levels of access in Nairobi and Central, but much lower usage in poorer and rural areas, such as the Eastern provinces and the Rift Valley. Higher proportions of those with higher incomes and levels of education had access to formal financial services as opposed to those who were poorer and without education. For example, 60% of those with primary education have no access to financial services, compared to 13% of people educated at secondary school (Financial Sector Deepening Program, 2013).

As discussed above, an important aspect of the expansion of financial access in Kenya has been the role of mobile banking, most notably M-PESA and its similar but less dominant competitor services. M-PESA was started in 2007 as a money transfer system by Kenya’s leading mobile telephone company, Safari.com, in partnership with Vodafone and the Government.

It allows money to be transferred within social networks and to MFIs via mobile phones. As well as personal ownership of phones, it can also be accessed through agents – typically based in “kiosks” or small shops – who own the phone and use it to collect or distribute cash and then record the transaction via the mobile device. Because of its reliance on access to - but not necessarily ownership of - a mobile phone it is easy and convenient to use relative to accessing financial services at banks’ physical premises. This is particularly the case in remote areas or urban areas – such as slums – that lack proximity to banks’ physical premises. Costs are also low relative to regulated banking services. Because of these advantages to customers, mobile banking

<p>| | | | |</p>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Post Office</strong></td>
<td>5.6</td>
<td>2.2</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>SACCOs</strong></td>
<td>13.1</td>
<td>8.3</td>
<td>9.1</td>
</tr>
<tr>
<td><strong>Informal Groups</strong></td>
<td>39.1</td>
<td>29.5</td>
<td>27.7</td>
</tr>
</tbody>
</table>

has proved very popular in Kenya and usage – as reflected in the financial access surveys – is widespread.

However, although originally a money transfer system, M-PESA was increasingly used for other services including loans and deposits because the clients have a “electronic wallet” at M-PESA. This effectively acts as a bank account because debit and credit balances are permitted. Further innovations have also been made – for example, M-PESA transactions can be linked directly to bank accounts in regulated banking institutions and the use of automated teller machines in partnership with Equity Bank (CGAP, 2014). These uses of M-PESA have raised concerns because M-PESA and its agents were unregulated but are conducting effectively regulated businesses such as holding client monies and payment systems.

The Central Bank of Kenya established stronger regulations for the control and management of agents and mobile banking through new legislation in 2008 and 2009 through an amendment to the Banking Act 2003. The legislation introduced licensing for both regulated institutions acting through agents and for individual agents. Regulated institutions remain liable for any negligence or fraud by agents. Technical standards were set for systems specifications. Mobile banking was also brought within the scope of the National Payments System Bill in 2012 (CGAP, 2010b; CBK, 2012).

However, the issue of the holding of client monies and the use of related interest remains unresolved. Client monies are now held in trust accounts at commercial banks. However, they are pooled across all clients and interest on monies is not allocated to clients. Such arrangements are below “best practice” standards and are likely to need further improvements in the future. (CGAP, 2010b, 2014). There is further discussion of M-PESA in Chapter 7.
6.2 The Impact on the Balance Sheet of Microfinance-Orientated Institutions: Assets

The financial fragility or stability of an institution is dependent upon its balance sheet structure. This and the next section discusses the fieldwork findings in relation to the changes that have occurred in the asset and liability structures of microfinance-orientated institutions as financial access has expanded. This section examines assets. The following section discusses liabilities.

6.2.1 The Growth in Scale and Concentration of Lending

One of the most fundamental changes that have occurred within microfinance-orientated institutions as financial access has expanded has been increased scale. In Kenya, there has been strong growth in microfinance assets – as represented by gross loans – since 2006. Outstanding loans in the sector have expanded from from Khs 37 trillion in 2006 to Khs 121 trillion by 2011 in real (inflation-adjusted) terms – a more than threefold increase. This is illustrated in Figures 10 and 11 below.

37 All figures in Chapters 6 and 7 are in real terms (i.e. inflation-adjusted) unless otherwise stated. Figures have been rebased using the index data from Figure 9. 2006 has been taken as the base index after which figures have been restated using cumulative inflation up to 2011.
Figure 10. Gross loans (2006 to 2011).

Source: Financial statements elaborated by the author (inflation-adjusted figures).

Figure 11. Growth rates in gross loans (2006-2011; 2006 Baseline)
Source: Financial statements elaborated by the author (inflation-adjusted figures).

As illustrated in Table 13, growth has been concentrated in microfinance-orientated banks. They account for Khs 77.5 billion of the growth in real terms, or 92.4% of the growth and experienced growth rates in real terms of 343% between 2006 and 2011. By 2011, the market share of the microfinance-orientated banks was 90.2%.

By contrast, the growth of deposit-taking microfinance institutions and unregulated microfinance institutions has been relatively muted.

Deposit-taking microfinance institutions experienced strong growth until 2009, but then growth slowed significantly. Between 2006 and 2011 deposit-taking microfinance institutions added Khs 5.8 billion in real terms in loans but market share shrank from 11.4% in 2006 to 8.3% in 2011.

Unregulated microfinance institutions grew by a small Khs 0.5 billion in real terms between 2006 and 2008 and market share for unregulated microfinance institutions had fallen from 3.3% in 2006 to a mere 1.5% by 2011. Unregulated microfinance institutions have been unable to compete with deposit-taking microfinance institutions and microfinance-orientated banks.

Table 13 shows the pattern of growth by individual institution. Two institutions – Cooperative Bank and Equity Bank – account for 78.2% of the 2011 balances and 83.1% of the growth of the total sector. Equity Bank in particular has experienced huge growth rates in loans (and, as will be
discussed further, in deposits and funding) with a growth rate of 725% from 2006 to 2011 and, by 2011, a 44.3% market share.

Similarly, within the deposit-taking microfinance institution sector, the dominant institution is KWFT, which expanded loans from Khs 2.2 trillion to Khs 7.1 billion from 2006 to 2011 with a 5.9% market share, thus becoming the fourth largest institution in the market.

Unregulated microfinance institutions loan balances are all individually trivial at the institutional level with, in 2011, none exceeding a 0.3% market share and none having a loan portfolio that exceeds half a billion shillings.

Table 13 Gross loans (2006-2011) by individual institutions with market share and growth rates.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>MF Orientated Banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative Bank</td>
<td>18,190</td>
<td>23,589</td>
<td>28,216</td>
<td>31,705</td>
<td>42,672</td>
<td>41,092</td>
<td>33.9%</td>
</tr>
<tr>
<td>Equity Bank</td>
<td>7,410</td>
<td>15,374</td>
<td>31,989</td>
<td>42,859</td>
<td>47,496</td>
<td>53,720</td>
<td>44.3%</td>
</tr>
<tr>
<td>Family Bank</td>
<td>2,573</td>
<td>3,934</td>
<td>4,908</td>
<td>5,785</td>
<td>7,376</td>
<td>10,350</td>
<td>8.5%</td>
</tr>
<tr>
<td>K-Rep</td>
<td>3,768</td>
<td>4,977</td>
<td>5,160</td>
<td>4,066</td>
<td>3,898</td>
<td>4,280</td>
<td>3.5%</td>
</tr>
<tr>
<td>Sub Total MFOB</td>
<td>31,940</td>
<td>47,875</td>
<td>70,272</td>
<td>84,416</td>
<td>101,443</td>
<td>109,443</td>
<td>90.2%</td>
</tr>
<tr>
<td>DTM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KWFT</td>
<td>2,281</td>
<td>3,674</td>
<td>5,578</td>
<td>7,675</td>
<td>8,402</td>
<td>7,098</td>
<td>5.9%</td>
</tr>
<tr>
<td>Faulu</td>
<td>1,521</td>
<td>1,674</td>
<td>2,449</td>
<td>2,266</td>
<td>1,842</td>
<td>2,052</td>
<td>1.7%</td>
</tr>
<tr>
<td>SMEP</td>
<td>458</td>
<td>585</td>
<td>734</td>
<td>708</td>
<td>854</td>
<td>916</td>
<td>0.8%</td>
</tr>
<tr>
<td>Sub Total DTM</td>
<td>4,260</td>
<td>5,933</td>
<td>8,762</td>
<td>10,649</td>
<td>11,098</td>
<td>10,065</td>
<td>8.3%</td>
</tr>
<tr>
<td>Non Regulated MFIs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAWDEP</td>
<td>488</td>
<td>687</td>
<td>365</td>
<td>469</td>
<td>454</td>
<td>402</td>
<td>0.3%</td>
</tr>
<tr>
<td>Jamii Bora</td>
<td>-</td>
<td>371</td>
<td>557</td>
<td>547</td>
<td>-</td>
<td>-</td>
<td>0.0%</td>
</tr>
<tr>
<td>KADET</td>
<td>267</td>
<td>396</td>
<td>313</td>
<td>353</td>
<td>344</td>
<td>228</td>
<td>0.2%</td>
</tr>
<tr>
<td>ECLOF Kenya</td>
<td>225</td>
<td>323</td>
<td>206</td>
<td>231</td>
<td>245</td>
<td>259</td>
<td>0.2%</td>
</tr>
</tbody>
</table>
### 6.2.2 The Impact on Credit Quality

Critical to the impact on asset structures of lending is credit quality. Credit quality is indicated by portfolio-at-risk.

Portfolio-at-risk, as reported by institutions in their financial statements from 2006 to 2011, is detailed in Figure 13 and Table 14 respectively. Portfolio-at-risk was at a high level from 2006 to 2009 with a sector average of 14.4%. From 2010 onwards portfolio-at-risk declined – indicating improving asset quality – with a sector average of 6.4% in 2011. The reasons for these changes in portfolio-at-risk include macroeconomic issues (notably inflation), agricultural events and political events. They are discussed in more detail below.

Portfolio-at-risk varies between institution types with microfinance-orientated banks consistently reporting the highest portfolio-at-risk, followed by deposit-taking microfinance institutions, and then unregulated microfinance institutions. This can relate to higher credit risk and related provision and losses but many interviewees commented that credit quality was better at microfinance-orientated banks because of their capacity to attract better quality customers, including wealthier customers, and because of their greater institutional capacity in relation to credit risk management.

Instead, it was commented that this higher portfolio-at-risk was due to the underreporting of portfolio-at-risk by institutions relative to regulatory provisioning requirements, especially in...
unregulated institutions such as unregulated microfinance institutions. This is discussed further in relation to institutional capacity and regulation below.

Figure 12. Portfolio-at-risk (2006-2011).
Portfolio-at-risk also varies between individual institutions as illustrated in Table 14. Within microfinance-orientated banks, different institutions reported very different levels of portfolio-at-risk within the same year. Equity Bank and Cooperative Bank reported 30 day portfolio-at-risk in 2007 of 8.1% and 22.7% and, in 2011, 4.4% and 6.3% respectively.

Within unregulated microfinance institutions, some bodies – such as Jami Bora, PAWDEP or ECLOF – reported zero portfolio-at-risk in some years whilst other unregulated microfinance institutions – such as BIMAS or Opportunity Kenya – consistently reported high portfolio-at-risk levels of up to 23.4%.

Source: Microfinance Information Exchange and financial statements elaborated by the author.
Table 14. Portfolio-at-risk (2006-2011) by individual institutions and with weighted average for types and all institutions.

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>MF Orientated Banks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative Bank (Adj)</td>
<td>14.00</td>
<td>22.70</td>
<td>17.83</td>
<td>10.53</td>
<td>6.44</td>
<td>6.30</td>
</tr>
<tr>
<td>Equity Bank</td>
<td>12.19</td>
<td>8.11</td>
<td>8.57</td>
<td>18.19</td>
<td>6.20</td>
<td>4.44</td>
</tr>
<tr>
<td>Family Bank</td>
<td>14.00</td>
<td>13.16</td>
<td>7.93</td>
<td>6.42</td>
<td>17.77</td>
<td>17.16</td>
</tr>
<tr>
<td>K-Rep</td>
<td>5.46</td>
<td>12.57</td>
<td>22.33</td>
<td>26.74</td>
<td>23.72</td>
<td>6.27</td>
</tr>
<tr>
<td>Sub Total MFOB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11.41</td>
<td>14.14</td>
<td>14.16</td>
<td>15.47</td>
<td>13.53</td>
<td>8.54</td>
</tr>
<tr>
<td>DTMs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KWFT</td>
<td>3.62</td>
<td>1.23</td>
<td>2.38</td>
<td>1.31</td>
<td>15.53</td>
<td>6.25</td>
</tr>
<tr>
<td>Faulu</td>
<td>3.20</td>
<td>2.00</td>
<td>3.43</td>
<td>8.60</td>
<td>10.82</td>
<td>5.14</td>
</tr>
<tr>
<td>SMEP</td>
<td>12.34</td>
<td>24.02</td>
<td>16.40</td>
<td>21.30</td>
<td>13.89</td>
<td>8.88</td>
</tr>
<tr>
<td>Sub Total DTMs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6.39</td>
<td>9.08</td>
<td>7.40</td>
<td>10.40</td>
<td>13.41</td>
<td>6.76</td>
</tr>
<tr>
<td>Non Regulated MFIs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAWDEP</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>13.43</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Jamii Bora</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.62</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>KADET</td>
<td>7.64</td>
<td>17.17</td>
<td>5.67</td>
<td>9.49</td>
<td>6.65</td>
<td>4.27</td>
</tr>
<tr>
<td>ECOF Kenya</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>8.08</td>
<td>14.03</td>
<td>9.53</td>
</tr>
<tr>
<td>Opportunity Kenya</td>
<td>8.00</td>
<td>7.82</td>
<td>23.47</td>
<td>2.11</td>
<td>1.53</td>
<td>1.33</td>
</tr>
<tr>
<td>BIMAS</td>
<td>16.57</td>
<td>7.89</td>
<td>9.14</td>
<td>12.01</td>
<td>8.84</td>
<td>6.90</td>
</tr>
<tr>
<td>Juhudi Kilimo</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>12.09</td>
<td>3.90</td>
<td>0.99</td>
</tr>
<tr>
<td>Sub Total MFIs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6.03</td>
<td>6.20</td>
<td>6.90</td>
<td>8.58</td>
<td>5.55</td>
<td>4.07</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>11.37</td>
<td>14.41</td>
<td>12.03</td>
<td>13.59</td>
<td>8.44</td>
<td>6.38</td>
</tr>
</tbody>
</table>

Source: Microfinance Information Exchange and financial statements elaborated by the author.

The reasons for variations in portfolio-at-risk were explored in interviews with senior managers at microfinance-orientated institutions and regulators. Most significantly for microfinance-orientated institutions, interviewees reported that credit risk relates to general poverty, as in the microfinance sector the typical customer is poor. This is unsurprising as it reflects the fundamental risk in microfinance lending – that its lending is to those whose credit risk is poor because they have low and volatile incomes and because they have no substantial assets to offer as collateral.

Interviewees reported that credit quality was related to macroeconomic conditions, again a fundamental credit risk. This exposure needs to be considered in the context of the exposure of the poor to macroeconomic events. Some macroeconomic events do not impact on the poor and so were not considered relevant by interviewees. For example, some interviewees commented that the poor were sheltered from macroeconomic cycles because they are excluded from formal labour markets and so are not affected when unemployment rises in the formal sector.
However other macroeconomic risks have differential impacts on the poor and consequently are causes of credit losses at microfinance-orientated institutions. In particular, inflation was considered a key risk by the practitioners interviewed. Kenyan consumer price inflation accelerated to a peak of 16% in 2008 and 2009, and then fell back before rising again to a new peak of 19% in 2011 (source: KNBS). Inflation was concentrated in basic goods, including food and fuel that had inflation rates of 25% in 2010 and 2011 respectively. Since these goods make up a large proportion of spending for the poor this created an inflation rate for the poor of 20%, compared to only 10% for the middle classes (Fengler, 2011).

In addition, the Central Bank of Kenya raised interest rates in order to use monetary policy to control inflation and this increased loan interest rates as microfinance loans are benchmarked against Central Bank of Kenya base rates. In 2011 the average rate charged to customers in microfinance was 32%.

Given the necessity of buying food and fuel regardless of income and the increases in interest rates, it is unsurprising that financial institutions reported inflation and interest rate rises as causes of increasing bad debts as their customers had reduced residual income for debt servicing combined with increased debt servicing levels.

Credit quality was linked by interviewees to business cycles and risks in specific sectors. The agricultural sector was identified as a sector where such events and cycles were important risk factors in credit quality. Between 2006 and 2011 there were significant problems in agricultural conditions with adverse conditions, including flooding and drought, in different parts of the country. Credit loses resulted and were concentrated in institutions with high proportions of agricultural lending or whose positions were concentrated in rural areas in Kenya where agriculture is the main economic activity. Agricultural risk also created high correlation risk across lenders within a given portfolio – that is to say, if one farmer is impacted by adverse

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38 For inflation to impact on the repayment ability of households, it has to rise faster than wage inflation – that is there is a decline in real wages. Data for this period that would provide an analysis of the real wages of poor households in this period is not available. However, given that the inflation was in fuel and foods and was very rapid and at a time of economic contraction, it was unlikely to have been accompanied by wage inflation that matched or exceeded it. Overall, it is reasonable to assume that real wages did indeed fall, as per the perceptions of practitioners.

39 Source: Equity Bank Financial Statements 2011, Chairman’s Statement.
weather conditions, the majority are likely to be impacted. In addition, agricultural prices and supplies can be volatile and impacted not only by weather, but also by business and political events. For example, one MFI, Juhudi Kilimo, specializes in agricultural finance, including value-chain financing. They have a large portfolio in the dairy business, including both primary dairy cow production and processing plants. However, in 2009 and 2010, the business expansion, combined with competitors who were replicating their successes, resulted in a glut of milk and prices fell. Portfolio-at-risk rose as a result. Subsequent improvements and diversification of marketing has improved these problems.

Some microfinance-orientated institutions have sought to diversify regionally or through greater diversify of agricultural products in order to manage this risk. However – and as will be discussed below – many have also withdrawn from agricultural financing into lower risk, higher return sectors.

Interviewees identified political risk as an important factor in credit quality. In Kenya, there has been social unrest during elections. All institutions reported significant credit losses and heightened portfolio risk during the political violence following contested elections in 2007 and 2008. The sector saw heightened portfolio-at-risk in 2007 to 2009, which peaked at 13.6%. Customers were affected by the destruction of their businesses and farms and by forced relocation, and were often unable to be contacted by the institutions from which they had borrowed, making management of bad debts impossible. In addition, some institutions reported that they believed some customers took advantage of the problems to cease payment. Violence and intimidation was focused in geographical areas including the Nairobi slums and the Rift Valley, and institutions with portfolio concentrations in these areas were differentially impacted. Improving political stability also saw a significantly improved portfolio-at-risk for the majority of institutions in 2010 and 2011 because political stability was re-established.

Finally, it should be noted that factors such as inflation as well as political or agricultural risk are common to institutions and create a further potential risk from a systemic perspective: namely, correlation risk. Correlation risk across portfolios of institutions exists where the latter have similar portfolios that are subject to similar risks. For example, institutions may all be exposed to risk from macroeconomic problems as well as to specific risks such as political or agricultural
threats. Such similar portfolios mean that bad debts across the industry rise together and are a source of coordinated financial fragility. This will be discussed further in Chapter 7.

6.3 The Impact on the Balance Sheet of Microfinance-orientated Institutions: Liabilities

As a financial institution expands its lending portfolio, it needs to expand its funding sources or liabilities in parallel. Funding can be sourced in many forms, including deposits, equity and debt. Deposits are raised from customers. They are considered the best form of funding because they are cheap and stable.

Equity and debt can be sourced from different types of investors. In Kenya, this has included public and private investors. Private profit-seeking investors have provided both debt and equity financing (although debt has predominated). Other investors have been important, including SRIs, NGOs, national governments and international finance institutions. In Kenya there are also a number of dedicated government funds that channel monies via microfinance institutions for poverty alleviation programs to targeted groups such as poor women, children or young people.

From the perspective of the institution, funding sources can carry liquidity and foreign exchange (FX) risk. Debt can be procyclical or subject to cycles in investor sentiment. This can create liquidity risk when new or replacement (rollover risk) sources of financing are needed. Debt can be denominated in foreign currency giving rise to foreign exchange risk.

These risks must be quantified and managed as part of the internal control and management processes of institutions. This includes “hedging” risk, whereby risk is mitigated by offsetting instruments. In developed countries such hedging would be completed largely through the use of derivative markets such as in foreign exchange or interest rate futures, options and swaps. However, in developing countries the immature financial markets heighten risks and make risk management difficult. Liquidity risk is heightened compared to developed markets because of shallower capital and interbank markets and limited maturity of instruments. Capital flows – especially from foreign investors – can be highly pro-cyclical. Foreign exchange markets can be
illiquid and volatile. Hedging instruments – such as interest rates futures, options and swaps – are not widely available. These challenges are discussed further below.

### 6.3.1 Equity Financing

Along with deposits, equity\(^{40}\) is a preferred source\(^ {41}\) of financing for a financial institution. It has a number of advantages, including stability due to its perpetual nature and its flexible “cost” in the form of dividends that are entirely variable in relation to profits and corporate goals. In addition, and very importantly, it contributes to the capital base of an institution.

In Kenya microfinance equity has been sought from international and domestic sources but investor appetite has been very limited. Where equity financing has been available, it is highly concentrated by institutional type and individual institution.

As illustrated in Figure 14, equity capital is almost entirely held by microfinance-orientated banks with minimal capital in deposit-taking microfinance institutions and unregulated microfinance institutions. In 2011, 95% of equity was in microfinance-orientated banks, 4% in deposit-taking microfinance institutions and less than 1% in unregulated microfinance institutions.

Furthermore, since 2006 only microfinance-orientated banks have experienced any material growth in their capital with a 416% growth rate compared to only a 150% increase in deposit-taking microfinance institutions, and a decline of 75% in unregulated microfinance institutions.

\(^{40}\) Equity is composed of share capital and retained earnings. Share capital is sourced when shares are issued and cash is paid into the institution. The buyer receives the shares. This can occur privately – a private placement – or through markets such as via stock exchanges. An initial public offering is the first time that a stock is listed on a stock exchange. It can raise share capital for an institution and this is known as a primary issue. It can also be a sale of previously privately-held shares and the proceeds go to the seller of the shares, not the institution. Retained earnings are the accumulated profits or losses of the institution. Retained earnings are issued after dividend payments to shareholders. If net profits are made and retained (that is not distributed as dividends), earnings increase. If net losses are made, they decline.

\(^{41}\) There is also considered to be an optimal level, as excessive capital can then lower returns on capital. However, this is more typical in large international financial institutions where return on equity is an important measure of performance from a shareholder’s perspective. In fact most banks in developing economies hold much higher levels of capital than their developed country counterparts. For example, the total capital to total RWA for Kenyan banks is 22.9% (Central Bank of Kenya, September 2013). In Kenya such high ratios have been encouraged by the Central Bank of Kenya according to Central Bank of Kenya interviews.
As will be discussed later, this is due to microfinance-orientated banks sourcing new capital from private investors. Deposit-taking microfinance institutions and unregulated microfinance institutions have sourced capital from retained earnings. For unregulated microfinance institutions the decline in capital is due to the losses being made.

Figure 13. Equity capital (2006-2011).

For microfinance-orientated banks, equity capital had increased between 2006 and 2011 by more than four times in real terms, from Khs 11.9 billion to Khs 39.6 billion (59.4 billion in nominal terms). Of this, Khs 12.4 billion in real terms (or Khs 19.7 billion in nominal terms) or 41% had been raised through primary issuances, with the remaining capital accumulating through retained earnings. Capital ratios for all microfinance-orientated banks in 2011 were well above the Bank for International Settlements thresholds.
Equity Bank was the dominant recipient of equity capital with Ksh 8.2 billion in real terms (or 13.1 billion in nominal terms) or 66% of the primary issues raised by Equity Bank. Equity Bank held 53% of the sector’s total capital in 2011. This is because Equity Bank has been active in seeking equity investment and investors have included international names such as George Soros, various private equity groups and the International Finance Corporation. In 2006 Equity Bank was listed on the Nairobi stock exchange via an initial public offering and is (as at 2013) the third biggest company on the exchange. Its reputation amongst investors, especially internationally, is high. Cooperative Bank also completed an IPO in 2008, raising Khs 3.0 billion (or 4.9 billion in real terms), or 25% of the total raised in the period, in terms of share capital. In 2011 it held 40% of the sector’s equity capital.

Other microfinance-orientated banks have been less successful in raising equity. They conducted some minor private placements between 2006 and 2011 that accounted for 9% of the new issuances. This was largely from international investors. There were also some one-off placements with private domestic investors whose motivation was mainly philanthropic rather than commercial. In 2011 these institutions held 7% of total equity capital.

For deposit-taking microfinance institutions the scarcity of equity capital has been a particular problem. Prior to transformation, deposit-taking microfinance institutions had low capital bases. They largely consisted of paid-in capital from initial owners – which were often related charitable organizations – plus retained earnings. For some deposit-taking microfinance institutions, retained earnings were negative due to on-going losses. However, upon transformation, the deposit-taking microfinance institutions became subject to a regulatory requirement to limit ownership of any one party to a maximum of 25% and needed new capital to meet capital ratio standards. This was reported as difficult to meet by deposit-taking microfinance institutions, despite the Central Bank of Kenya granting lengthy grace periods to allow compliance. KWFT, for example, raised capital in 2010, but from its parent company and remains exclusively owned by it with a four year grace period granted by the Central Bank of Kenya. Interviewees at KWFT reported that they were seeking investors but that it was “tricky” due to the need to ensure that investors were compatible with their social mission as well as commercially suitable and, because of these difficulties, they were considering divesting through grants of equity to staff and customers instead. Faulu also reported searching for investors in order to both meet the capital
requirements and to build their capital base. Interviewees reported “strong discussions” for a private placement in 2010 but it appeared not to have been successful by 2011. SMEP was also in the process of diversifying its ownership, having applied for and been denied an exemption from the Central Bank of Kenya in 2010. SMEP interviewees also reported that they had wished to avoid diversification because of concerns that new investors would not be compatible with their religious and social goals. Overall, the deposit-taking microfinance institutions seemed optimistic about raising new equity. However, their motivation was primarily to meet the regulatory requirements for ownership diversification and they were cautious about partners that might deflect them from their social mission.

Less optimistically, there seems little concrete investor interest beyond some minor domestic and related parties and the alternate source for equity financing – retained earnings – remained weak due to their low profitability.

Overall the equity base, from both a financing and capital ratio perspective, is weak for deposit-taking microfinance institutions due to a lack of appetite or compatibility of international investors that prefer investments in microfinance-orientated banks.

Unregulated microfinance institutions were the least unattractive to potential equity investors. Many had negative retained earnings and, in the weakest institutions, negative net equity due to on-going net losses. In interviews, many unregulated microfinance institutions reported seeking equity because it was needed for “transformation” to a regulated deposit-taking microfinance institution. However they reported little realistic opportunity of finding it.

Financial needs for transformation are high because of the need to upgrade technology platforms, investing in order to meet regulatory standards (such as for premises), and meeting capital requirements. This included needing to increase bad and doubtful debt provisions to meet regulatory standards. As a consequence of being unable to finance these requirements through new capital unregulated microfinance, institutions that were seeking to transform were spending large amounts of self-funded costs to prepare for transformation. This was resulting in further deepening of capital deficits.

All interviewees at unregulated microfinance institutions reported concerns about creating conflicts of interest with investors between commercial returns and their social mission.
PAWDEP, for example, reported seeking Khs 60 million or more in investments to both fund transformation and meet the ownership diversification requirements. They reported long-standing relationships with a number of financiers, including socially responsible investors such as Oikocredit, the Grameen Foundation and the Netherlands Development Agency – all of whom have previously or currently provided them with debt finance. However, there was a reluctance to commit to equity investments. Barriers included requests for Central Bank of Kenya progress reports, intensive due diligence on internal environments and expectations of a more commercial approach to business. Some investors had also created a “chicken and egg” situation where they did not wish to be the first investor to commit. In another example, Juhudi Kilimo – a start-up MFI in 2009 for value-chain agricultural financing – reported a difficult environment for sourcing equity. They had received start-up funds from the Grameen and Acumen Foundations. They were using internal funds to finance expansion and planned to sell the whole operation once it is more mature to an investor such as a commercial bank.

Overall, only the microfinance-orientated banks have been able to successfully access equity capital. Its main source has been international investors. Deposit-taking microfinance institutions and unregulated microfinance institutions have struggled to attract such investment.

6.3.2 Deposit Mobilization
An attractive source of financing for microfinance-orientated institutions is deposit mobilization because they are cheap and stable. Many interviewees commented on the desirability of attracting deposits as a cheap and stable source of funding for their institutions and almost all interviewees cited this as a key strategic goal. A secondary goal in deposit mobilization was to provide a safe and effective savings vehicle to the client and to promote a savings culture.

Deposits in microfinance institutions have grown rapidly between 2006 and 2011 as illustrated in Figures 14 and 15 below. For the sector, deposits have grown from Khs 34.8 billion to Khs 119.8 billion (in real terms) in the period, a three and a half fold increase.

However, following a very similar pattern to equity, deposits are concentrated in microfinance-orientated banks with limited deposits in deposit-taking microfinance institutions and unregulated microfinance institutions. Microfinance-orientated banks raised 94.0% of all new deposits.
Deposit-taking microfinance institution raised 5.2% of new deposits. Unregulated microfinance institutions raised a very minor 0.8% of new deposits.

Figure 14. Deposits (2006- to 2011).

Source: Financial statements elaborated by author (inflation-adjusted figures).

Figure 15. Growth rates in deposits (2006-2011, from 2006 baseline).
Deposit growth is highly concentrated by individual institutions, as illustrated in Table 15 below. By 2011, Equity Bank and Cooperative Bank had a market share of deposits of 59.1% and 20.0% respectively.

Table 15. Deposits (2006-2011) by individual institutions with market share and growth rates.
<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>Market Share</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>MF Orientated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation Bank</td>
<td>12,046</td>
<td>13,134</td>
<td>13,718</td>
<td>17,625</td>
<td>21,784</td>
<td>23,965</td>
<td>20.00%</td>
<td>199%</td>
</tr>
<tr>
<td>Equity Bank</td>
<td>12,205</td>
<td>20,984</td>
<td>28,747</td>
<td>33,499</td>
<td>50,202</td>
<td>70,911</td>
<td>59.18%</td>
<td>581%</td>
</tr>
<tr>
<td>Family Bank</td>
<td>4,160</td>
<td>5,777</td>
<td>6,170</td>
<td>7,907</td>
<td>11,367</td>
<td>13,590</td>
<td>11.34%</td>
<td>327%</td>
</tr>
<tr>
<td>K-Rep</td>
<td>3,308</td>
<td>4,301</td>
<td>3,751</td>
<td>3,343</td>
<td>3,941</td>
<td>4,085</td>
<td>3.41%</td>
<td>124%</td>
</tr>
<tr>
<td>Sub Total</td>
<td>31,718</td>
<td>44,196</td>
<td>52,386</td>
<td>62,374</td>
<td>87,295</td>
<td>112,551</td>
<td></td>
<td>93.92%</td>
</tr>
<tr>
<td>DTM's</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KWFT</td>
<td>1,276</td>
<td>1,583</td>
<td>2,216</td>
<td>3,228</td>
<td>4,453</td>
<td>4,485</td>
<td>3.74%</td>
<td>352%</td>
</tr>
<tr>
<td>Faulu</td>
<td>779</td>
<td>1,031</td>
<td>1,229</td>
<td>1,504</td>
<td>1,340</td>
<td>1,245</td>
<td>1.04%</td>
<td>160%</td>
</tr>
<tr>
<td>SMEP</td>
<td>247</td>
<td>323</td>
<td>351</td>
<td>397</td>
<td>444</td>
<td>516</td>
<td>0.43%</td>
<td>209%</td>
</tr>
<tr>
<td>Sub Total</td>
<td>2,301</td>
<td>2,937</td>
<td>3,797</td>
<td>5,129</td>
<td>6,237</td>
<td>6,246</td>
<td>5.21%</td>
<td>271%</td>
</tr>
<tr>
<td>Unregulated MFs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAWDEP</td>
<td>120</td>
<td>215</td>
<td>243</td>
<td>258</td>
<td>352</td>
<td>342</td>
<td>0.29%</td>
<td>286%</td>
</tr>
<tr>
<td>Jamii Bora</td>
<td>252</td>
<td>371</td>
<td>557</td>
<td>547</td>
<td>-</td>
<td>-</td>
<td>0.00%</td>
<td>0%</td>
</tr>
<tr>
<td>KADET</td>
<td>151</td>
<td>214</td>
<td>187</td>
<td>224</td>
<td>245</td>
<td>182</td>
<td>0.15%</td>
<td>120%</td>
</tr>
<tr>
<td>ECLOF Kenya</td>
<td>102</td>
<td>150</td>
<td>121</td>
<td>141</td>
<td>158</td>
<td>175</td>
<td>0.15%</td>
<td>172%</td>
</tr>
<tr>
<td>Opportunity Kenya</td>
<td>18</td>
<td>26</td>
<td>88</td>
<td>89</td>
<td>108</td>
<td>131</td>
<td>0.11%</td>
<td>745%</td>
</tr>
<tr>
<td>BIMAS</td>
<td>104</td>
<td>125</td>
<td>130</td>
<td>130</td>
<td>116</td>
<td>128</td>
<td>0.11%</td>
<td>123%</td>
</tr>
<tr>
<td>MicroKenya</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>35</td>
<td>76</td>
<td>0.06%</td>
<td>n/a</td>
</tr>
<tr>
<td>Juhudi Kilimo</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>26</td>
<td>-</td>
<td>-</td>
<td>0.00%</td>
<td>n/a</td>
</tr>
<tr>
<td>Sub Total</td>
<td>746</td>
<td>1,101</td>
<td>1,327</td>
<td>1,414</td>
<td>1,014</td>
<td>1,034</td>
<td>0.86%</td>
<td>139%</td>
</tr>
<tr>
<td>ALL</td>
<td>34,766</td>
<td>48,234</td>
<td>57,509</td>
<td>68,918</td>
<td>94,546</td>
<td>119,831</td>
<td></td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Source: Financial statements elaborated by the author (inflation-adjusted figures).

Because of the advantages of deposits as a source of financing, interviewees considered that there is considerable competition for deposits between institutions. They also saw deposit-taking as an area where the competition was between all banks, rather than only microfinance-orientated banks. For example, banks such as Barclays, Kenya Commercial Bank and Standard Chartered were quoted as competitors. Interviewees at a deposit-taking microfinance institution described the competition as “fierce” and driven by microfinance-orientated banks downscaling into the microfinance sector and directly competing with them.

This was especially the case for the most attractive business clients with significant deposits to be make. Interviewees commented that the most attractive customers from a depositor perspective
were often already sophisticated enough to have established bank accounts, typically at non-microfinance-orientated banks. They preferred non-microfinance-orientated banks because they offer more attractive services, such as cheque clearing – which are restricted for deposit-taking microfinance institutions under the separate DTM regulations – as well as the number of ATMs and branches. This applied especially to business customers who are identified by many institutions as attractive clients from a commercial perspective as well as individuals with large deposits. Very few saw poor households as commercially attractive clients for deposit raising because of their typically small level of deposits.

Interviewees emphasised the importance of reputation in relation to deposit-taking. Given the history in Kenya of bank bankruptcies and the lack of deposit insurance, they commented that the institution’s reputation for stability and soundness was a major factor in gaining the trust of depositors.

Deposit-taking institutions commented that success in deposit-taking was elusive. Their reputations – whilst well-established as lenders – was very limited in deposit-taking and they felt that their reputation was weak compared to both microfinance-oriented banks and general banks. For example the chief financial officer at a DTM commented that its reputation was a major barrier to deposit-taking as in their customers’ view the institution was “not really a bank”. Overall, the chief financial officer commented that deposit-taking microfinance institutions were “struggling” to raise deposits in the face of competition from banks. Another DTM interviewee commented on the problem of reputation and clients seeing them as being a reputable microcredit provider, but not a deposit-taking institution. The DTM interviewee commented on the strategic issue of how to pace expansion, as it required large investments in order to establish the required regulatory branch environment in terms of security and premises. However, this was offset by the need for critical mass in order to serve clients, especially the attractive business clients who expected a nationwide service. These comments reflect the lower success rate of deposit-taking at deposit-taking microfinance institutions compared to microfinance-orientated banks.

By contrast, unregulated microfinance institutions have only a very tiny share of the deposit market with very small levels of absolute deposits and new deposits, and comparatively slow growth rates. However, they are not regulated to take deposits. Nevertheless, the majority reported doing so. Many took deposits as part of lending practices, whereby clients were expected to
establish savings habits prior to being given credit and to demonstrate this through regular deposits into dedicated accounts. Many unregulated microfinance institutions also require cash collateral from lenders and count these as deposits. However, some were also openly flouting the regulatory prohibition on deposit-taking, although the level of such unregulated deposit-taking was small.

6.3.3 The Funding Gap

Because of these difficulties in equity raising and deposit mobilization, non-debt sources of funding have not grown sufficiently to fully fund the growth of loans. Figure 16 illustrates the extent of the “funding gap,” defined as total deposits less total loans in the microfinance sector. A nil or positive value indicates that deposit growth has been matched or exceeded by loan growth, meaning that an institution does not need other sources of funding apart from deposits. A negative value indicates that loan growth has exceeded deposit growth and that other sources of funding – such as debt – are required.

As can be seen here, the funding gap has become increasingly negative since 2006 for all institutions except for Equity Bank.

Figure 16. The funding gap (2006-2011)
For microfinance-orientated banks, the funding gap became increasingly negative, peaking at Khs -22.0 billion in 2009 before returned to being slightly positive at Khs 3.1 billion in 2011. However this was exclusively due to Equity Bank because its deposit base has grown faster than its loan portfolio since 2009 and, between 2009 and 2011, its funding gap moved from being Khs -9.4 billion to Khs 17.1 billion.

The three remaining residual microfinance-orientated banks have seen an increasingly negative funding gap that increased to a maximum of Khs -22.1 billion by 2010 before declining slightly to Khs -14.1 billion in 2011. Cooperative Bank in particular saw its funding gap widen in this
period and appeared to rely on non-microfinance deposits, including government deposits, in order to finance microfinance loan growth\textsuperscript{42}.

For deposit-taking microfinance institutions (DTMs) the funding gap grew to Khs -5.5 billion by 2009, before declining to -3.8 billion by 2011 as deposit-taking microfinance institutions began to seek deposits under their new licenses. Again, the funding gap was differentiated by institution with the gap concentrated in KWFT. These figures are representative of the difficulty of deposit-taking microfinance institutions in raising deposits.

Finally, for unregulated microfinance institutions the funding gap has been stable and small. This reflects their low growth rates overall in both loans and deposit-taking.

### 6.3.3 The Leverage Ratios

The funding gap implies that institutions need to increase non-deposit forms of funding for loan growth. This could be achieved through increasing equity or via increasing debt. Which of these has occurred can be examined through the leverage ratio.

The leverage ratio – defined as loans divided by equity (with equity defined as share capital, share premium, and retained earning but excluding revaluation reserves and proposed dividends)\textsuperscript{43} – is shown in Figure 17 below (on a logarithmic scale).

\textsuperscript{42} Disclosure of deposits broken down for microfinance customers is not given in cooperatives’ financial statements. However, in 2011 it was disclosed that 33% of deposits are from “Private Enterprises” and 35% as “Other”, including 20% from “governments”. Of these 33% is term or foreign currency deposits. It is unlikely that such deposits are from microfinance customers (Cooperative Financial Statements, 2011).

\textsuperscript{43} The ratio is based on a simplified form of the BIS definition. It has also been inverted to allow greater clarity. This allows for two advantages, which are: (i) the ratio has been calculated using the data that is used throughout the thesis. This ensures consistency. It also avoids the problem that the BIS definition includes calculated elements that are not publically available – such as risk-weighted assets -, but that are unlikely to be material for the institutions under consideration based on the thesis findings. For example, BIS capital is defined to include instruments where assessment of subordinated creditor status or capability and the “exposure” includes adjusted derivative values, collateral and risk-weighted values for off-balance sheet instruments. No banks reported such activities either in interview or in their financial statements; and (ii), it allows the same methodology across all institutions in the sample. This is necessary because only regulated entities provide disclosure of full BIS-based capital (Basel Committee on Banking Supervision, 2010a, 2014).
The leverage ratio has increased modestly across the sector (defined as “all institutions”) from a low of 2.4 in 2007 – which was the year in which Equity Bank raised new capital through an IPO – to 3.1 by 2011. Microfinance-orientated banks, with the exception of Equity Bank, followed these sector trends closely.

However, deposit-taking microfinance institutions and unregulated microfinance institutions showed rapidly increasing leverage. Deposit-taking microfinance institutions leverage increased from a low of 2.1 in 2006 to 6.4 by 2011. Unregulated microfinance institutions leverage ratios increased from 1.64 in 2006 to 4.64 by 2011. This reflects earlier discussions in this chapter detailing the expansion of their loan portfolios despite weak growth in deposits and lack of net profits that would help build the equity base in proportion to the loan portfolio.

As will be discussed in the next section, this gap has been filled by debt. Such balance sheet structures – with these high leverage ratios – can be a source of financial fragility.

Figure 17. Leverage ratios (2006-2011)

Source: Financial statements as elaborated by the author (inflation-adjusted figures).
6.3.4 Debt Financing

The implication of this widening funding gap for institutions is that there is a need for institutions to seek to fund growth through debt, including through private capital inflows and debt financing has become the dominant source of financing for microfinance-orientated institutions in Kenya.

Figures 18 and 19 below show that total debt financing has grown nearly four-fold, from Khs 4.5 trillion in 2006 to Khs 17.1 trillion by 2011 (in real terms).

Figure 18. Debt financing by source (2006-2011).

![Debt Financing by Source](image)

Source: Financial statements elaborated by the author (figures are inflation-adjusted).

Figure 19. Debt financing by source (2006-2011).
National and international development institutions have been an important source of debt financing. They were particularly important in providing anti-cyclical funding in 2011. National and international development institutions who have provided financing to microfinance institutions in Kenya include the European Investment Bank, the Netherlands Development agency (FMO), the German Development Agency (KfW), the International Finance Corporation (IFC) and, since 2009, the China Development Bank. However, such financing has (as for lending and deposits) been concentrated in a small number of institutions with, respectively, 81% (in 2011) and 60% (in 2010), of all such financing being received by Equity Bank.

However, the majority of debt been sourced from private investors. Debt financing from private investors grew annually from 2006 peaking at Khs 13.5 trillion in 2010 (in real terms), accounting for 78% of all debt financing, before declining in 2011 to 57% due to reduced flows following the global financial crisis.

Furthermore, and as illustrated in Figures 20 and 21, the majority of private financing from 2006 to 2009 came from international private investors that grew from negligible levels in 2006 to peak at Khs 6.5 billion (in real terms) in 2010. However, such flows are pro-cyclical and declined to
Khs 5.4 billion by 2011 and in the wake of financial crisis, when debt financing from international private capital declined.

Figure 20. Lending by international and domestic private investors (2006-2011).

Source: Financial statements elaborated by the author (inflation-adjusted figures).
Figure 21. Lending by international and domestic private investors (2006-2011).

Source: Financial statements elaborated by the author.

Increasing leverage, especially using private capital from international sources, can have a number of advantages. For example, it offers a much greater pool of potential liquidity and, as such, has been an important source of financing for the growth of lending in microfinance. Indeed, according to interviewees it provides a critical intermediate source of funds to facilitate growth whilst they sought to build a long-term deposit base. However, private capital is also associated with risks that can increase financial fragility in institutions, including increasing liquidity and foreign exchange risk.

The Central Bank of Kenya set liquidity ratios for regulated institutions to control institutional liquidity risk based on Bank for International Settlements standards. Many of the institutions
examined have prudent liquidity risk management practices in relation to both leverage and maturity risk. KWFT, for example, had 75% of their 2011 borrowing (i.e. debt liabilities) in maturities over one year and had a liquidity ratio of 66% versus a regulatory requirement of 20%. Similarly, Equity Bank had 61% of their 2011 borrowing in maturities over one year and a liquidity ratio of 33%.

Nevertheless, the reliance on pro-cyclical and short-term private capital remains a key risk even for the most stable institutions. This is particularly the case where there is a reliance on international investors flows because these can be pro-cyclical. In fact, as discussed above, this has materialized in Kenya, where, as a percentage of private investment, international investment has declined continually since 2007 from 72% in 2007 to 42% in 2011, reflecting investor responses to the financial crisis in advanced economies. This creates significant liquidity risk for institutions that are reliant on international funding and increases the financial fragility of institutions. As discussed in Chapter 4, such pro-cyclical capital flows have been an important cause of numerous developing country financial crises.

Furthermore, international private capital is highly concentrated in a very few, highly rated institutions. Equity Bank is the primary recipient. Citibank and Deutsche Bank – both of whom have global investment operations for private investment in microfinance – invest exclusively in Equity Bank. Two major funds, Growth Management and the Global MFIs Facility44 have made investments in Kenya, again exclusively in Equity Bank. This is because Equity Bank is able to provide an attractive profile to private investors. For example, as at 2010, Equity Bank had an AA credit rating and attracted publicity in international investment circles. In 2008 the Financial Times45 commented, “Mr Mwangi46, a former Ernst & Young accountant, is a numbers-and-systems man. He boasts of the bank’s rigorous credit analysis… (that) Equity’s proportion of non-performing loans, at 2.8 per cent, is the lowest in the sector… (and) has built a state-of-the-art information technology system that the chief executive says can handle ever higher volumes of customers without an appreciable increase in costs”. When an institution has such a reputation,

44 The owner is not disclosed publically.


46 Equity Bank’s Chairman.
international finance is often easily available. In fact, in an interview the Head of Risk Management at Equity Bank described it as being able to select from investor and financiers as they have more willing liquidity providers than they require. This enables it to manage liquidity and maturity risk well and assists with institutional soundness, despite very high growth rates. Its ability to lock into longer maturities also ensures that it is less susceptible to short term changes in investor sentiment and liquidity. For example, during the global financial crisis it has been relatively unaffected by changes in investment sentiment and liquidity and, in fact, Equity saw themselves promoted as an “alternative” investment.

However, second tier institutions report only moderate success in attracting international financing and – if available – increased institutional risks in relation to it. For example, interviewees at deposit-taking microfinance institutions reported that there was international debt finance available, but it was predominantly offered either in “hard” currency or with costly foreign exchange hedging and limited maturity. Interviewees commented regarding foreign exchange hedging that liquidity was reasonable as Symbiotic – a new socially responsible provider of foreign exchange hedging in developing country currencies – had been established, but that it was expensive.47

However, the majority of institutions reported much less favourable positions. This included difficulty in sourcing basic liquidity from international investors. They were being reported by interviewees as conservative in their investment appetite for smaller and less well-known microfinance institutions. In particular, small and unregulated microfinance institutions without track records in profitability and growth reported that attracting private international financing was almost impossible. Overall, they again experienced a “chicken and egg” situation – as for equity finance – where institutions were only able to attract funds for growth once they have already demonstrated growth and profitability and an ability to attract other investors.

Oikocredit provided interesting comments which capture this dynamic in the investment environment, stating, “More recently, competition has been high, especially with more and more

47 Analysis of foreign exchange risks data is not available.
social investors and private funds taking an interest in the region ... at the wholesale level, only a number of MFI’s have the capacity to borrow and it seems like we are all chasing the same fish”.

However, these issues with basic liquidity provisions and pro-cyclical flows from private sources were also dependent upon the type of investors. For example, SRIs and NGOs – with their twin goals of investment and social returns – were reported as being more stable sources of financing with a long-term view of investment and, consequently, less focus on pro-cyclical flows. Active in Kenya are Oikocredit, Blue Orchard and Dexia. Again, Equity Bank has been a major recipient. However the recipients have been more diverse than other sources of finance and have included deposit-taking microfinance institutions including KWFT and SMEP. Both attract investors due to their engagement with banking for women. Small amounts have also been provided to unregulated microfinance institutions such as ECLOF Kenya, a church-affiliated MFI.

In interview, Oikocredit commented that they actively sought out less well-established organizations and provide both financing and technical support to assist in their growth. Oikocredit comments, “We want to support organizations to grow and have high developmental impact and will often work with younger organizations needing both financial and technical support to grow. Young organizations with high social impact and a positive financial outlook usually would be candidates”.

Nevertheless, SRIs are subject to the same investment appetite and pro-cyclicality of private investors. Oikocredit, for example, commented that, “Speaking for Oikocredit, we did experience a slowdown in inflows from investors in 2008 and also now in 2011 ... By the end of 2009, our inflows had improved once again”. However, they have been a consistent source of funding for smaller organizations and, because of their commitment to providing longer-term liquidity, are a source of financial stability rather than fragility for institutions.

Finally, domestic financing has also increased. The major recipients have been the second tier institutions, especially deposit-taking microfinance institutions, particularly KWFT with smaller amounts going to SMEP and Faulu. The major lenders have been Kenya Commercial Bank and Cooperative Bank, both of whom have exposure to several deposit-taking microfinance institutions. Many interviewees saw domestic financing as preferable in some respects compared to international funding. Interviewees at Faulu, for example, commented that the long maturities
available domestically had protected the institution from liquidity problems during the financial crisis and also helped to avoid foreign exchange risk as domestic institutions were able to provide loans in Kenyan shillings.

6.4 Balance Sheet Composition

The analysis in Sections 6.2 and 6.3 examined the assets and liabilities of institutions in detail. These findings can be summarized by examining the overall structure of the balance sheet over the period of the study and the changes in its relative composition in terms of percentage of different assets and liabilities.

This is shown for all institutions in Figure 22 below (with its legend in Figure 23). In the figure, 100% represents the total of gross assets or liabilities, that is the gross value of each side of the balance sheet.

For all institutions, the composition of assets shows moderate fluctuations during the period. Loans reduced as a percentage of the balance sheet from 73% in 2006 to 65% in 2011. This was offset by increases in non-loans – primarily cash and investment assets – which increased as a percentage of the balance sheet from 27% in 2006 to 35% in 2011. This indicates improving liquidity in institutions despite increasing loan levels. However, as will be discussed, this was largely due to changes at Equity Bank.

In relation to liabilities, the level of funding through deposits has declined moderately as a percentage of the balance sheet from 68% in 2006 to 64% in 2011. Equity has also declined as a percentage of the balance sheet from 23% in 2006 to 21% in 2011. These changes in liabilities have been offset by increases in debt that rose as a percentage of the balance sheet from 9% in 2006 to 15% in 2011 – reflecting the increasing debt levels discussed in earlier sections.

Figure 22. Balance sheet composition: all institutions.
Legend is given below figure.

Source: Financial statements elaborated by the author (inflation-adjusted figures).

Figure 23. Legend for figures 6.x to 6.x

<table>
<thead>
<tr>
<th>Balance sheet category</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans</td>
<td>Blue</td>
</tr>
<tr>
<td>Cash, investments an other assets</td>
<td>Red</td>
</tr>
<tr>
<td>Deposits</td>
<td>Green</td>
</tr>
<tr>
<td>Equity</td>
<td>Purple</td>
</tr>
<tr>
<td>External debt</td>
<td>Turquoise</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>Orange</td>
</tr>
</tbody>
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As shown in Figure 24 below, these changes to the sectors’ overall balance sheet composition was driven by that of microfinance-orientated banks. Their assets saw a declining share in loans that dropped from 73% in 2006 to 65% in 2011. This was offset by increases in cash, investments, and other assets from 25% to 35% in the same period – indicating improved liquidity. On the liability side of the balance sheet, microfinance-orientated banks saw equity increase as a percentage of the balance sheet from 21% in 2006 to 23% in 2011, reflecting their success in both raising capital and generation of retained profits. The share of deposits fell from 74% to 68% in the same period and the funding gap was filled with debt, which increased from 4% to 9% of liabilities. These trends were driven by Equity Bank, which by 2011 held 92% of microfinance-orientated banks’ cash and investments, 53% of equity and 95% of debt.
Source: Financial statements elaborated by the author (inflation-adjusted figures).

As shown in Figure 25 below, this contrasts with deposit-taking microfinance institutions, where their increased debt levels are apparent. On the asset side of the balance sheet, loans declined in value from 62% in 2006 to 56% in 2011, with greater levels of liquid assets in the form of cash and other investments, which increased from 38% in 2006 to 44% in 2011. On the liability side of the balance sheet – reflecting deposit-taking microfinance institutions’ lower ability to raise equity and deposits as loans have grown – deposits declined from 44% of assets in 2006 to 37% in 2011, and for equity from 45% to 14% in the same period. By contrast, debt grew from 11% in 2006 to 49% in 2011.

Figure 25. Balance sheet composition: deposit-taking microfinance institutions.
As shown in Figure 26 below, for unregulated microfinance institutions, assets followed similar patterns to other institutions. Loans declining relative to cash and other investments with a decline in loans from 74% to 64% from 2006 to 2011 and increases in cash and other investments from 26% to 36% from 2006 to 2011. Liabilities saw similar changes to deposit-taking microfinance institutions, with declining deposits and equity – from 44% to 37% and from 45% to 14% from 2006 to 2011 – offset by increasing debt that grew from 11% in 2006 to 49% in 2011. However, as noted earlier, the overall balance sheets of unregulated microfinance institutions remained small relative to microfinance-orientated banks and deposit-taking microfinance institutions.

Figure 26. Balance sheet composition: unregulated microfinance institutions

Source: Financial statements elaborated by the author (inflation-adjusted figures).
Overall, these balance sheet compositions reflect the trends discussed in Sections 6.2 and 6.3, for increasing overall scale in the balance sheet, financed by debt and – for a limited number of successful organizations – equity.

6.4 THE EMERGENCE OF DOMINANT INSTITUTIONS

The trends discussed in the earlier sections of this chapter have led to the development of a market structure of a few, dominant institutions attracting a disproportionately large share of loans, deposits, equity and debt financing.
This is illustrated in Figures 27 and 28 below showing loans and deposits and the related market shares for each by individual institutions. Cooperative Bank and Equity Bank jointly account for 77% of the 2011 balances and 80% of the growth of the total sector. The market then has a number of medium-sized institutions (Family Bank, KWFT and K-Rep). Then there are “also ran” institutions with very small market shares, made up of all unregulated microfinance institutions, plus the deposit-taking microfinance institutions, Faulu and SMEP.

Figure 27. Loans and deposits (2011).

![Graph showing loans and deposits](image)

Source: Financial statements elaborated by the author (inflation-adjusted figures).

Figure 28. Loan and deposits market share (2011).
Focusing on Equity Bank, as illustrated in Figure 29, its market shares show its dominance, not only in loans and deposits, but also in private, government and international development agencies financing. Equity Bank’s dominance has increased continuously as it accelerated away from rivals for all measures since 2006. By 2011, Equity Bank held 55% of deposits, 44% of loans, 27% of private financing and 94% of international development agencies and government financing in the Kenyan microfinance sector.

Figure 29. Equity Bank market share (2006-2011).
This is due to Equity Bank’s success in a “winner takes all” market structure where, as discussed earlier in the chapter, through achieving growth and a good reputation, including high credit ratings and an international brand, it is able to fuel further growth through attracting the majority of financing including equity, debt and deposits.

Equity Bank also has a differentiated strategy. It has built only a modest physical presence in banking, with branches increasing from 28 in 2008 to 135 by 2012 and ATMs from 377 in 2008 to 611 by 2011. Instead, it has used the mobile banking platform, M-PESA, for agency and point of sale (POS) business to rapidly acquire new customers. Equity Bank has, from negligible levels in 2006, increased its number of agents to over 3,200 and POS to over 6,000 by the end of 2011. This has resulted in Equity Bank increasing its customer base from 1.8 million in 2007 to 7.5 million by 2012. Other institutions have also adopted mobile banking platforms, but without as much success as Equity Bank.
Equity Bank has been subject to political influences as its chairman, Mwangi Kibaki, campaigned for president in 2007. Equity Bank became a target for opposition campaigning as a result. Equity Bank has been subject to some negative press in relation to this. For example, the Financial Times reported, “Some sceptics, meanwhile, voice doubts about the solidity of a business that has expanded so fast. ‘I have a feeling all is not well. It is not solid. What are its structures?’ says one retired banker. ‘The question is whether it’s a house of cards,’ says a Nairobi businessman. The evangelism with which Equity Bank talks about its social mission has heightened such suspicions”\(^48\)

However, despite this strong market concentration, the perception by market participants is of intense competition for business as a result of expanding finance access. The majority of interviewees saw the marketplace as very competitive, driven by the entry of microfinance-orientated banks. Competition was from new entrants, like Equity Bank, or from existing banks downscaling their business into microfinance. The outcome of this is that microfinance-orientated banks hold a dominant position in both loans and deposits based on their rapid expansion of business and competitive advantages, such as the range of services they can offer and their reputations.

Deposit-taking microfinance institutions are evolving and changing quickly in order to catch up with microfinance-orientated banks. However, they are hindered by their social mission and restrictions on their services under DTM regulations. Overall, deposit-taking microfinance institutions continue to compete, but remain as a second tier below microfinance-orientated banks. By contrast, unregulated microfinance institutions are seeking to compete but are generally failing and being left behind.

In terms of lending, as discussed previously interviewees reported that competition has been very fierce. However, this competition was also reported as being mainly based in Nairobi and a limited number of regional centres such as Kisumu and Mombasa. In addition, competition has focused on the most desirable clients, namely the wealthier,

urban middle classes. Competition for business in rural areas and for poor customers is limited.

Some interviewees commented that this has resulted in urban markets becoming overbanked with cases of multiple and over-indebtedness. As discussed in Chapter 5, “excessive” competition has been a driver of microfinance crises in other countries due to declines in lending standards and aggressive business practices. Interviewees considered that this was also the situation in Kenya, especially in the absence of credit bureaus. Certainly, as discussed earlier in this chapter, many saw it as a key contributory factor given the perceived high levels of over-indebtedness and multiple indebtedness, especially where the competition is so concentrated in seeking commercially-attractive clients among the urban, middle class.

Equally important, is that the “winner takes all” structure that has developed amongst institutions has led to the rise of systemically important institutions. The implications of this are discussed further in the next chapter.

6.5 Mitigating Microprudential Risks: Building Institutional Capacity

Any institution – even the most capable and well-resourced – would be challenged to retain operational integrity in a period of very rapid change relating to the fundamental aspects of its business.

Kenyan microfinance institutions have experienced the pressures that arise from such changes as they have grown in scale and face new risks. This raises the issue of whether institutional capacity is adequate.

49 These factors can also be seen in financial access figures where increases in, and levels of, financial access are far higher in populations that have higher levels of income, education and urbanization (Financial Sector Deepening Program, 2009; Financial Sector Deepening Program, 2013).
As credit portfolios grow in scale and complexity, risk increases. However, risk can be mitigated through development of institutional capacity and the financial architecture required to manage it. For example, in relation to credit risk, individual institutions can have extensive internal processes to manage bad and doubtful debts, including procedures to assess changes in the credit worthiness of lenders, valuation of collateral, management information system and practices relating to late payments and arrears.

In microfinance-orientated banks there was a variety of reported levels of institutional challenge. Equity Bank, for example, reported relative ease of supporting its very rapid growth operationally as it had access to the best staff because of its reputation and market position and it considered that it operated “best practices”. In addition, its profitability has supported high levels of investment in risk management, including technology platforms. Interviewees reported its strategy of using Infosys platforms which, while expensive, were well-tested platforms and highly adaptable to expansion, such as “plug and play” platforms for new branches and the ability to operate 35 million accounts. Equity Bank has also invested in a major Nairobi-based data centre with IBM and Sun Systems servers, a back-up recovery site and information technology engineers. Staff have been recruited from international competitors in order to import expertise in a number of areas, including risk management, operations and information technology. Equity Bank is able to match international compensation in order to do this. Interviewees reported that overall operational problems, including losses, have been low. However, the interviewees at the Central Bank of Kenya – who are responsible for onsite inspections and offsite risk assessments at Equity Bank – were less complacent, describing the institution as having “high” operational risk under the Central Bank of Kenya rating system. They commented that this was partially due to the innate risk of the high growth rates, including both within Kenya and in relation to Equity Bank’s regional expansion, and that the Central Bank of Kenya considered the bank’s technology platforms to be “robust” and having “no challenges” in relation to both centralized processing and network operations. However, the Central Bank of Kenya also commented that there were some weakness, including audit functions, that were understaffed and weak, and risk management practices that were “not that advanced”, such as a lack of stress testing and “value-at-risk” processes despite quite complex trading and foreign exchange risks. It was the Central Bank of Kenya’s opinion that Equity Bank was “on top of it,” but that the high risk had caused the Central Bank of Kenya to put Equity Bank on a rapid inspection cycle. Overall, Equity Bank is an example
of an institution that has increased risk due to the growth and complexity of its operations, while also (apparently) building matching good institutional capacity to manage them. However, an independent assessment of Equity Bank’s institutional capacity cannot be determined by the fieldwork.

Equity Bank also illustrates another issue in operational environments – that of fraud and corruption. There have been rumours relating to Equity Bank’s political connections through its Chairman. Additionally, another bank’s chief executive officer, in interview, reported that staff found committing fraud and corruption at his institution had been recruited into senior management by Equity Bank. The chief executive officer reported that his institution suffered significant problems with fraud and incompetence when they expanded their business from their traditional base in individual lending into small and medium-sized enterprises and corporate lending as part of their growth strategy and “fraud and corruption were widespread”. After a clean-up by international investors, the previous chief executive officer and other senior staff were dismissed. Other institutions, including unregulated microfinance institutions, also reported that staff that were “the baggage” from other institutions circulated to other institutions. In Kenya, there is no regulatory register of finance employees and there is a lack of a referencing process in the industry. Such reports cannot be verified, but highlight the general risks of fraud and corruption.

In 2009, the DTM licensing legislation became active and three institutions transformed from unregulated microfinance institutions to regulated deposit-taking microfinance institutions. These were KWFT, SMEP and Faulu. All were interviewed. Because of this transformation deposit-taking microfinance institutions have faced challenges, not only from increases in scale and risk, but also from changes relating to organizational transformation from an unregulated to a regulated institution. This requires both a significant upgrade in internal operations to meet new regulatory reporting and operational standards and fundamental changes in their organization from being a predominantly charitable organization to a commercial one.

Often this involved the establishment of new technology platforms, including replacing low level technology or manual record-keeping systems. All three deposit-taking microfinance institutions introduced the T-24 platform, a well-established core-banking platform that includes customer account functions. Two reported that during this process of data migration, multiple reconciliation
errors and fraud were revealed. These included non-existent assets, such as fraudulent loans, which resulted in the need for large provisions. In addition, the upgrade to real-time accounting requires excellent connectivity between mainframe systems and ATMs and branches. This has proved challenging, given the weak telecommunications infrastructure in Kenya. Infrastructure security has also been difficult and there have been breaches via the internet. Unregulated microfinance institutions preparing for transformation to deposit-taking microfinance institutions or introducing new technology platforms reported similar issues.

All deposit-taking microfinance institutions reported staffing challenges in terms of retraining existing staff and recruiting experienced staff. Retraining current staff was difficult, as there has to be a shift in culture. For example, one chief financial officer reported moving from “A more relaxed NGO culture to a more aggressive commercial culture” and that the staff was often resistant and turnover increased. Some deposit-taking microfinance institutions tried to increase and upgrade staff though recruiting from the banking sector, but reported that qualified staff are scarce and often prefer to work for microfinance-orientated banks where compensation is higher. If higher compensation was offered to new recruits this created staffing problems with existing staff. Again, unregulated microfinance institutions preparing for transformation to deposit-taking microfinance institutions reported very similar issues with staff retraining and recruitment.

All institutions reported significant issues with the management of bad debts during transformation from an unregulated to a regulated entity. Two major issues were noted. Firstly, as part of the transformation to a regulated entity, there was a regulatory requirement to increase the recognition and extent of loan provisioning as, prior to becoming regulated, internal process and provision requirements were below regulatory standards. This resulted in some new deposit-taking microfinance institutions making large one-off provisions on transformation in order to raise provisioning to the required regulatory levels. The required increase averaged 10% of gross loans and can be attributed to lower internal standards of provisioning prior to becoming regulates. This suggests that unregulated microfinance institutions have significant under-recognition of bad debts in their loan portfolios.

Secondly, these institutions suffered bad debt problems relating to the transformation process itself that required additional reserve provisions. For example, as noted institutions introduced new internal technology platforms in order to upgrade their technology to meet both new
regulatory standards and to facilitate expansion of their businesses. When loan accounts were reconciled and transferred to these new systems a number of problems became apparent. This included inaccurate and incomplete records of current balances and arrears. These required write-offs and new provisions. Also institutions often faced internal stresses, such as recruiting new staff with banking skills, retraining of existing staff and internal political infighting. These issues distracted staff from on-going credit management, which then allowed credit control to deteriorate and resulted in a surge in bad debts. Again, these new bad and doubtful debts required additional provisions to be made.

Unregulated microfinance institutions typically have a much simpler operating environment than deposit-taking microfinance institutions, but are of a much lower standard. For example, one unregulated microfinance institution reported being assessed by “Planet Ratings”, a MFI-rating agency, who commented on their respective lack of systems, formality, segregation of duties and risk monitoring. Other unregulated microfinance institutions reported that the staff are typically NGO-style social or charity workers, rather than professional bankers. Some has suffered problems with staff fraud. Operating environments were reported as having major weaknesses, such as using manual or spreadsheet systems for managing loans and deposits or lacking good quality arrears tracking and management. A number of unregulated microfinance institutions reported difficulties in upgrading as they lacked the expertise and funds for establishing more robust technology platforms. For example, one reported weak arrears management that was improved on the introduction of T24 in 2010 after more than six years of problems in trying to establish the platform. Other unregulated microfinance institutions reported trying to buy in packaged systems, but then struggling to manage related service contracts that varied in quality and were often costly.

Unsurprisingly, given these very substantial challenges, many unregulated microfinance institutions reported poor internal control environments and expected timeframes for deposit-taking microfinance institutions’ transformation of up to five years. Some of these institutions are subject to risk of failure, especially if significant shocks to the sector are again experienced. However, such institutions are also limited in terms of connectivity to the financial system as they are largely self-funded because they have not been able to access private funding markets or build deposit bases. Hence, they pose a relatively low systemic risk.
Overall the fieldwork indicated that there is a range of institutional capacity. Some institutions are developing “best practice” internal control environments. For example, a number of the microfinance-orientated banks and deposit-taking microfinance institutions had reasonably strong management practices and internal controls. Others, however, appeared to be struggling and a number reported problems with errors, frauds and mismanagement. Unregulated microfinance institutions seemed to lack basic capacity and were weak institutions.

However, institutional capacity was broadly related to the size of the institution, with greater capacity for larger, regulated institutions as they are more able to invest in staff, technology platforms and internal control, thus creating a feedback loop of scale and capacity, providing a generally more robust institutional capacity. There were some exceptions – for example, K-Rep – but this relationship was broadly true. Conversely, smaller institutions, especially unregulated microfinance institutions, had weak capacity but were less likely to be systemically important.

6.6 MITIGATING MICROPRUDENTIAL RISKS: DEVELOPMENT OF FINANCIAL ARCHITECTURE

As with institutional capacity, the development of financial architecture can act as an important mitigant to risk within financial institutions. In this section, we highlight two important issues identified in the fieldwork relating to financial architecture. Both relate to weaknesses in ensuring the sound capital bases of regulated institutions and are weaknesses in managing overindebtedness and multiple indebtedness amongst microfinance clients and weaknesses in the regulatory environment relating to monitoring of the capital base of institutions. These are important because banking regulations, typically based on Bank for International Settlements standards, set minimum standards for banks’ capital ratios in order to provide for absorption of losses without institutional failures. If losses cannot be absorbed by an institution without breaching these thresholds, then it becomes technically bankrupt. Less extreme losses can indicate financial fragility which can affect other aspects of institutional soundness – for example, its ability to access liquidity as potential lenders become less willing to lend funds – and be a factor than can initiate depositor runs.
6.6.1 Over-Indebtedness and Multiple Indebtedness

As discussed in Chapter 5, over-indebtedness and multiple indebtedness have been critical factors in microfinance crises in a number of countries. Their prevention is important to financial stability.

The most frequent way to control over-indebtedness and multiple indebtedness is through the use of credit bureaus. Credit bureaus collect and share information relating to borrowers across lending institutions within the financial system. This includes, for example, disclosure of borrowers’ credit histories, including any previous defaults or arrears, and disclosure of outstanding loans with other institutions. This information can then be used by institutions in assessing the creditworthiness of a borrower in relation to the granting of further credit to them.

In order to be effective, a credit bureau needs to have cooperation and information from a critical mass of lending institutions to ensure that the information provided is timely, comprehensive and correct. This usually involves institutions agreeing the processes and procedures for reporting customer information to the credit bureaus and the terms and conditions under which it is shared.

In Kenya, there is a limited credit bureau infrastructure and many of the interviewees commented on the need to establish a more comprehensive system. The Central Bank of Kenya is aware of the issue and has been active in seeking solutions. In 2008, the Banking (Credit Reference Bureau) Regulations were enacted and became operational in 2009. The Central Bank of Kenya, which is responsible for regulating credit bureaus under the Act, has since licensed several credit bureaus. However, information sharing via credit bureaus is limited to microfinance-orientated banks, although there are plans to include deposit-taking microfinance institutions and unregulated microfinance institutions in the future (source: Central Bank of Kenya interviews). As the Central Bank of Kenya comments,

The Kenyan banking sector was in the 80’s and 90’s saddled with momentous non-performing loans. This invariably led to the collapse of some banks. One of the catalysts in this scenario was ‘serial defaulters’, who borrowed from various banks with no intention of repaying the loans. Undoubtedly these defaulters thrived in the ‘information asymmetry’ environment that prevailed due to lack of a credit information sharing mechanism... The development of a sustainable information sharing industry is therefore recognized as a key component of financial sector reforms (Central Bank of Kenya, 2011).
Over-indebtedness and multiple indebtedness are difficult to quantify but almost all interviewees believe that it is a material issue in Kenya. When asked for a subjective risk assessment, interviewees ranked it from medium to high risk. Interviewees who rated it as high commented that they thought over-indebtedness and multiple indebtedness were common and had been deepened by excessive competition in the microfinance sector and an absence of credit bureaus. For example, the interviewees at KADET commented that it was “urgent” and that there was also adverse selection taking place as microfinance-orientated banks improved credit assessments (including through bureaus), whereupon poorer quality clients move to institutions with more limited information on their credit history (i.e. adverse selection was taking place). Some of the best clients had also been actively poached by microfinance-orientated banks from smaller institutions, leaving them with poorer-quality residual clients. In fact, such had been the competitive pressures and problems with over-indebtedness and multiple indebtedness, that some stated that they had taken a strategic decision to withdraw from lending to small and medium-sized enterprises to focus exclusively on “children welfare lending”. Interviewees also commented that there was a lowering of credit standards taking place under increased competitive pressures.

Others interviewees were less concerned about the issue however. For example, at a small, unregulated microfinance institution, interviewees considered that it was a risk, but a manageable one if you manage clients and credit officers by being the institution that is tightest in “putting those (clients) under pressure”. While not entirely comforting in relation to their debt collection techniques, it does indicate active management of defaults.

Overall, it seem likely that until there is comprehensive credit bureau monitoring, there will be a high level of multiple and over-indebtedness in the Kenyan microfinance sector and – in common with other countries who have experienced microfinance crisis – it is being intensified by competitive forces. Whilst it does not appear to have reached unmanageable levels in Kenya at the current time, nevertheless it can add to financial fragility.

6.6.2 Institutional Capacity and Regulatory Compliance

Reporting and accounting for credit losses is a critical part of bank regulation as it ensures that capital ratios – a critical element of an institutions’ soundness – are correctly reported. Capital ratios are determined by central banks but are usually based on internationally-accepted Bank for
International Settlements standards. Regulatory requirements for determining and providing in bank reserves for portfolio-at-risk are also set by central banks or other regulators, but are less universally applied.

In Kenya, the Central Bank of Kenya set standards for regulated institutions for credit losses and capital. Central Bank of Kenya requirements for microfinance-orientated banks are detailed in the “Guideline on Risk Classification of Assets and Provisioning” whose purpose is to ensure that assets are correctly evaluated, standards of provisioning are set (such as time limits and classification of assets) and work out processes are followed and effective. Similar requirements are set out for deposit-taking microfinance institutions in “The MFIs (Deposit-Taking MFIs Institutions) Regulations, 2008”. Selected details of these standards from the legislation are set out in Table 16. Auditing of these internal controls and processes are part of the Central Bank of Kenya inspections. As can be seen, the regulations are prescriptive and seek to ensure adequate and comprehensive recognition of bad and doubtful debts. Regulatory requirements for deposit-taking microfinance institutions provision are also higher than for microfinance-orientated banks.

Table 16 Central Bank of Kenya loan classification and provisioning requirements.

<table>
<thead>
<tr>
<th>CBK category</th>
<th>MFOB Provision</th>
<th>DTM Provision</th>
<th>Timeframe for arrears</th>
<th>Summary definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>1%</td>
<td>1%</td>
<td>N/a</td>
<td>Well-documented facilities to financially sound customers and all loans performing</td>
</tr>
<tr>
<td>Watch</td>
<td>3%</td>
<td>5%</td>
<td>30-90 days</td>
<td>Potential weaknesses including deteriorating collateral or economic conditions; adverse trends in the borrower’s financial position</td>
</tr>
<tr>
<td>Category</td>
<td>Probability</td>
<td>Percentage</td>
<td>Days</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>------------</td>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sub-standard</td>
<td>20%</td>
<td>25%</td>
<td>90-180 days</td>
<td>Not protected by net worth and paying capacity of the borrower &amp; collateral relied upon for repayment.</td>
</tr>
<tr>
<td>Doubtful</td>
<td>20%</td>
<td>75%</td>
<td>Over 180 days</td>
<td>All the weaknesses of a substandard loan plus not well secured or collectable</td>
</tr>
<tr>
<td>Loss</td>
<td>100%</td>
<td>100%</td>
<td>As identified</td>
<td>Uncollectible or of no or little value</td>
</tr>
</tbody>
</table>

Source: “Guideline on Risk Classification of Assets and Provisioning”, Prudential Guidelines for Institutions Licensed under the Banking (pp. 62-88); the MFIs (Deposit-Taking MFIs Institutions) Regulations, 2008 (Part viii – Risk Classification and Provisioning of Loans); www.centralbank.gov.ke

Interview material and the secondary data analysis presented earlier in this chapter indicate that these standards are not being fully adhered to and this signals that the capital base of these institutions is materially overstated.

In fieldwork interviewees reported difficulty in compliance with regulatory standards of reporting and internal control and non-compliance with reserving requirements. Across all institutions, interviewees reported difficulties in complying with regulations relating to portfolio-at-risk management and reporting. Internal control and management problems were identified as key causative factors, indicating weaknesses in institutional capacity in compliance with regulatory requirements relating to credit risk. Commonly reported failures were in management information systems and management processes – such as arrears tracking and follow-up – that made effective management of deteriorating credit difficult.

These challenges were particularly acute amongst deposit-taking microfinance institutions as they transformed from unregulated to regulated entities. This was due to both the expansion of lending portfolios – thus increasing the capital required to be held under regulatory standards – and due to the more stringent standards for regulated institutions. In addition, pressures on these institutions arose from the need to be “sustainable” and present strong capital ratios to potential
investors and depositors that can be a disincentive for honest financial reporting. For example, a chief financial officer of a microfinance institution commented that provisions in 2008 and 2009 covered less than 10% of its portfolio in its financial accounts but, in fact, they had had bad debts of up to 70% based on its internal management information systems and informal credit officer reports. He stated they had not fully provided for them because of the negative impact it would have had on their capital base.

Deposit-taking microfinance institutions and those MFIs hoping to transform to deposit-taking microfinance institutions reported significant issues with the transformation process, including management of bad debts. Two major issues were noted. As discussed earlier, part of the transformation to a regulated entity meant that there was a regulatory requirement to switch to the recognition and provisioning requirements detailed in Table 16 above. Prior to becoming regulated, for many institutions internal process and provision requirements were below regulatory standards. Consequently, a large increase in provisions is required as a one-off loss on transformation by these institutions. Practitioners, when interviewed, openly raised this issue. For example, a General Manager of a large unregulated microfinance institution hoping to transform commented that the reduction in their capital base that would be required to bring provisioning up to regulatory standards was large and a “barrier” to transformation as the organization could not afford the write-offs required.

The level of these problems can be estimated from the figures for portfolio-at-risk reported earlier in this chapter. Deposit-taking institutions, prior to transformation, had reported portfolio-at-risk that was lower than average prior to 2009 and then increased from 4% to 14% in 2009 to 2010, before declining in 2011 to converge with levels of provision at the microfinance-orientated banks. This 10% increase between 2009 and 2010 was assigned by the deposit-taking microfinance institutions interviewed as due to the need to increase provision to bring them in line with regulatory standards. It is not possible to estimate the extent of the under-provisioning for unregulated institutions exactly, but if this estimated 10% increase is applied to the current portfolio of unregulated microfinance institutions, it would imply under-provisioning within the sector of approximately Khs 0.3 to Khs 0.5 billion in 2010.

These issues of non-compliance in relation to regulatory standards was confirmed by the Central Bank of Kenya officials responsible for deposit-taking microfinance institutions licensing. They
described regulatory requirements as “more stringent and prescriptive”. They confirmed that they thought that unregulated microfinance institutions were materially underprovided and that the write-downs required to comply with regulated standards were a major barrier to them becoming regulated institutions.

6.7 CONCLUSION

Institutional stability and capacity are essential building blocks of a stable financial system. Institutional failures in sub-Saharan Africa remain common with some extending into systemic crisis.

This chapter discussed the pressures that institutions in Kenya are experiencing in balancing institutional stability and the expansion of financial access. The challenges are great. These include the impact on risks within institutions as the expansion of financial access has driven the restructuring of their balance sheets. These pressures include increasing credit risk that reflects the creditworthiness of the poor, macroeconomic cycles (notably in relation to inflation and agricultural cycles) and political risks.

At the same time, the lack of equity capital from investors and the difficulty of building deposit bases have led to a high reliance on debt to fund expansion, which, in turn, has led to increases in foreign exchange and liquidity risks. The stability of such flows is differentiated by the type of investor that varies according to the investment criteria they apply and their commitment to social, as well as commercial, goals. Socially responsible investors often have a commitment to the social missions of institutions that lead them to make riskier investments – for example, in weaker institutions – that purely profit-seeking investors avoid and are less pro-cyclical in their investment appetite. Nevertheless, the funds they deploy remain susceptible to pro-cyclical flows that limit their ability to invest on a non-cyclical or counter-cyclical basis. Profit-seeking investors favour only select Tier 1 microfinance-orientated banks, are more pro-cyclical in investments and more concerned with profitability compared to social mission. In addition, private capital was highly concentrated by institution with a “winner takes all” structure in relation to equity and, to a lesser extent, debt.
These risks can be mitigated to a degree through increases in institutional capacity. The fieldwork found that growth in institutional capacity was broadly correlated to increases in the scale and complexity of institutions. This implies that increasing institutional capacity involves adequately managing increasing risk within institutions as financial access expands. However, there were some notable exceptions. Deposit-taking microfinance institutions faced challenges because of their rapidly increasing risks with lower ability to attract private capital and resources (such as staff) to build institutional capacity. Broadly, the results indicate that some institutions are making good progress in building institutional capacity but others are struggling to do so.

Financial architecture can also an important mitigant to inherent risk as financial access expands and it also becomes an important enabler of institutional soundness. However, the fieldwork reported significant weaknesses in the areas of credit risk management. In particular, the financial architecture in relation to the management of credit risk was weak, including over indebtedness and multiple indebtedness, and a lack of compliance with regulatory frameworks. This includes the absence of a comprehensive coverage of client and institutions in the current limited number of credit bureaus and non-compliance with regulatory requirements for recognition of portfolio-at-risk, thus overstating their capital base. These issues increase the probability that crises that have occurred elsewhere in microfinance due to over-indebtedness and multiple indebtedness – including institutional failures – are at risk of recurring in Kenya.

However, more important for building a stable financial system is how these institutional risks accumulate and interact at a systemic level. It is this issue that will be discussed in the next chapter.

Institutional stability and capacity are essential building blocks of a stable financial system and are dependent upon the balance sheet structures of financial institutions. As discussed in Chapter 6, Kenyan microfinance-orientated institutions are experiencing challenges because of the restructuring of their balance sheets as they expand financial access. This restructuring is increasing credit, liquidity and foreign exchange risks. These can, in theory, be mitigated through matching their growth with increases in institutional capacity. However, in practice, institutions are having mixed success in building required institutional capacity. By contrast, financial architecture is lagging behind this growth, especially building architecture to manage over-indebtedness and multiple indebtedness and in order to ensure compliance with microprudential regulation. However, all these concerns relate only to the development of individual institutions, not the whole financial system.

In this chapter, we build on the findings from Chapter 6 to examine how the expansion of access is interacting with financial stability and with economic growth using the frameworks developed in Chapters 2 and 3.

When exploring financial stability, we examine the finding that a few institutions have emerged in a “winner takes all” ability to attract equity, deposits and debt financing, in order to show that this has driven the emergence of an oligopoly market structure of systemically important institutions. Second, we discuss how the finding that the funding gap left by the failure of deposit mobilization to match expansion of lending has led to increased interdependence on international private capital flows and domestic interbank markets. Third, we examine more deeply the emergence of mobile payments systems in Kenya and its possible impact on financial stability.

We conclude that, while these changes have brought positive benefits – including the expansion of financial services through the most capable institutions to households and liquidity provision to financial institutions – they have also increased financial fragility. This includes through
increasing liquidity risk via greater susceptibility to pro-cyclical international private capital flows and by increasing contagion and coordinated failure risks.

The chapter will then discuss the relationship of the expansion of financial and economic development. As discussed in Chapters 3 and 6, this can potentially include increasing intermediation of savings to productive investment. This chapter will present further fieldwork findings in relation to these issues. As will be discussed, the research suggests that the expansion of financial access is contributing moderately to deposit mobilization, but it is impaired by a lack of confidence in institutions and by non-incremental deposit-raising. In addition, much of the expansion of lending is going toward purposes that make a neutral or negative contribution to structural transformation.

7.1 Financial Sector Stability

7.1.1 The Growth of Systemically Important Institutions

As discussed in Chapter 6, there has been an emergence of a “winner takes all” market structure with a few dominant institutions attracting a disproportionately large share of deposits, equity, debt and lending. As a consequence, there has been an evolution of the market towards an oligopoly. This is illustrated by the CR3 concentrations measure (market share of the three largest banks), that in Kenya for loans is 86% and for deposits is 90%, versus an African financial market average of 68% (Beck et al., 2010).

The evolving market power of the top tier banks (especially Equity Bank) creates systemic issues because they are, arguably, systemically important institutions. The latter can be defined as an institution whose failure would cause widespread distress, either directly or as a trigger for contagion. It is assessed through several measures, including size and inter-connectedness relative to the whole financial system (IMF, 2009). By these measures, Equity Bank has become systemically important and a “too big to fail” institution. This issue was explicitly recognized in interviews with the Central Bank of Kenya who are consequentially directing additional resources to its supervision.
Currently, it is not possible to conclude whether the evolving market structure of excessive competition against an increasingly dominant institution will result in institutional failure or financial sector instability. However, it is possible to comment that the market structure that has evolved in microfinance in Kenya places high reliance for overall financial system stability on the soundness of a very few institutions.

7.1.2 DEEPENING OF LINKAGES IN DOMESTIC FINANCIAL MARKETS

Linkages within the financial system play a key role in intermediation. Interbank markets facilitate liquidity management and the transmission of monetary policy. Payments systems facilitate efficient intermediation between financial institutions and firms and households. However, such linkages can act as mechanisms to transmit contagion leading to financial instability. This may include sources of liquidity, such as participants in interbank markets, losing confidence, becoming increasingly risk adverse and reducing or stopping lending to other financial institutions, causing them to become insolvent (Acharya & Naqvi, 2010). There may also be a feedback loop between liquidity and insolvency problems in financial institutions that further deepens financial crisis.

Financial access is deepening financial linkages, including those in domestic interbank markets and through payments systems. This can bring significant economic and social benefits but also increases the risk of financial fragility by providing channels for transmitting financial instability. These two channels are now discussed in more detail.

7.1.2.1 The Deepening of Domestic Interbank Markets

As discussed in Chapter 6, private sector financing of institutions involved in the expansion of financial access has grown with the majority of debt financing now coming from private sources.
This has increased linkages to the international financial system. Such exposure increases liquidity risk within institutions where such inflows are pro-cyclical\(^5\).

In addition there has been significant growth in domestic interbank financing markets. Since 2006, the domestic interbank market has become a greater liquidity provider to microfinance institutions than international markets and as illustrated earlier, with domestic investors providing 27% of financing in 2007, but 60% by 2011.

The major recipients of increased domestic financing have been the second tier institutions, especially deposit-taking microfinance bodies, particularly KFWT. Smaller amounts have gone to SMEP and Faulu. These institutions have found it difficult to access international equity and debt markets. The major lenders have been Kenya Commercial Bank and Cooperative Bank, both of whom have exposure to several deposit-taking microfinance institutions. Many interviewees saw domestic financing as preferable, in some respects, to international funding. Interviewees at one deposit-taking microfinance institution, for example, commented that the long maturities available domestically had protected the institution from liquidity problems during the financial crisis and also helped it to avoid foreign exchange risk as domestic institutions were able to provide loans in Kenyan shillings.

However, whilst these domestic sources of financing can create a more stable source of financing, they also increase linkages within the financial sector and, consequently, can potentially pose greater systemic risk through contagion. For example, in Kenya, one bank is the creditor of another and, in the case of institutional collapse, one institution’s failure could cause the failure of another through credit losses leading to bankruptcy. Such contagion can spread in the instance of market rumours or reputational problems and then become self-fulfilling through withdrawal by liquidity providers or depositor bank runs. This is especially the case where financing is

\[^5\] During the financial crisis this has caused the failure of a number of institutions in developed economies was due to the failure to match loans and deposit growth and instead relying on interbank funding. For example Northern Rock in the UK, which collapsed after the first bank run in the UK since 1866, ran into problems because its funding was reliant on wholesale funding markets which became highly illiquid during the crisis, especially for small, regionally-based institutions such as Northern Rock.
uncollateralized, as is the case for the microfinance institutions. In that case, the speed of collapse of confidence is increased.

The deepening of domestic interbank markets also generates greater systemic risk by creating secondary exposure to microfinance credit risk. Cooperative Bank, for example, lends to KWFT, as well as directly in the microfinance market. Thus, it has a “double” exposure to microfinance, directly through its own credit portfolio and via its interbank lending to deposit-taking microfinance institutions.

In common, with other central banks, the Central Bank of Kenya acts as lender of last resort to institutions and in theory would be able to mitigate these risks. However, in practice, it is not known if there were to be multiple institutional collapses whether the Central Bank of Kenya would have the capacity to support all institutions. In fact, in past crises in Kenya, the Central Bank of Kenya has only been able to attempt orderly closure rather than rescues of various institutions.

7.1.2.2 Development of Payments Systems

In Kenya, there has been a strong growth in mobile banking. Mobile banking usage is high, with 61.6% of Kenyans using it by 2012. It has been the main reason why reported financial access in Kenya has increased so substantially (Financial Sector Deepening Program, 2013).

The most notable amongst these platforms has been M-PESA, a mobile phone-based money transfer system operated by agencies throughout Kenya and jointly owned by Safari.com (whose majority owner is the Government and minority owner is Vodafone). A number of competitors have also set up mobile banking services to compete with M-PESA, including three further operators: Zain (with its product “Zap”); Essar Telecom Kenya (with its product “yuCash”); and Telecom Kenya (with its Orange brand).

Such services typically operate through agents such as small shopkeepers, mobile phone renters or petty traders operating cash transfers for customers. By 2012, 10 microfinance-orientated banks had over 14,000 active agents in Kenya. A number of interviewees reported very fierce competition for mobile business and banks have set up networks of competing agents and ring
fencing of M-PESA, especially by Equity Bank, has become a method of creating a dominant position in the banking market.

Prior to 2008, M-PESA was unregulated. The Central Bank of Kenya allowed Safari.com to operate M-PESA outside the provisions of the banking law and without regulation. In 2008, after a lobbying attack from the banking industry seeking to shut down the service, the Central Bank did an audit of M-PESA, including the security features of the technology platform, at the request of the Ministry of Finance, and declared it sound but it did not enact regulation (Mas & Radcliffe, 2010).

In 2012, the National Payments Act was enacted, setting responsibilities for the management of agents and the control environment, but it remains at initial implementation stage and is limited in scope (source: Central Bank of Kenya).

This raises concerns relating to the soundness of what is effectively a national payments system. Despite the assertions of supporters of mobile banking that M-PESA is “the least risky, the fastest, most accessible and one of the least expensive channels” (Financial Sector Deepening Program, 2009, p.24), a number of issues exist that suggest it is a potential source of systemic and institutional risk.

Firstly, management and control of agents depends on their integrity and competency. The Central Bank of Kenya guidelines set out requirements for checking the “moral and professional suitability” of agents. In reality, this is difficult to achieve and interviewees reported instances of fraud and incompetence, especially as agents make cash transactions. KWFT, for example, reported fraud amongst its agents. In 2011, the Central Bank of Kenya issued agency banking guidelines, giving responsibility to banking institutions for managing agents, but as these have only just become operational it is not yet known how effective they will be in practice.

Secondly, and unregulated by current guidelines, more sophisticated institutions have built direct interfaces between their technology platforms and M-PESA into their mainframe banking systems. Other, less sophisticated institutions also reported developing such interfaces in order to allow them to compete effectively with customers who demand the seamless operation of bank accounts via mobile banking. This development creates a risk of internet fraud and errors, especially as mobile technology is vulnerable to fraudulent infiltration in the absence of strong
internal controls. The Central Bank of Kenya guidelines set some general guidance for managing this, such as stating that “technology risks regarding information and data security in wireless networks shall be properly identified and mitigated,” and requires the encryption of pins and transactions. However, no interviewees – even at the most sophisticated institutions – reported installing sophisticated technology security environments to manage these risks. With a reported 30 million agency transactions annually (source: Central Bank of Kenya) this environment is susceptible to fraud. To date, no major breaches of security have been publically reported. System downtime is frequent (Mas & Radcliffe, 2010), but it has yet to cause a delay or the collapse of the payment system.

Thirdly, M-PESA is increasing being used not just for money transfers, but also for deposit-taking, despite it being unregulated for doing so. In 2010 Safari.com and Equity Bank launched M-KESHO, which will offer fully-fledged financial services by mobile phone, including deposits and withdrawals, interest-bearing deposits and loans using automated credit-scoring. In 2011 Safari.com was made subject to certain regulatory requirements, such as deposits had to be kept in trust accounts at regulated financial institutions and limits on transaction sizes were imposed to address money laundering concerns. This deposit-taking is growing and is effectively unregulated making this an area of potential losses for deposit-makers if there were to be fraud or failure at M-PESA.

7.2 Financial Access’s Contribution to Financial Sector Development

7.2.1 Deposit Mobilization
As discussed previously, deposits in microfinance-orientated institutions have risen from Khs 37.5 to Khs 191.4 billion between 2006 and 2011, a more than fivefold increase. As illustrated in Figure 30 below, the number of depositors has increased from 103 per 1,000 adults in 2004 to 652 per 1,000 in 2011. Consistent with the expansion of financial access, average deposit balances declined until 2006 and then remained approximately constant at Khs 90,000. This would indicate both that deposit mobilization is successful at the macroeconomic level and that there is an increase in savings amongst the poor.
Figure 30. Average deposit per person and depositors per 1,000 people (2004-2011).

Source: IMF elaborated by the author (nominal values).

Note: Blue bars indicate average deposits and are read against the left hand axis. Red line indicates deposits per 1,000 adults and is read against the right hand axis.

However, the fieldwork challenges this conclusion. Firstly, the increasing number of deposits may be overstated as many interviewees commented that it was very common practice for their customers to hold multiple savings accounts, often for different purposes, such as sight deposits for daily use and time deposits for longer-term accumulation. This is also consistent with
household survey data that illustrates, for example, a reported 1.55 accounts per person (Financial Sector Deepening Program, 2009).

Interviewees reported that savings were not largely from the poor but from middle class customers, with customers transferring balances from non-microfinance banks to microfinance-orientated institutions. This is supported by data from household surveys that indicate that only 29% of the lowest quintile by income had savings products in 2009 compared to 64% of the top quintile (Financial Sector Deepening Program, 2009). Similarly, the IMF reports that average savings, whilst much lower than loans, are 1.5 times per capita annual GNI and, thus, still represent a figure unlikely to be achieved by those on subsistence incomes.

These issues indicate that the deposit figures in microfinance-orientated institutions alone are not adequate to reach a conclusion about access as they may represent net transfers between banks rather than incremental accounts. However, deposit mobilization in Kenya has increased from 33.5% of GDP in 2006 to 42.5% in 2011 (source: International Financial Statistics), so whilst deposit mobilization in the economy has increased, it cannot be concluded from the fieldwork what contribution to this has been made by microfinance-orientated institutions mobilizing deposits through the expansion of financial access.

7.2.2 **INVESTMENT MOBILIZATION FOR STRUCTURAL TRANSFORMATION**

An essential function of the financial system in facilitating economic growth is its contribution to investment that increases productivity – one of the defining processes of structural transformation. The development impact of the expansion of financial access is dependent on how the funds mobilised are deployed in relation to this productivity growth.

For Kenya, this issue can be examined through a sector analysis of the expansion of lending by microfinance-orientated institutions. This is presented in Table 17 and Figures 33 and 34 below that show loans analysed by sector for microfinance-orientated institutions from 2006 to 2011.

Sectors identified are agriculture, business and consumer lending. As noted in Chapter 6, “business” categories were inconsistent across institutions and definitions were not disclosed. “Microenterprises”, however, comprised 55% of total “business” loans (averaged from 2006 to 2012). Other categories that made up the remaining 45% included retail, wholesale and trading.
However, because of the inconsistencies and non-disclosure, no separate analysis was completed below the category of “business”. As a consequence, business lending is broadly defined and includes a number of categories including microenterprises, trading, wholesale and retail activities. Consumer lending includes payday lending.

As illustrated in these figures, all sectors expanded. However, both absolute amounts (Fig. 33) and percentage growth (Fig. 34) – all stated in real terms, that is with inflation–adjusted figures – were differentiated by sector. Business lending expanded more than threefold, from Khs 29.9 billion to Khs 81.8 billion. Agricultural lending grew from Khs 3.9 to Khs 5.7 billion. However, the strongest growth was in consumer lending, which expanded seventeen-fold, from Khs 3.2 to Khs 33.7 billion in the same period.

The much greater growth in consumer lending and the much lower growth in agricultural lending has led to a relative shift out of agriculture in favour of consumer lending. The share of lending to agriculture fell from 14% to 5% of outstanding lending from 2006 to 2011. By contrast, consumer lending grew from 11% to 28% of outstanding lending. Business lending fell as a percentage of lending from 75% to 68% of outstanding lending.

Table 17 Loans by sector: All institutions (2006-2011).

<table>
<thead>
<tr>
<th></th>
<th>Micro Enterprises</th>
<th>Retail &amp; Wholesale</th>
<th>Trading</th>
<th>All business</th>
<th>Agriculture</th>
<th>Consumer &amp; payday</th>
<th>Other</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>43,364</td>
<td>33,406</td>
<td>5,229</td>
<td>81,999</td>
<td>5,714</td>
<td>33,707</td>
<td>-129</td>
<td>121,291</td>
</tr>
<tr>
<td>2010</td>
<td>43,530</td>
<td>30,295</td>
<td>5,907</td>
<td>79,732</td>
<td>6,625</td>
<td>28,249</td>
<td>-358</td>
<td>114,248</td>
</tr>
<tr>
<td>2009</td>
<td>38,932</td>
<td>27,091</td>
<td>47</td>
<td>66,070</td>
<td>5,971</td>
<td>24,082</td>
<td>1,083</td>
<td>97,206</td>
</tr>
<tr>
<td>2008</td>
<td>37,511</td>
<td>21,302</td>
<td>40</td>
<td>58,853</td>
<td>5,028</td>
<td>16,399</td>
<td>676</td>
<td>80,955</td>
</tr>
<tr>
<td>2007</td>
<td>22,401</td>
<td>21,092</td>
<td>32</td>
<td>43,525</td>
<td>5,150</td>
<td>6,887</td>
<td>394</td>
<td>55,956</td>
</tr>
<tr>
<td>2006</td>
<td>13,862</td>
<td>16,083</td>
<td>21</td>
<td>29,966</td>
<td>3,993</td>
<td>3,240</td>
<td>256</td>
<td>37,454</td>
</tr>
</tbody>
</table>

Source: Financial statements & interview material elaborated by the author (inflation-adjusted basis).
Figure 31. Loans by sector: all institutions (2006-2011)

Source: Financial statements & interview material elaborated by the author (inflation-adjusted basis).

Figure 32 Loans by sector: all institutions (2006-2011).
Source: Financial statements & interview material elaborated by the author.

These trends can be examined by institutional category. Table 18 and Figure 33 show that microfinance-orientated banks experienced the largest overall expansion of lending. They were the main institutions driving the rise in consumer lending, accounting for 97% of the increase in lending for consumption from 2006 to 2011. In that time, they accounted for Khs 30.5 billion of the Khs 31.5 billion of increase in real terms and the percentage of their portfolios in consumer lending rose from 10% to 28%. In particular, Equity Bank expanded its consumer lending from Khs 2.1 billion in 2006 to 40.2 billion by 2011 (in nominal terms), a twenty-fold increase.

By contrast, agricultural and microbusiness lending, although increasing in absolute terms, declined in relative terms. Business lending changed from Khs 25.1 billion in 2006 to Khs 72.0 billion (in real terms) but declined as a percentage of the portfolio from 79% to 65%. Agricultural lending increased in absolute terms from Khs 3.3 billion to Khs 4.8 billion (in real terms), but declined in relative terms from 10.4% to only 4.3% of the portfolio.

<table>
<thead>
<tr>
<th>Business</th>
<th>Micro Enterprises</th>
<th>Retail &amp; Wholesale</th>
<th>Trading</th>
<th>Agriculture</th>
<th>Consumer &amp; payday</th>
<th>Other</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2011</strong></td>
<td>33,369</td>
<td>33,406</td>
<td>5,229</td>
<td><strong>4,819</strong></td>
<td><strong>32,748</strong></td>
<td>-129</td>
<td><strong>109,443</strong></td>
</tr>
<tr>
<td><strong>2010</strong></td>
<td>32,064</td>
<td>30,295</td>
<td>5,907</td>
<td><strong>5,871</strong></td>
<td><strong>27,664</strong></td>
<td>-359</td>
<td><strong>101,443</strong></td>
</tr>
<tr>
<td><strong>2009</strong></td>
<td>28,037</td>
<td>27,091</td>
<td>47</td>
<td><strong>4,863</strong></td>
<td><strong>23,852</strong></td>
<td>528</td>
<td><strong>84,416</strong></td>
</tr>
<tr>
<td><strong>2008</strong></td>
<td>28,274</td>
<td>21,302</td>
<td>40</td>
<td><strong>3,879</strong></td>
<td><strong>16,332</strong></td>
<td>447</td>
<td><strong>70,272</strong></td>
</tr>
<tr>
<td><strong>2007</strong></td>
<td>15,191</td>
<td>21,092</td>
<td>32</td>
<td><strong>4,362</strong></td>
<td><strong>6,839</strong></td>
<td>359</td>
<td><strong>47,875</strong></td>
</tr>
<tr>
<td><strong>2006</strong></td>
<td>9,050</td>
<td>16,083</td>
<td>21</td>
<td><strong>3,350</strong></td>
<td><strong>3,202</strong></td>
<td>234</td>
<td><strong>31,940</strong></td>
</tr>
</tbody>
</table>

Source: Financial statements and interview material elaborated by the author (inflation-adjusted basis)

Figure 33. Loans by sector: microfinance-orientated banks (2006-2011).

Source: Financial statements and interview material elaborated by the author.
In deposit-taking microfinance institutions – illustrated in Table 19 and Figure 34 – business lending has remained the majority of the portfolio, with increased lending in absolute terms from Khs 3.6 billion to Khs 8.6 billion, with a static percentage of the portfolio of 85%. However, post-transformation from unregulated microfinance institutions to regulated deposit-taking microfinance institutions, these institutions rapidly increased consumer lending, from 0% of their lending in 2008 to 7% by 2011 – although absolute amounts remained small – and decreased agricultural lending from 15% of total portfolios to only 6% between 2006 and 2011.

Table 19. Loans by sector: deposit-taking microfinance institutions (2006-2011)

<table>
<thead>
<tr>
<th></th>
<th>Business</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Micro Enterprises</td>
<td>3,635</td>
<td>5,190</td>
<td>7,678</td>
<td>9,080</td>
<td>10,129</td>
<td>8,689</td>
</tr>
<tr>
<td></td>
<td>Retail &amp; Wholesale</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Trading</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Agriculture</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>603</td>
<td>664</td>
<td>713</td>
</tr>
<tr>
<td></td>
<td>Consumer &amp; payday</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>170</td>
<td>401</td>
<td>713</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>427</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>4,260</td>
<td>5,933</td>
<td>8,762</td>
<td>10,649</td>
<td>11,098</td>
<td>10,065</td>
</tr>
</tbody>
</table>

Source: Financial statements and interview material elaborated by the author (inflation-adjusted basis).

Figure 34. Loans by sector: deposit-taking microfinance institutions (2006-2011)
By contrast – and illustrated in Table 20 and Figure 35 – there was little consumer lending amongst unregulated microfinance institutions. It was mainly accounted for by one unregulated microfinance institutions which was set up exclusively for commercial payday lending in Nairobi. In contrast to other institutions, microbusinesses continue to dominate their loan portfolios.


<table>
<thead>
<tr>
<th></th>
<th>Business</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Micro Enterprises</td>
<td>1,305</td>
<td>1,336</td>
</tr>
<tr>
<td></td>
<td>Retail &amp; Wholesale</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Trading</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Agriculture</td>
<td>231</td>
<td>187</td>
</tr>
<tr>
<td></td>
<td>Consumer &amp; payday</td>
<td>246</td>
<td>184</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>0</td>
<td>105</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1,783</td>
<td>1,707</td>
</tr>
<tr>
<td>Year</td>
<td>Loans</td>
<td>Interest</td>
<td>Loan Losses</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>2009</td>
<td>1,816</td>
<td>-</td>
<td>155</td>
</tr>
<tr>
<td>2008</td>
<td>1,560</td>
<td>-</td>
<td>83</td>
</tr>
<tr>
<td>2007</td>
<td>2,021</td>
<td>-</td>
<td>58</td>
</tr>
<tr>
<td>2006</td>
<td>1,177</td>
<td>-</td>
<td>39</td>
</tr>
</tbody>
</table>

Source: Financial statements and interview material elaborated by the author (inflation-adjusted basis).

Figure 35. Loans by sector: unregulated microfinance institutions (2006-2011)
Source: Financial statements and interview material elaborated by the author.

Interviewees commented that consumer lending is commercially attractive and that these trends reflect the rapid drive in the sector towards commercialization through both the entry of microfinance-orientated banks and the transformation of unregulated microfinance institutions into deposit-taking microfinance institutions. This is because, typically, consumer lending by the formal sector is not directed at the poor engaged in informal employment, but to those with regular salaried incomes and, as such, the more affluent middle class. Such relatively affluent customers are much more creditworthy than the poor in terms of both income and assets available for collateral. In addition, because repayments are typically made by direct deduction from salaries, their less volatile incomes make credit management easier. Target customers are concentrated in urban areas, particularly Nairobi, and so are cheaply serviced via branch networks. Such customers are suitable for low-cost credit management techniques such as credit scoring and for inclusion in the credit bureaus. Such customers however, borrow at the same rates as higher risk customers. This combination of high interest rates compared to risk, good collection rates and low costs of service makes the consumer-lending business very commercially attractive.
This was confirmed by the Financial Sector Deepening Program Financial Access Survey 2009 which comments that “the increased availability of banks credit appears to target consumer lending to public sector employees” and that there is “a bias ... towards the formal wages employed, particularly public sector workers”, concentrations in Nairobi and Central Province, Kenya’s most affluent regions, and that the “bulk” of loans growth was attributable to increases in the average size of loans rather than expansion of access (Financial Sector Deepening Program, 2009, p.13). The report concluded that “income, education ... and employment status are strong predictors of the use of financial services” and that “low income is still the most prominent barrier for the unbanked” (p.17). Similarly, regression analysis of survey data show that income is “one of the strongest predictions of usage of both formal and informal services” (Financial Sector Deepening Program, 2009, p.23).

This interpretation is also supported by the increases in the size of average loans. As illustrated in Figure 36, IMF data shows that the size of average loans, while declining as access initially expanded, stabilized from 2006 onwards at a high multiple of per capita GNI. Indeed, in 2011, the average loan size was 6.7 times the per capita annual GNI of $820 (source: World Bank).

Figure 36. Average loan and borrowers per 1,000 people (2004-2011).
Source: IMF elaborated by the author (nominal values).

Note: Green bars indicate average loans and are read against the left hand axis. Blue line indicates borrowers per 1,000 adults and is read against the right hand axis.

Other research findings are consistent with this rise in consumer lending but also indicate that borrowing is common amongst the poor as well as the middle classes. For example, household survey data found that between 2006 and 2009 borrowing had increased from 38.8% to 52.4% of the population (Financial Sector Deepening Program, 2009). This discrepancy is explained because borrowing is conducted in the informal sector for poor households and through the formal sector for middle class households. Indeed, despite these high figures for household borrowing, only 5.2% of the 2006 borrowing (or 13.4% of total borrowing) and 7.3% of the 2009 (or 13.9% of total borrowing) came from the formal sector with the remainder being lent by the informal sector (Financial Sector Deepening Kenya, 2009).
Interviewees’ comments were consistent with the commercial attractiveness of the sector. They reported there has been fierce competition for business amongst institutions in Kenya in terms of consumer lending to the middle classes. This has included very heavy marketing by both microfinance-orientated banks and deposit-taking microfinance institutions of consumer lending products to the middle classes, typically for mortgages and consumption goods such as cars and household goods, high-end clothing and vacations. Indeed, the rise of the aspirant middle classes has been observed by the international banking community and has been one of the drivers for its investments in the microfinance sector. For example, the Financial Times comments, “Kenya’s capital is full of aspirational buyers … Kenya’s banks now offer loans for everything from home furnishings to indulgent spa days for female customers”.

From an individual institution’s risk perspective, the expansion of middle class consumer lending versus other sectors is probably a net positive as it carries a lower innate credit risk. Indeed, interviewees at the Central Bank of Kenya specifically commented that it was leading to a net reduction in risk due to the greater proportion of lending to salaried workers.

However, some interviewees expressed concern over excessive lending in consumer finance and they underlined that this was one of the areas where over-debt and multiple indebtedness were occurring. For example, the chief executive officer of a microfinance-orientated bank described consumer lending as the “biggest worry” and that it was “out of hand” due to the high levels of competition for the same customers, thus driving a lowering of lending standards. Central Bank of Kenya interviewees commented that although microfinance-orientated banks had managed consumer credit risk well in the past, it was “deteriorating” and accounted for the “bulk” of provisions.

By contrast, lending to sectors important for structural transformation has grown more slowly. Business lending has declined as a percentage of total lending as financial access has expanded but has, nevertheless, expanded significantly in absolute terms. Interviewees reported this as constituting lending to small business, typically for short-term working capital or small capital needs.

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52 The Financial Times. 6 July 6 2011. “Aspiration drives Kenya’s status struggle”. 221
Agricultural lending has stagnated in relative terms. Microfinance-orientated banks shrank agricultural lending from 11% of lending in 2006 to 4% by 2011. Similarly, deposit-taking microfinance institutions shrank agricultural lending from 14% of their portfolios to 7%. Only unregulated microfinance institutions increased agricultural lending from 3% in 2006 to 13% in 2011. However, this was due to the establishment of a new unregulated microfinance institution dedicated exclusively to agricultural lending for value-chain finance in dairy products (Juhudi Kilimo).

Again these changes are consistent with commercialized incentives. Interviewees consistently reported that their view is that agricultural lending is high risk and subject to correlation risk between lenders. Agricultural risk has given rise to very material losses for institutions due to drought and political unrest in 2007 and 2008. As a result of these risks, a number of interviewees – including those at microfinance-orientated banks and deposit-taking microfinance institutions – stated that their organizations explicit policy was to withdraw or reduce agricultural lending that is commercially unattractive due to substantial and repeated credit losses and the high costs of operations in rural areas.

However, from an economic development perspective, the marginalization of agricultural lending is problematic. A critical process in development is a structural shift from labour intensive, subsistence agriculture to high productivity, high capital intensity agriculture and a restructuring of the economy away from agriculture towards industrialization. In Kenya, the agriculture sector remains economically dominant in terms of both labour and GDP. It is labour-intensive with low productivity and low capital intensity. Especially in rural areas, the majority of the population remains in subsistence agriculture. Some rural areas, particularly those in the North and East, also have poor quality land and suffer from an arid climate. Their need for investment capital for agricultural development is high. The trend seen in microfinance – whereby agricultural lending is being marginalized – can only be detrimental to agricultural development.
7.3 Conclusion

This chapter the thesis has built on the findings presented in Chapter 6 relating to institutions in order to generate a systemic view. Two critical questions were examined in relation to the impact of the expansion of financial access on the financial system: its impact on both financial sector stability and contribution to the intermediation of funds to investment that will add to structural transformation.

In relation to financial stability, the research has found that expansion of financial access has had a mixed impact. Due to “winner takes all” tendencies, an oligopoly market structure has evolved with a few systemically-important institutions. This means that the financial system’s stability is highly dependent upon their individual institutional soundness.

The financial market has also seen changes in liquidity risks and related contagion risks. This has included a deepening of interbank markets and growth in domestic payments systems (especially M-PESA). The changes in liquidity risk are particularly relevant to institutions – primarily deposit-taking microfinance institutions – that have failed to mobilize adequate levels of deposits to match the expansion of lending or to attract international private capital. This has led to an increased dependence on domestic interbank markets. The deepening of domestic interbank markets has allowed such institutions to access liquidity provision. However, it is also increasing financial fragility through increasing contagion risks and coordinated failure risks between domestic institutions.

Overall the growth of financial access has brought both positives and negatives in relation to financial stability. In Chapter 9, the thesis will discuss what policy approaches should be considered to ensure that the benefits continue whilst ensuring financial stability is maintained.

In relation to the impact on intermediation of funds to investment that will contribute to structural transformation, the fieldwork findings were less positive. The research found that the expansion of financial access is contributing moderately to deposit mobilization, but that may be being impaired by weak confidence in institutions and by non-incremental deposit-raising.

Most importantly, the research found that capital is being intermediated primarily into business and consumer lending. The majority of increased lending to business is in “microbusinesses” that
make little contribution to large-scale industrialization or service sector development (Nissanke, 2001). This is discussed further in the concluding chapter.

The growth in consumer lending is less positive as, although it may be assisting the poor in consumption smoothing, it also appears to be mainly offered to middle class households and is less likely to contribute to economic development. Of most concern is the reduced relative level of lending to agriculture, a key sector that requires investment in order for it to be transformed from a low to a high productivity sector. Furthermore, this trend towards expansion of lending into sectors with little transformative potential was strongest in the dominant institutions, notably Equity Bank.

In the next chapter – the final chapter that presents the research and fieldwork findings – the thesis will turn to a new topic, the role of financial access in the financial lives of the poor. The chapter will represent findings that support the conclusion in Chapters 6 and 7, including the low level of deposit mobilization from poor households and the continued constrained credit for agriculture and business investment. In addition, it will examine, from the perspective of the poor themselves, the “barriers” to greater financial access.

Recent research into financial access in developing countries has focused on the “financial lives of the poor”. This approach has yielded new insights into the financial needs and behaviour of the poor, especially the way in which they manage through finance the risk and uncertainty caused by the low and volatile incomes that are prevalent in their lives. In this chapter, we build on this developing body of research relating to the financial lives of the poor by presenting the results of semi-structured fieldwork interviews with the poor in urban and rural areas in Kenya that investigated their financial lives and place the expansion of financial access in those lives.

At a macroeconomic level our findings suggest that the expansion of financial access through the private sector is sub-optimal in deposit mobilization and in intermediating investment. Lending, in particular, is being directed towards sectors, like consumption, which do not contribute to structural transformation. This chapter further supports these findings. Barriers remain against the use of formal financial services by the poor, including “voluntary” barriers due to the services being offered by microfinance-orientated institutions not serving the needs or wants of the poor. Furthermore, lack of financial access undermines the goals of financial sector development, including mobilization of savings and the use of credit for investment in small and medium-sized enterprises in the formal sector.

8.1 Thesis Methodology for Individual Interviews

As discussed in the introduction in Chapter 1, the thesis has sought to incorporate the voices of the poor in its research and places their views and opinions of financial access and its advantages and disadvantages in a position central to the research. As such the methodology included fieldwork with low-income households.

As will be discussed, fieldwork interviews were conducted with individuals between March and May 2012 in Kenya (subsequent to the interviews with practitioners, regulators and investors). In
total, 109 interviewees participated in 14 focus group interviews, with 55 being conducted in Kibera and 56 in Kisumu.

In designing the methodology, a number of factors had to be considered including selection of the sample frame, selection of the individuals within the frame, the form of the interviews, and the method to obtain accurate information in an area which may be sensitive or confidential – people’s financial lives. These factors and how they were handled – and some critical comments about it – are discussed below.

The selection of the sample frame was driven by a number of factors. Existing individual surveys were examined to provide guidance. The surveys were those from FSD (Financial Sector Deepening Kenya, 2009). They showed a number of demographic dimensions upon which financial access can be examined. These include age, sex, education, income and location. They showed that the level of financial access is positive correlated with older age groups, with men relative to women, with greater levels of education, and with higher levels of income. For the purposes of the thesis – which sought to interview poorer individuals but not the “poorest-of-the-poor” – it was hoped to select lower-income individuals, but to randomise age and sex. Education was captured within this because of its positive correlation with income.

In addition to this – and as discussed in Chapter 5 – mainstream literature identifies barriers to financial access. Many of these barriers are associated with location, particularly with remote, rural areas where barriers include physical distance to bank premises or the cost of travel to premises relative to levels of transactions. The FSD surveys confirmed different levels of access between rural and urban areas in Kenya. In particular, urban areas of Kenya – such as Nairobi and Mombasa – had higher levels of financial access than rural areas, and the remotest rural areas – such as the North-Eastern Province – had the lowest levels of access (FSD, 2009). As one of the goals of the research was to critically examine these “involuntary” barriers to financial access, it was decided to use two comparative sites, one rural and one urban.

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53 Kenya has eight provinces: (with the capitals in brackets): Central Province (Nyeri), Coast Province (Mombasa), Eastern Province (Embu), Nairobi (Nairobi), North Eastern Province (Garissa), Nyanza Province (Kisumu), Rift Valley Province (Nakuru), Western Province (Kakamega).
Based on these two factors – the need to interview low-income individuals in an urban and a rural site – specific sample frames needed to be chosen. This was determined mainly by selecting sites with the best access.

Firstly, SOAS requires students to act upon the UK Foreign Office advice regarding which locations not to travel to. At the time of the fieldwork the Foreign Office had issued warnings against travel to the eastern and coastal areas of Kenya – including Coast Province (Mombasa) and the North Eastern Province - so these were ineligible for consideration.

Given this, and because it is Kenya’s largest city, Nairobi was chosen as the urban location. As the fieldwork wanted to focus on poor individuals, interviews needed to be conducted in poor areas. Kibera was chosen as it is a large slum area in Nairobi but not amongst the most impoverished. Also, Kibera has been an area where many MFIs – including microfinance-orientated banks – have been active in establishing physical branches and marketing their products according to the earlier interviews with banks and FSD.

In rural areas, after Foreign Office advisory sites had been excluded, the remaining potential locations were a number of rural areas in central Kenya. Provinces in the Rift Valley and Mount Kenya were also relatively affluent according to the FSD household surveys and so the interviewees were more likely to include those that were poorer - but with above subsistence levels of income. As will be discussed further, the final choice was Nyanza Province because of the assistance provided by an NGO, Farm Africa.

Once the sample frames had been determined, individuals within the frame needed to be selected. In this regard, interviewees were again determined by practical considerations relating to access. In Kibera, the British Institute in East Africa (BIEA) – a charitable institute in Nairobi associated with the University of Nairobi and where I lived during the fieldwork – helped to identify a research assistant. The assistant had worked previously in a secondary school in Kibera and the BIEA guard was a resident and member of a Baptist church in Kibera, and they both helped me find interviewees. The assistant contacted a former teacher at the school and we worked from his home in Kibera to network through the neighbourhood to ask for interviewees. This included meeting a number of interviewees in their own homes throughout Kibera. I also attended the
church with the guard on Sundays and, via the minister, members of the congregation were invited to be interviewed.

For the rural areas, I contacted a charity – Farm Africa – after reading an article about their work in “Farmers’ Weekly” magazine. They were involved in supporting farming projects in Kenya which sought to help farmers develop projects to increase their yields and incomes, such as through introducing improved seeds and fertilisers, diversifying farming activities and increasing agricultural processing. After discussion with their staff in London and Nairobi, they agreed to introduce me to their staff and the people they worked with in Nyanza in return for me writing a report about my findings relating to their projects. We agreed I would visit all projects that they were supporting in Nyanza in order to avoid any selection by local staff of only the best projects. Their local staff met us in Farm Africa’s offices in Kisumu and they arranged the meetings and other practical arrangements for the interviews. The staff accompanied us for interviews with the cassava farmers but not for the fish farmers when I went unaccompanied (although local representatives joined us for some of the meetings).

Fees were paid to the interviewees but not to the Farm Africa staff or organization. In Kibera, each interviewee was offered a fee of Khs 100 (about $1). For the interviews in Kisumu, a lump sum fee was paid to the group leader of between Khs 2,000 to 4,000 (about $20-40) and the groups were left to decide whether to use it collectively or individually. On occasions we also gave small gifts such as paper, pens and food.

There is a consideration to be made regarding whether such compensation to interviewees distorts research results. It can be argued that payments are ethically justified to compensate interviews for their time and inconvenience in participation. This was the view of the author.

Ideally, payments should also increase participation – and hence the representativeness of the sample of interviewees, but without distorting outcomes. This is more of a concern when payments are large, but research suggests that modest payments increase participation without excessive distortion. (Grady, 2001) This is especially the case when it is combined with information to participants to remind them of the voluntary nature of both their participation and of any responses, including their choice as to whether to provide the requested information or not (Grady, 2001). Such reminders were included in our introduction for focus groups.
In the case of this research, the amount paid was deliberately set at approximately half days’ casual salary as this was approximately the time given by the interviewees and this has been defined as a fair financial inducement, but not so much that it might distort results (Fisher & Anushko, 2008). Although some interviewees did seem to be motivated to participate in order to receive the fee – most notably in Kibera – there did not seem to be any evidence that it distorted responses. However, the presence of these payments may have distorted the representativeness of the sample or their responses.

The interviews were conducted using a questionnaire that sought to gather quantitative data on formal sector engagement. This is given in Table 21 below. The original aim of the questionnaire was to collect quantitative and qualitative data about the individual interviewees’ financial lives and financial access in a structured way and to provide consistency across the interviews. This included topics related to the holding of deposit and loan accounts, loans and savings balances and data on asset holdings and income.

Table 21. Interview questionnaire.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Detailed questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL</td>
<td>1. What is your age? 18-30; 31-45; 45-60; Over 60</td>
</tr>
<tr>
<td></td>
<td>2. What is your occupation(s)?</td>
</tr>
<tr>
<td></td>
<td>3. Please estimate your current monthly (cash) income?</td>
</tr>
<tr>
<td>DEPOSIT / SAVINGS</td>
<td>Have you used a savings product in the last year?</td>
</tr>
<tr>
<td>DEMAND - GROUP</td>
<td>• With a group?</td>
</tr>
<tr>
<td></td>
<td>• As an individual?</td>
</tr>
<tr>
<td></td>
<td>If yes, for GROUP SAVINGS (For each group):</td>
</tr>
<tr>
<td></td>
<td>1. Describe the main characteristics of the group?</td>
</tr>
<tr>
<td></td>
<td>a. Name</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>b.</td>
<td>Registered or unregistered</td>
</tr>
<tr>
<td>c.</td>
<td>Number of members</td>
</tr>
<tr>
<td>d.</td>
<td>Time it has been active</td>
</tr>
<tr>
<td>e.</td>
<td>Regular contributions e.g. weekly or monthly amounts</td>
</tr>
<tr>
<td>f.</td>
<td>How often does the group meet</td>
</tr>
<tr>
<td>g.</td>
<td>Lending amounts and time</td>
</tr>
<tr>
<td>h.</td>
<td>Interest rates (Members and non-members)</td>
</tr>
<tr>
<td>i.</td>
<td>Business (Projects) activities</td>
</tr>
<tr>
<td>j.</td>
<td>Distribution patterns</td>
</tr>
</tbody>
</table>

2. What is the purpose of the group’s savings?

   a. Business/Projects (Describe details including income & employment)
   
   b. Emergency funds (e.g. Health)
   
   c. Education
   
   d. Other (Describe)

3. Does the group have a formal bank account? If so;

   a. Which bank is used and why?
   
   b. How often & how much is typically money banked
   
   c. What is the typical (Average) balance in the account?
   
   d. What has been the maximum ever in this account?
DEPOSIT / SAVINGS DEMAND - PERSONAL SAVINGS:

1. What type of product have you used?
   a. Formal Savings: Bank account / MFI account / M-PESA / Other (Specify)
   b. Informal Savings: Secret place / friends or family / Other (Specify)

2. Which formal provider did you use (Name of bank or MFI)?

3. What were the purposes of your savings?
   Everyday household needs / Emergency funds (e.g. Health) / Business / saving for house or household goods / Education / Marriage or Funeral expenses / other long term savings

4. What is the average balance in the account?
   Less than 200Khs / 200-1,000 Khs / 1,001-10,000 Khs / Above 10,000 (Specify)

5. What has been the maximum ever in this account?
   Less than 200Khs / 200-1,000 Khs / 1,001-10,000 Khs / Above 10,000 (Specify)

6. What is the average monthly deposit made into this account?
   Less than 200Khs (Specify) / 200-1,000 Khs / 1,001-10,000 Khs / Above 10,000 (Specify)

   If “No” savings in the last year:

7. If you have had no cash savings, why is this?
   No money to be saved / Irregular income / Unemployment / Difficulty of finding or accessing (e.g. due to distance) a savings method / Barriers such as minimum deposits / Put off by formality of some types of savings / Other (Specify)

8. Have you ever had non-cash assets you see as primarily savings?
<table>
<thead>
<tr>
<th>CREDIT / LOAN DEMAND</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you used a loan or credit product in the last year?** Yes / No.**</td>
<td></td>
</tr>
<tr>
<td>If yes, for each product used:</td>
<td></td>
</tr>
<tr>
<td>1. What provider have you used?</td>
<td></td>
</tr>
<tr>
<td>Formal Loan: Bank account / MFI account / M-PESA / Savings club (Including ROSCA and similar) / Other (Specify)</td>
<td></td>
</tr>
<tr>
<td>Informal Borrowing: Friends or family / Other (Specify)</td>
<td></td>
</tr>
<tr>
<td>2. What was the purpose of your loan? Please indicate up to three purposes.</td>
<td></td>
</tr>
<tr>
<td>Everyday household needs / Emergency funds (e.g. Health) / Business working capital (i.e. short term) / Business investment (Specify) / Agricultural working capital / House or household goods / Education / Marriage or Funeral expenses / Other long term savings</td>
<td></td>
</tr>
<tr>
<td>3. What is the typical (Average) loan amount?</td>
<td></td>
</tr>
<tr>
<td>Less than 200Khs / 200-1,000 Khs / 1,001-10,000 Khs / Above 10,000 (Specify)</td>
<td></td>
</tr>
<tr>
<td>4. How long was the loan outstanding?</td>
<td></td>
</tr>
<tr>
<td>Less than 1 week / Up to 1 month / Up to 6 months / Up to 1 year / More than 1 year(Specify)</td>
<td></td>
</tr>
<tr>
<td>5. Have you had more than one loan outstanding at the same time?</td>
<td></td>
</tr>
</tbody>
</table>
If yes, what is the maximum and typical number of loans you have outstanding simultaneously? What is the reason you use multiple lending sources? Have you used one loan to repay another? Has having multiple loans made interest or principal payments difficult? Have you disclosed other loans to lenders?

6. Have you experienced any problems with lending or borrowing?

If “No loans” in the last year:

7. If you have not borrowed any money, why is this?

Never needed / No source to borrow from / Did not know how too / Not enough money or income to be able too / Did not meet other lender requirements e.g. for employment or collateral or guarantor / Concerned would not be able to repay / Do not believe it is a good or ethical option / Other (Specify)

Source: The author.

However, although the questionnaire was originally planned to be used for each individual interview, it became a more general checklist for focus groups. This was because it rapidly became clear that the less structured discussions in focus groups was giving richer and more complete material than the responses that were generated from either rigidly following the questionnaire (which had been predetermined by the researcher) or from discussions conducted with individuals only. For example, it was found that the interviewee discussions brought up new issues that had not been addressed in the initial questionnaire and that the group discussions were producing a richer picture of their financial lives when they were not constrained by predetermined topics, and these were then discussed between the interviewees in the focus group which drew out more detail.

This has been observed in other methodology research where the use of such focus groups has the key advantage of allowing large numbers of observation within a relatively short time and a wider and more complete range of topics and responses (Smithson, 2008; Kruger & Casey, 2009).
As a result, the mix of structured versus unstructured interviews and the combination of individual versus group focus evolved as the interviews progressed, with greater emphasis being placed on unstructured focus group interviews.

However, focus groups can introduce issues that need to be managed carefully during the research process. One issue that can arise in focus groups is that the moderator can unconsciously introduce bias of various forms into fieldwork interviews (Smithson, 2008). A number of steps were taken to manage these issues. Care was taken not to present leading questions but to use “open” questions that do not constrain responses, and the emphasis on this increased during the fieldwork. The researcher has been trained as a “neutral” interviewer (as a clinical psychologist) and this was helpful.

A further disadvantage of focus groups is that dominant individuals in the group can influence the results (Krueger & Casey, 2009). This was observed in some of the focus groups in the fieldwork. For example, men or older men and women were more forthcoming with their views and comments. This probably reflected their relative status in the focus groups where they not only had higher social status but were also known as leaders – both formally and informally – among the group. This observation was used in the moderation of the group where we sought to encourage initial discussions by asking the first speaker to be such a forthcoming individual and this appeared to be effective in encouraging others to become more open in sharing their opinions. However, care was also taken to direct questions specifically to individuals who were not participating – such as younger women – to solicit their comment. This had mixed results, because even when spoken to directly some women did not wish to respond – although others seized the chance very willingly to give their opinions.

Lastly, a key issue was how to extract material from the interviewees regarding their financial lives, given that this might be a sensitive topic. This issue can often be observed in research involving issues such as financial lives and needs to be handled carefully (Christensen, 1993). We approached this by using the focus group format where interviewees were members of saving and loans clubs and so were already familiar with each other’s financial lives. Similarly, a female research assistant from the local area was chosen as it was considered that women would be more relaxed when discussing issues with another woman from their region. This also allowed interviewees to speak in their first languages, thereby ensuring that those who did not speak
English were able to participate. We also included in our introductory comments a statement that the information was confidential and would only be used for research, while interviewees were asked only to give their first names and permission was sought to make tape recordings of the group.

As interviews progressed, we also found that it was most productive to ask groups to describe the workings of their clubs first. As this was already common information, interviewees were relaxed when giving detailed information. This also created a relaxed atmosphere. We would then ask for more individual information that seemed more sensitive – such as personal savings goals – before asking what appeared to be the most sensitive information - such as bank account balances and asset holdings.

It is also worth noting that it was not clear to what extent interviewees felt financial life information was private and if they were reluctant to share this with each other and the researchers. In European cultures, asking for information regarding your earnings, the value of your assets or bank balances etc, by friends or neighbours would be largely taboo. However, in Kenya, it is not clear if this was the case as many interviewees seemed relaxed providing it – even to researchers who were relative strangers – and, in fact, only one person refused. Such cultural differences need to considered when conducting fieldwork (Christensen, 1993).

The above discussion describes the methodology that was used for the fieldwork interviews. However, it can be critiqued in a number of areas. Firstly, the selection of the individual interviewees within the sampling frames – although not subject to a clear bias or other systemic approach – was also not randomised. As noted, the approach tried to address major sample bias found in the FSD surveys – such as age, sex and location – through the selection of appropriate sample frames for the research questions.

However, there was not full randomization of individuals. Other research has used techniques such as random selection from voter registers (although this introduces bias of a different type because marginalised groups are less likely to be registered), random selection through mapping of the sample frame with random selection of households within the sample frame or even simpler methods such as selection of periodic houses in a given location. However, in this research such approaches were not used. This was partially due to practical problems including a lack of
resources for a PhD student and security considerations as a lone researcher. However, it needs to be recognised that these issues means that the sample may be subject to selection bias.

Secondly, as noted earlier, the use and form of the questionnaire evolved during the fieldwork and there was a greater emphasis on focus groups. However, this approach of using unstructured interviews and focus groups can also introduce bias in results (Devereux, 1993). In retrospective, it would have been better to conduct a pilot study and then rework the questionnaire to reflect the feedback. This effectively took place during the study. Had a pilot study been conducted however, greater consistency could have been achieved between the interviews.

These issues are particularly important in relation to the quantitative data collected. The validity of any aggregates may have been impacted, both by the lack of randomization and the lack of interview structure (Devereux, 1993). Again, this can be contrasted with the method used in, for example, the FSD surveys, which deployed standard questionnaires with pre-determined responses with no element of qualitative discussion but that yielded strong quantitative data (FSD, 2009, 2012). Overall, the quantitative data – although suggestive of outcomes – would ideally be verified through more systematic questionnaires and sampling than was conducted in this thesis.

Thirdly, the fieldwork relied upon self-reporting by interviewees. Ideally, interview responses should be verified against independent information. However, in this research, it was not possible to verify statements made by interviewees against independent evidence. This was because this was not asked for, as it went beyond the scope of the focus group or was not available – for example the value of non-cash assets. It also included responses to quantitative questions – for example, bank balances or asset holdings – where responses could have been confirmed by independent evidence. For example, bank balances could have been checked against bank statements or assets against title deeds or purchase records. These issues mean that the responses could be inaccurate.

Misreporting might be deliberate. For example, it might occur where interviewees are reluctant to provide sensitive information and instead provide false information on sensitive issues about matters such as, for example, financial status or sexual behaviour (Christensen, 1993). It can also occur because interviewees are relying on recall and this may be inadvertently inaccurate (Devereux, 1993).
It is not possible to objectively assess whether such issues were present. Subjectively, most responses did appear genuine and open. This was particularly because many of the interviewees were already familiar with the financial lives of the other interviewees through the various savings and loans clubs. They also cross-checked and agreed responses on issues including, for example, club practices and balances during the discussion, thus making errors due to faulty recall less likely.

However, it was also noted that on occasion some responses did not seem credible or interviewees were evasive. For example, some young men in the case study relating to garbage collection stated they had large bank balances but this did not seem compatible with their stated income and other circumstances. Some people were evasive about their amount of personal savings, although only one interview refused to respond outright. It is possible that they wished to keep such information private or were concerned about its security if it became known that they had substantial savings. This is especially because in some areas – such as Kibera – having known savings might make people a target for crime.

Finally, responses may have been affected by group dynamics. (Krueger and Casey, 2009). As noted, it was common for the established group leaders to lead the discussions. Also, women in the discussions sometimes deferred to men or younger women to older women, allowing the men or the older women to lead the conversation. This occurred even when women who had not spoken were specifically invited to do so by the researchers and, on occasion, they then provided limited answers or let the men respond for them. However, there was also an element of individual personality reflected in these observations – some women were quiet and deferential but others were extrovert and freely offered bold opinions and information. Again, it is not possible to objectively determine whether these observations caused bias in the interview material.

Overall, it is believed by the author that the interview material that is about to be presented remains valuable in providing insights into the voices of the poor and their interaction with financial access. Nevertheless, these methodological shortcomings should be noted.

8.2 Urban Financial Lives of the Poor
All of the 56 interviewees were resident in Kibera, which is one of the largest slums in Nairobi with an estimated population of one million. It is home to both long term-residents and low-income immigrants from rural areas. Living conditions, whilst poor, are not those of “the poorest of the poor,” as not only has Kibera an established housing stock and services (such as electricity, shops and non-running water), but also well-established social structures.

Living conditions include crowded homes and buildings made of low quality building materials such as scrap wood, mud walls and tin roofs. In the homes and other buildings (such as the local church and shops) where interviews took place, the interiors of the homes were simple and often included not only furniture, such as beds and sofas, but other possessions, such as televisions, stereos and bicycles. Most of the interviewees lived in collective compounds. The compounds typically had electricity (although it is “jerry-rigged”), tanked water and pit latrines. Between buildings in Kibera there are large amounts of rubbish and open sewers. Interviewees reported a fear of crime and the presence of limited and poor quality government schools and health centres. The majority of interviewees lived with extended families and many had dependents, including children. There is a large market in Kibera (“The Toy Market”) where a number of the interviewees conducted petty trade and it is served by a local minibus (“Matatu”).

Figure 37. Figure 8.1 Selected images of Kibera\textsuperscript{54} (illustrating the living conditions of interviewees).

\textsuperscript{54} Images are publically available third party pictures as cameras were not taken on fieldwork at the request of research assistants due to security concerns.
Kibera is an area where institutions focusing on microfinance clients have very active marketing and branch network expansion. Equity Bank has been very active with a large branch in the main
street in Kibera and included active marketing advertising throughout the slum. This is reflected in the number of interviewees who have opened accounts at Equity Bank. Other banks with branches in Kibera include Cooperative Bank and Jami Bora. M-PESA agents are scattered throughout the area.

Interviewees were chosen as those with incomes above subsistence level and so had some disposable income with potential savings capacity. In total, 95% were informally employed or were employed in low-pay work. Income averaged Khs 250-750 daily. Typical occupations included collective businesses within Kibera (such as water or latrine provision, garbage collection or child-minding), collective low-skill manufacturing (such as weaving and spinning or soap manufacturing), small shop-keeping and petty trades or occupations (Such as selling vegetables or second hand clothes). Some interviewees had waged jobs, but these were often irregular and relatively low-skilled. They included, for example, security watchmen or drivers. There were a few exceptions, such as one informally qualified electrician, one primary school teacher and two salaried community workers. However, none had professional qualifications and all were employed within Kibera.

8.2.1 Savings and Lending Groups

It was very popular to be a member of a savings and lending group (SLG), including both registered and unregistered saving and credit co-operative societies (SACCO). In fact, 95% (53/56) of interviewees reported being a member of a savings and loan group with 24 separate savings and loan groups being included in the sample of the 53 individual interviewees. Savings and loan groups were organized by neighbourhood or community groups, such as local neighbours, women’s or church groups. They typically functioned by collecting monies on a regular basis, with members then being able to borrow monies from the group. However, as will be discussed further, their primary purpose is business investment and “self-insurance” for emergencies.

Membership numbers varied widely with a mean of 24 members but a mode of 15-20 members and a range from a minimum of five to a maximum of 72 members. Interviewees who were members of the same groups showed throughout the interviewees that they typically knew each other well, including their financial lives, and there was a strong social and community aspect to the groups. The age of the group also varied with some being short-dated, such as less than a year,
and others up to “more than” 20 years. However, the mode age was 2-5 years. Collections of monies were weekly (50%) with an average collection of Khs 152 or monthly (50%), with an average collection of Khs 766. A minority of groups (14%) also made an annual collection of Khs 500 or Khs 1,000, mainly for Christmas celebrations. Interviewees commonly commented that making contributions was easy, with members typically seeking to build a small amount each day or week from their income in order to collate the required sum.

Savings and loan groups varied in their formality with some being very informal and others using detailed written terms and conditions. Kenyan savings and loan groups can be registered as savings and credit cooperative societies. They are required to be registered in order for the group to open a bank account. In our sample, 42% (10/24) of the groups were registered, with the others unregistered. However, 67% (16/24) had a group bank account, implying a disregard for registration requirements. The most popular bank to hold funds with was Equity Bank (63%), which dominated group accounts, followed by Cooperative Bank (31%) and deposit-taking microfinance institutions (11%). None had a bank account with an unregulated microfinance institution. In total, 34% of cash collections from group savings and activities was banked on average each week or month after collections, with the rest being spent. Average account balances were Khs 64,500 with a range of balances from Khs 30,000 to Khs 200,000. Those with larger balances were often associated with the accumulation of funds for specific purposes, particularly school fees that are paid out periodically over the academic year.

Figure 38 details the most commonly-cited purpose by interviewees for their saving and lending activities. It provides separate figures for group and personal savings and respondents were allowed to give up to three responses.

Figure 38. Urban interviewees stated purpose for saving.
As can be seen, the most important function of savings and lending groups are not savings and lending per se, but income and employment generation through community businesses, with 58% of interviewees commenting this was the primary purpose of the group’s savings and lending. The interviewees described how the monies collected on a regular basis are invested in their small businesses. Critical to understanding the substance of these activities is not only the collective nature of the savings and loan group, but also the character of the businesses, almost all of which were collectively, not individually, managed and owned.

In many instances, the business also provided the primary employment for the group members and profit-shares that represented important income. Profit shares often had a savings-like component because income distribution was periodic, such as annual distributions.

The investments being made were in business assets, such as equipment or property for use in the business, or as working capital. This funding is of considerable importance. It adds a different
dimension compared to what is discussed in the mainstream literature. In most cases, studies of microfinance fail to analyse the collective nature of many small businesses in developing countries. Moreover – and again in contrast to much existing literature – no groups reported having received any formal loans, and businesses were entirely self-funded. Many interviewees saw this as preferable as it avoided the costs and collateral risks of formal bank loans.

The second most common purpose for savings was for “emergencies,” with 34% citing this as an important purpose for the savings and loan group, and 20% as the exclusive purpose for the group. This shows that an important savings and loan group function is to provide a fund for members to draw down on in the event of emergencies. Group members saw this ability to “self-insure” each other against adverse events as a critical reason and purpose for the group. There was a strong community and social element to the ability of a collective business to provide mutual support and assistance to members. Typically, an emergency was identified as warranting funds during group meetings that would then authorize release of funds. Examples included health emergencies or funeral expenses. Often emergency loans were in fact gifts and were not repayable by members. For a number of groups, these were the only reasons members could borrow funds.

The third important purpose for group savings was education, with 29% of groups citing this as an important purpose. Many members put a high value on education, either for themselves or for their children. Often, they actively sought educational opportunities in the private sector, given the poor quality of government education. Fees are paid annually or each term in lump sums and were a major financial burden. Savings clubs functioned to allow structured savings towards this goal or allowed accumulation of profits from collective businesses to fund the required payments.

Most groups allowed borrowing by both members and non-members and many interviewees reported taking occasional loans from the group. Loans were typically agreed at weekly or monthly group meetings. Average loans were Khs 1,600 with the amount that could be borrowed varying from Khs 1,000 to 3,000 and repayable within one week or month. As such, loans were typically short term and for relatively small amounts, reflecting their function as a “service” to group members. Interest rates averaged 12% per month for group members and 22% for non-members. Many commented on these rates being significantly below other possible sources of loans, including formal banks and moneylenders. They noted that the loans also had a key advantage of creating income for the members and the return was put into the overall returns from
the collective businesses. Collateral was usually taken and took the form of small assets, such as household goods or similar, and was particularly common for non-members.

8.2.2 Individual Savings, Borrowings and Assets

In addition to group financial behaviour, interviewees were asked for information in relation to their individual financial lives. Of the 56 people interviewed, 66% (37/56) have a formal personal bank account, 34% (19/56) savings in kind and 21% reported having neither.

In relation to formal bank accounts, all were deposit accounts. The most popular banks were Equity Bank where 38% of those with an account held their account and Cooperative Bank where 27% were customers. In addition, for personal accounts, M-PESA was also engaged with 22% of interviewees reporting using M-PESA for savings. Interviewees reported using banks for longer-term savings and M-PESA for short term, daily cash flow. A number reported that this was because they liked the discipline that limited access to funds, such as the inconvenience of visiting the bank, compared to the security and convenience of using M-PESA to access small, daily cash requirements.

However, whilst some interviewees reported accumulating reasonably large sums of up to Khs 70,000, the average balance for the majority was smaller at Khs 4,300 and the mode much smaller at less than Khs 1,000. This is illustrated in Figure 39. Only 8% (5/56) reported having significant accumulated savings, defined as balances over Khs 10,000. In contrast, 66% (37/56) of interviewees reported having less than Khs 1,000 in their bank accounts and a further 25% (14/56) reporting having between Khs 1,000 and Khs 10,000. Furthermore, 82% (45/56) reported not making regular savings, such as on a weekly or monthly basis.

The reasons given for this lack of regular use of deposit accounts and low balances, was that that although they had opened accounts, it was often under the influence of advertising and promotion by microfinance-orientated banks and after opening the account they had not found them to be useful. Others reported only holding deposit accounts in order to meet the requirements set by formal banks to access loans at a later date. Overall, although 66% had deposit accounts, of these, only 6% reported actively using the accounts with the other 94% have effectively dormant accounts.
Such findings indicate that the level of access reported in surveys is misleading. Financial Sector Deepening Program surveys simply record if a respondent has a bank account, but not their actual account usage or its utility value to their owners. The fact that we found that the actual account use is low suggests lower financial access than currently reported by such surveys.

Figure 39. Urban Interviewees stated average deposit balance.

Source: Interview material (see Appendix for detailed workings).

When asked about purpose of savings, illustrated in Figure 40, interviewees reported similar results to those for group savings, including the importance of business (36%), emergencies (16%) and education (23%). However, two important differences between group and individual savings existed. Firstly, the importance of using savings for businesses was far lower for an individual’s savings than for group savings, with 36% reporting this as an important purpose for individual savings, contrasting with 58% for group savings. Interviewees reported this was due to the importance of collective business enterprise, compared to a much lower level of individual business enterprise. This reflects the desire to work communally and cooperatively, thus sharing
the risk of business failure and enabling the accumulation of much larger sums of capital for business investment through pooling savings.

Secondly, the most frequently cited goal for individual savings was asset accumulation. In total, 38% of interviewees reported this as their primary goal in savings, with savings acting as an interim stage to acquiring non-financial assets. Interviewees also commented that this was an important goal of the savings and loan groups business activities as well, with returns from businesses, such as income distributions, being channelled into accumulating cash for the ultimate goal of hard asset acquisition.

Figure 40 illustrates this savings and asset-accumulation cycle. Income is generated through individual or group businesses and employment, accumulated in cash into material sums, and then used to acquire hard assets, but with hard assets being the ultimate goal and the preferred store of long term value.

The cycle also illustrates an important point – that capital investment is largely through collective savings and investment. Individual capital investments in businesses were almost non-existent with only one interviewee reporting having made such investments and then only for trading capital.

Figure 40. The process of hard asset accumulation
Source: Interview material.

As illustrated in Figure 41, this strategy was successful for many, with 34% of interviewees reporting owing non-financial assets. In total, 29% of interviewees owned land or housing and 25% owed livestock (some own both). As part of this, a common practice was to remit funds to the rural areas from which interviewees had originated to their extended families, all in order for them to buy rural land and livestock. However, half of those reporting land and property owned these assets in urban areas including, for example, rental and self-occupied land and housing in Kibera.

Figure 41. Urban interviewees’ individual asset portfolios.

Percentage of those reporting holding such assets
Hard assets were seen as preferable by interviewees for a number of reasons. Firstly, almost all interviewees noted that these were income-generating assets producing rental or farming income. In addition, assets were used by themselves or their families to fund accommodation or subsistence farming.

Secondly, interviewees made direct comparisons with financial assets and found non-financial assets to be preferable for reasons relating to the deficiencies of the former. In particular, they cited the low return received on deposits – 2-5% per annum was noted – compared to the return that could be generated by hard assets and the opportunity cost in terms of use value of financial savings compared to hard assets.

A few interviewees commented on how, by using savings and loan groups for lending and borrowing between themselves, there was a benefit to all, as “deposits” returns were retained within their community rather than being lost to microfinance-orientated institutions.

Source: Interview material (see Appendix for detailed workings).
Such comments by interviewees challenge the views that the poor are in need of “financial literacy education”. We found, on the contrary, a reasonably pragmatic grasp of basic costs and benefits involved in formal banking offerings compared to other options.

However, an important exception to this was found in relation to the costs of loans from savings and loan groups compared to formal sector ones. Interviewees noted the differential between stated savings and loan group rates and bank rates, but did not adjust for some rates being quoted as monthly compared to annual rates. In fact, this is highly material as average savings and loan groups’ loans are made at 10-20% per month, equivalent to a compounded 214-792% annually, which compares to an average rate of 30-45% annually for bank lending. These responses indicate that the interviewees did not have a sophisticated understanding in relation to comparing interest rates presented on different basis.

As for group lending, formal bank borrowing was negligible, with only one person reporting having had a formal loan (2%). By contrast, almost all interviewees reported using informal lending from savings and loan groups at one time or another and expressed a strong preference for doing so.

When asked from their perspective what were the “barriers” to formal lending, the responses could be broken into “voluntary” and “involuntary” barriers. Most important in relation to voluntary barriers was their dislike of the rigid nature of formal loans. Many expressed concern, given the volatility and low-levels of their incomes, that they might have unforeseen difficulties making on-time and regular payments. The anxiety over loss of collateral was very frequently cited but, interestingly, not that collateral was unavailable. Indeed, collateral requirements could be met and interviewees reported having household assets or other property that had been used as collateral in savings and loan group borrowing. But the issue was the rigid and uncaring nature of the formal bank agreements under which collateral could be seized. Indeed, many cited their strong preference for borrowing from savings and loan groups where the group would be able to differentiate between an inability and an unwillingness to pay, and act more sympathetically to those in genuine difficulties. By contrast, formal banks were perceived as being harsh and uninterested in the circumstances of those in arrears.
In relation to over-indebtedness, the majority of interviewees expressed a very conservative approach to borrowing beyond their ability to repay. Indeed, none reported multiple borrowing or borrowing for consumption and only one person (2%) reported using one loan to pay off another. Attitudes to debt were very cautious and a number of interviewees expressed high levels of anxiety about the consequences of incurring a debt that may lead to repayment problems. Many cited examples in their communities of people who had become over-indebted and the adverse consequences of this. For these people who are sustaining themselves but still have a relatively small gap between their current stable and reasonable livelihoods and destitution, this risk aversion was understandable. The consensus seemed to be that security and a modest but sustained level of consumption and business activities was preferable to risk-taking that, whilst possibly leading to an improved life, could also lead to the loss of basic livelihood requirements.

These points are now further illustrated through case studies.

8.3 Urban Case Studies

8.3.1 The Garbage Collectors: “The bank is not your friend”.

Interviewees were an informal group of 14 young men whose ages ranged from 17 to 25. They lived together in adjacent houses in a neighbourhood next to the railway track that runs through Kibera (Fig. 45). They were living cooperatively, with some being brothers, but mostly friends. None had parents present and the two older men, aged 24 and 25, demonstrated their leadership of the group. Their occupations were patchy and informal with interviewees variously describing themselves as “hustlers”, “businessmen,” or “students”. One was an informal electrician. Some had attended primary and secondary school and all spoke good English57.

57 There were some women present during the interview, who one older man described as being “ladies who make house calls”. They only observed and so have not been included in the interview material.
Figure 42. Kibera railway track neighbourhood (illustrating the living conditions of the interviewees).

Source: http://lori4twb.wordpress.com/2011/12/13/394/

Their main source of income was the collective collecting of garbage from households in the neighbourhood. They had been running the business for about three years and had received start-up help from a local NGO who had given them a wheelbarrow and bags. They had a weekly collection when they distributed bags to homes in the neighbourhood and collected the full bags. They collect garbage from about 150 houses and charge Khs 20 a bag, providing average income of Khs 3,000 to 4,000 a week. However, on occasions they reported there are problems with collecting their fees as households sometimes cannot pay. Of the amount earned, about 50% of the weekly collections are distributed to the individuals who have participated in the garbage collection. They commented this was often used for immediate needs, not only food but, like all young men around the world, on fun things, including “beer” and “grooming”.
The remainder, however, is saved. Typically, about Khs 2,000 is banked weekly. They have a 
formal bank account at Cooperative Bank but otherwise the savings group is very informal. They 
also use funds for emergencies and lending to members. The group members can borrow Khs 
1,000 at 5% interest for the month and they also lend to non-group members at 10%. The leader 
cited a balance of “up to Khs 100,000” in the account and the balance accumulated was distributed 
to members annually.

Of the fourteen, nine (64%) had individual formal bank accounts at Equity Bank, Cooperative 
Bank, Kenya Commercial Bank and the Postbank. Six (43%) also (or exclusively) used M-PESA 
for savings. M-PESA was seen as useful for small amounts and short-term savings as it is 
particularly convenient as there are many agents in the neighbourhood. For example, one man 
commented that “when you don’t have money to eat, it’s easy” as he could go and get small 
amounts of money for such daily basics.

Despite the majority having one or even two accounts in formal banks, a high proportion cited 
egregible savings balances. Half of them (7/14) had a balance below Khs 1,000 with a minimum 
balance of Khs 30. Such low savings resulted from the reality of the low income generated from 
garbage collection.

This reality contrasted with their enthusiastic financial plans. For example, they expressed the 
ambition to buy housing and to save for their college fees. They also wished to develop a more 
substantial business and said that they had been discussing a plan to open a “video shop”. These 
are quite common in Kibera and are essentially a bar with a TV showing programs or videos. The 
group was interested to make their video shop a specialist in sports video and had been looking 
to rent a shop in the neighbourhood and were hoping to accumulate sufficient savings to use as 
start-up and working capital.

The group lends to members and most of the members had borrowed at one time or another, and 
were comfortable with that. However, the group said it would not consider borrowing from a 
formal bank. The reasons given related to collateral and the lack of understanding of personal 
circumstances by banks. One commented that, “the group are my friends and understand,” 
comparing this to the lack of a personal relationship with a bank. Another commented that, “the 
bank is not your friend”. Another commented that “I fear loans” and that the bank will require,
and will seize, collateral, regardless of the impact on the need to be able to provide the most basic requirements for yourself. The bank “want your house” one young man commented. The electrician commented they might take his tool box which he had acquired via careful savings. When I commented that it might be wise to avoid indebtedness, another commented “then you are on our side, the side of the poor here”. It was clear that the use of formal bank loans was very unattractive due to risk aversion relating to the potential loss of collateral. They saw the formal banks as being anti-poor and even as an adversary of the poor. There was a deep distrust of formal banks. Instead, their preference was for self-help through their friendship and family groups.

8.3.2 Collective Businesses in Kibera: “The group ties us all together”.

Amongst those interviewed in Kibera, 26% (10/38) were members of community-owned business groups. These businesses were typically small, locally-based enterprises with a savings and loan group that funded the businesses. Some were exclusively owned and managed by women. The types of businesses included local services such as schools, water provision (in large tanks within Kibera which are filled by tanker lorries and are the main source of fresh water for residents) and public latrines. They also included small manufacturing and trading businesses, such as food manufacturing, soap manufacturing and spinning and weaving. The related savings and loan groups typically took contributions on a weekly or monthly basis to fund investments in the business, with periodic pay-outs. These periodic distributions were very important to members as a source of income. The groups also had a strong component of community engagement and self-help. For example, and similar to regular savings and loan groups, they usually had a “social fund” which provided emergency funds for members, to whom they lent on an unconditional basis.
Examination of these businesses detail the way in which they are managed and developed by community groups and the nature of their engagement with formal financial services. For example, one older lady described her involvement over 20 years with her savings and loan group, “The Shuka Group”. The group had been started by women in order to “put something on the table” but had then evolved into businesses running pit latrines and water tanks in the neighbourhood. They had purchased a soap-making machine and now collectively make soap and
individually sell it throughout Nairobi on the street and house-to-house. Today, the group has 30 members and contributions of Khs 40 per week plus estimated weekly profits of Khs 4,000 to 6,000 weekly. Members can also borrow for one month at 10% and typical uses are household needs and for individuals’ petty businesses, such as making baskets or charcoal, or crocheting. The groups are registered and have an account at Equity Bank, after switching from Post Bank due to preferential fees. They use the account for savings and the maximum accumulation has been approximately Khs 70,000, which is shared out prior to Christmas. However, although they regularly use their savings accounts for banking and the safe storage of funds, the group have never applied for, nor ever wanted a loan. The interviewees’ comments were that they “fear rules and regulations” and that “if you don’t pay on time they will come and sell your properties and maybe your things at home, and we are afraid of that”. In addition, she commented that the “rates are very high and we cannot afford them”.

In another example, an interviewee described her group “Action Speaks” which had 11 members who were all widows. She described the group as “ty(ing) us all together”. The women in the group had a pooled monthly contribution of Khs 1000, saving enough to open a nursery school in Kibera. They have one paid teacher and 30 children currently between the ages of 3 and 6 years. The school charges fees. Contribution and income is accumulated in a savings account at Equity Bank and then an annual distribution is made. Funds have been used for on-going investments in the school, such as equipment and books and the recent renovation of the building. However, when the group had applied for a loan from Equity Bank they had been refused for lack of collateral, despite having a good savings records from income for over two years. This was because the bank had required the title deeds of the school for collateral and these were not available.

In another example, two male interviewees described the collective business they were involved in. The business was owned by 24 members, collected contributions of Khs 1,000 monthly and had used the proceeds to invest in a crisp-making business. The business now had two employees with salaries. The group also had a social fund for emergencies, such as health emergencies, and lends to members. A member can borrow a maximum of Khs 5,000 at 10% a week but there are no requirements as to why a member can borrow. The group has registered bank accounts with
Equity Bank and accumulated savings of up to Ksh 70,000. However, they had never sought or been granted a loan.

In a final example, an older woman, aged 55 years, described how she is involved in a women’s spinning and weaving group. The group has 32 members and has been running for about 20 years. The group originally formed through friends from church who met via door-to-door prayer meetings. The members make contributions of Kshs 100 a month and use the funds to finance materials for spinning and weaving by the women members in their homes. The group is registered and has two bank accounts at Equity Bank and Cooperative Bank. The group have accumulated funds of up to Kshs 300,000. Funds are distributed at the end of the year and members use them mainly for school fees. Such fees are about Kshs 30,000 annually and she has eight children. She emphasized how their children’s education was both a priority for any income they had as well as, in common with many comments from interviewees, a significant financial burden. However, the group has never borrowed from a bank as they are “afraid” and they prefer the social aspects of the group.

Overall, many interviewees were involved in collective businesses. However their engagement with formal finance is limited to using savings accounts to accumulate and manage safely the collective funds prior to distribution to individuals. The interviewees’ main problem with bank borrowing was risk aversion relating to collateral and high interest costs. Such barriers to access are both rational and largely voluntary. The costs and risks involved in the offerings of commercialized microfinance institutions are not regarded by small business enterprises as outweighed by the benefits offered by immediate and larger-scale capital.

Instead, participants prefer to share risk and “self-insure” within their communities. It was apparent that the social and community basis of the businesses and their ethos of self-help amongst members were important, not only in sharing the risk of businesses and emergencies, but also in providing personal support and encouragement in their lives. Such a social and community self-help ethos is, in fact, the dynamic that originally inspired microfinance.

### 8.3.3 Individual Businessmen in Kibera: The bank conditions are “too high”.

As noted, the majority of interviewees are engaged in collective businesses. Indeed, almost all small businesses were run through collective enterprises. However, two interviewees ran
individual businesses. One was an M-PESA agent and the other was an importer of second-hand clothing. They are interesting as both would seem to be excellent candidates for formal loans, given their respective track records running small and successful businesses. However, their formal sector financial access was limited, especially in relation to loans.

The first businessman was an M-PESA agent who ran a kiosk in the main street in Kibera selling phone cards and rental phones and similar small electrical goods. He was 23 years old and fashionably and well dressed. His earnings were above average at Khs 8,000 a month, mainly from M-PESA commissions. He was an active saver with a formal bank account at Equity Bank. He does not, however, use M-PESA for his personal finances. His purpose for savings was to accumulate capital for his business. In particular, he wished to buy a kiosk, as the one he currently had is rented, and because he wished to expand into additional goods. He banked money monthly from his commission and typically the amount is Khs 1,000 to 1,500, depending upon his living expenses. To date he has accumulated savings that average Khs 10,000 to 20,000 and that have reached a maximum of Khs 20,000. The amount is not high relative to his income, however, and he commented that this was due to emergencies and living expenses, as well as variable income due to fluctuating M-PESA commission. He also noted that competition between agents has become more intense recently due to the growing number of M-PESA agents and new agents from Airtel and others who are competing for the same customer base and driving down commission rates.

This businessman commented that he had never had a formal loan from a bank, either for personal expenses or for his business. He has had casual loans from friends and family, but is not a member of a savings group. Such borrowings are on a fairly informal basis and for small sums, typically about Khs 1,000 to 3,000 for up to two months and at no interest. He commented that greater sums than this are difficult to borrow because people do not have a high level of surplus funds, although it would be useful to access large sums for his kiosk. However, he would not consider a formal loan as he commented that he prefers to borrow informally and not from a bank because the bank conditions are “too high” in relation to both requirements and interest rates. Also formal banks tend to lend lump sums and he was concerned about whether his business would realistically be able to support regular repayments, including the high interest costs. Such
comments indicate that the perceived high costs of microfinance loans are disincentives for small businessmen to take loans for business expansion.

The second businessman was an importer of second-hand clothing. Second-hand clothing is widely sold in Kenya including in Kibera’s “Toy Market” and is considered by fashionable young Kenyans to be preferable to new clothing as it is more individualistic and expressive. The businessman was interviewed as part of the group that met at church, where he was one of the wardens. He was middle-aged and well dressed with a gold watch and was generally more prosperous than other interviewees. He had been running his business for 14 years and was involved in importing second-hand clothing by the container load and then finding petty traders to sell it in the markets throughout Nairobi including the Toy Market, where he had a permanent stall.

In relation to his financial life, he had a savings account and had accumulated significant savings that he had used to purchase a house and pay for his children’s school fees. He had had accounts at various times with Equity Bank, Cooperative Bank and Family Bank. Of all the interviewees, he was the only one who had taken out large-scale loans. He told us he had borrowed up to Kshs 100,000 to use for his business. Typically, the loans were used for working capital to pay for the imported clothing until it was sold and also, on one occasion, to purchase a stall for clothing sales in the market. His preference was to take loans from a savings and loan group that consisted of tradespeople and of which he was a member due to the cost. He reported the rates as being 7-14%, compared to the 36% charged by formal banks. He had not considered loans from formal banks because of the requirement for savings accounts to be held and accumulated.

Overall, although both businessmen were well established, and with above average incomes, they both showed a reluctance to borrow from a formal bank to expand their businesses. However, and unlike other employees, risk aversion in relation to loss of collateral was not the key reason and this can probably be linked to their greater prosperity and more regular ability to generate well-

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58 This comparison is incorrect because the comparison is between annual and monthly rates without compounding. This mistake was made by a number of interviewees. It is discussed further in the conclusion.
above subsistence levels of income. Instead, cost was the central barrier to borrowing for business expansion from formal banks.

8.4 Rural Financial Lives of the Poor

The circumstances of the rural poor interviewed during fieldwork contrasted with those in urban areas. The interviewees lived in Samia and Kisumu districts in western Kenya. Kisumu is the regional centre and the farming areas visited were on the shores of Lake Victoria and close to the Ugandan border. The area is relatively affluent but based firmly in an agricultural economy and is fertile especially compared to eastern areas of Kenya. Subsistence and cash crops are farmed. Cash crops include sugar cane that is farmed on a large-scale, mechanized basis. Other crops include wheat and rice. Living conditions are reasonable, but some areas have poorer farmland and there have been high rates of AIDS infection and urban migration which have both differentially affected the young, male population. Residents were mainly in traditional thatched housing but some of the richer farmers had brick and tin-roofed homes.

In addition, and in contrast to Kibera where many microfinance-orientated institutions are active, the presence of formal financial institutions is more limited. Many have city branches in Kisumu, the regional centre, but in rural areas there are no branches. However, there are agents, both for banks and M-PESA, and these were used by participants who were accessing formal financial services. In addition, there had been some promotion including “financial literacy” based marketing.

The interviews were sponsored by a regional NGO, Farm Africa, which has been active in projects aiming to build productivity and incomes in the agricultural sector. The interviewees we met were involved in two projects, one introducing new disease-resistant and higher yielding varieties of cassava and one to develop fish farming. Both included training, marketing and processing efforts to build value-chain activities. The overall goals of the projects have been to increase farm productivity and related incomes.

In total, 56 people were interviewed in focus groups. Some of the groups had collective enterprises, but most ran their business individually as they each owned, or took responsibility for, individual parcels of land that were cultivated and had individual family compounds with livestock. Nevertheless, each group came from single communities and had a strong communal
attitude towards helping one another and exchanging information. In addition, three of the seven groups had formed savings and loan groups, with the training and assistance of the NGO. The savings and loan groups were formed to provide collective assistance for the agricultural programs that they supported. Some individuals also participated in neighbourhood savings and loan groups.

Income sources reflected the agricultural basis of the economy of the areas, with the main occupation and incomes of interviewees being in and from agriculture. Interviewees were involved both directly in farming and in selling their products. Few had diversified sources of income outside of agriculture. Crops were mixed and included cash crops, subsistence crops and livestock. The latter was mainly for household consumption and included cows, goats and chickens. Cash crops were sold in local markets or to intermediaries supplying urban areas such as Nairobi and Kampala, the Ugandan capital, which is not far across the border west of Kisumu. The level of mechanization in agriculture remains very limited with much work being done by hand, including planting, harvesting and preparing crops for storage. The interviewees ranged in their levels of income from quite affluent to close to subsistence income levels.

The interviewees’ financial issues related directly to their primary occupation in agriculture. In particular, the farming cycle requires significant capital because, during planting and establishment of crops, there are significant inputs, such as seeds and fertilizers, and these are required to be paid for in advance of the sale of crops. For some products, this cycle can be 6-12 months long. In addition, during the period immediately prior to crop sales, household, school fees and other on-going consumption is required to be paid for from savings.

Figure 44 shows the purposes of savings as provided by interviewees. The responses reflected these issues with the need for investment in agriculture cited as the most important reason for accumulating savings with 73% giving this as the primary purpose. In addition to working capital for inputs to manage the agricultural cycle, interviewees were accumulating savings for capital investments. These included, for example, basic machinery for processing cassava and fish as part of their efforts to add value to the crops.

Following funding of agricultural cycles and equipment, the second most important goal of savings was for education, with 68% citing this as its purpose. This figure partially represented
the high level of female interviewees with multiple dependent children because AIDs has increased male adult mortality. Interestingly, free primary education is available in the areas we visited. However, interviewees saw this as inadequate and preferred to suffer the financial burden of paying for private education. A high value was placed on education, even for interviewees whose income was very close to subsistence levels.

Figure 44. **Rural interviewees stated purpose for saving.**

![Bar chart showing purpose for saving among rural interviewees.](chart.png)

Source: Interview material (see Appendix for detailed workings).

Interestingly, unlike the urban interviewees, asset acquisition and emergencies were reported as a relatively unimportant savings goal. However, and as illustrated in Figure 45, asset ownership was already very high, with 73% owning land, often acquired through inheritance, and 93% owning livestock. Indeed, with the exception of landless and single women, all interviewees owned land and livestock, although there was variation amongst them as to their respective
quantity and quality. Even amongst the landless women, who typically rented agricultural land, almost all owned livestock of some type, including goats and chickens.

Figure 45. Rural Interviewees individual asset portfolios.

Percentage of those reporting holding such assets

Source: Interview material (see Appendix for detailed workings).

Figure 46 shows that the proportion of interviewees having a bank account was low at 48% (contrasting with urban levels of 68%), and levels of dormant accounts was high with 91% (i.e. of the 48%, 44%) of accounts being dormant. Nevertheless, 12% reported having had loans, which was higher than for urban interviewees.
Figure 46. **Rural interviewees with bank accounts and loans.**

*Percentage of those reporting having an account or loan and those no longer actively using the account*

![Bar chart showing percentage of personal bank accounts, dormant accounts, and personal loans](image)

Source: Interview material (see Appendix for detailed workings).

The differences of the savings and loan behaviour of rural compared to urban interviewees can be viewed in various ways. Rural people enjoyed lower absolute levels of income hence, other things being equal, they accumulated less saveable surplus. Indeed, a number of interviewees commented that income levels did not allow for any surplus. Secondly, rural interviewees reported greater basic security provided by land ownership, both in terms of assets and in terms of provision of a livelihood through agricultural work. Land ownership also means that there was less of an incentive to accumulate sums for asset acquisitions as reflected in the purposes given for savings by urban respondents. Similarly, living in tight-knit, long-established agricultural communities provides a higher level of security than in urban ones, particularly as related to the availability of mutual help. This might explain the absence of emergencies cited in stated savings goals.
It appears reasonable to propose that the relatively low level of account ownership in rural areas also reflects the lower level of promotion and advertising by financial institutions in these areas compared to urban markets. This is also reflected in the wider range of institutions being used, including a variety of microfinance-orientated banks (Family Bank, Barclays, Equity Bank, Kenya Commercial Bank, Cooperative and Postbank) and deposit-taking microfinance institutions (KWFT). Equity Bank, in particular, was far less dominant in rural areas with only 15% of those having a bank account holding it with Equity Bank, compared to 38% in Kibera. Interestingly, the low usage did not seem to reflect rural isolation. Rural interviewees generally reported agents as being available at a reasonably close distance, including minor towns.

The very high level of dormancy of accounts is remarkable. Various reasons were given for letting accounts fall dormant. Some interviewees had changes to their circumstances that meant that accounts were no longer useful. For example, one man had had a salaried job that had ended and his bank account had been used for receiving his salary. However, many interviewees allowed bank accounts to be dormant because they preferred to use bankable surpluses elsewhere. For example, there was again a strong preference to use surpluses to self-fund agricultural inputs or livestock. There was also the use of funds for small-scale improvements and diversification of income. For example, one interviewee had brought an egg incubator or another a bicycle in order to serve markets further afield. Interviewees commented that these assets were simply seen as more productive compared to low returns on deposits when interest rates, charges and fees are considered.

In contrast to urban interviewees, loans to rural people were more common. Borrowing fell into two categories, group and personal. Two groups had applied for loans, one from KWFT and one from Equity Bank. However, the loans had not generally been seen as a success. Problems, in addition to high interest rates and fees, were related to a lack of willingness by lenders to match the agricultural cycles. In relation to personal loans, four had successfully sought loans from banks. They had used them for business capital and school fees, but reported that they were struggling to repay them.

Like urban interviewees, rural people frequently commented on a respective lack of trust in and perceived usefulness of loans as provided by formal banking. In particular, the need for collateral and the risk of losing it was very important. Formal bank loans generally required collateral over
land and, in these agricultural communities where basic security is ensured by land ownership and agricultural work, the risks of losing land or housing were perceived as unacceptably high, therefore interviewees were very averse to offering land as collateral. In addition, there were many stories relating to harassment and aggressive debt collection by formal banks and the dire consequences for those who had lost their homes, land and livestock. This included stories relating to the seizure of collateral during the political violence of 2007 and 2008 and there seemed to be a view amongst some interviewees that such seizure was partially politically and ethnically motivated.

8.5 Rural Case Studies

8.5.1 Wealthy Cassava Farmers: “We are banking within the community”. These interviewees were from the wealthy farmlands in the fertile river delta south of Kisumu in the market town of Ahero. The farms are lush with maize and cassava under cultivation. Interviewees had well-established farm buildings, including some of brick and tin roof construction and all had plentiful livestock. The interviews took place at a wealthy farmer’s house with large brick buildings with family graves, orchards and lawns. Two interviewees arrived by motorbike and the coordinator, who was crippled by polio, had a hand-operated bicycle for transport. The main occupation of interviewees was farming, but a number of interviewees had other sources of income as well, such as petty trading. The interviewees were Luo and spoke Luo as well as Swahili and English. In total 63% (5/8) had personal bank accounts but, of these, 20% (1/8) were dormant, giving an active bank account holding of 50% (4/8) of interviewees.

Figure 47. Ahero farmhouses and interviewees illustrating the higher standard of living of the group.
The farmers had been involved in projects to establish new improved cassava cultivation in order to diversify their agricultural activity. Cassava varieties have been well established and widely grown by the group of farmers and added significantly to crop yields and reduced the length of the harvest cycle from 2 years to 8 months. The project has been led by CREP, a local NGO, who started with a demonstration farm in the district to display new strains from the Kenya Agricultural Research Institute. As well as new varieties, the projects were focusing on cassava production and value-added processing such as drying, making crisps and processing cassava into flour for chapattis and bread. The group also had sold or donated propagated cuttings and seeds into the local community.

Farmers have replaced maize and other crops with cassava and the reported increment to income was significant. Individual farmers reported increases in their incomes ranging from Khs 10,000 to 20,000 per harvest to Khs 400,000 to 600,000 per harvest. This made this group of interviewees the wealthiest interviewed. Because of this newly acquired surplus income, this group of interviewees made a particularly interesting case study as clearly – unlike other interviewees – there was a bankable surplus available as well as a need to store value over agricultural cycles.
Interviewees held a strong antipathy to banking this surplus in the formal banking system. Instead, there was significant self-organization around a number of goals. Firstly, the surplus was used for business – largely agricultural – investments. The group, who nearly all owned substantial farmland, were investing in diversification and value-added projects. For example, the group has invested in larger-scale poultry farming, including buildings and purchasing incubators, and were currently saving for cassava processing machines. They were also developing new products from cassava to add value, such as cassava porridge and beer.

Secondly, education was also a key purpose of savings, but was seen as being dependent upon increasing their agricultural incomes. One interviewee commented that,

> education is number one as it is the key to everything. With no education you cannot get anything ... we put education as number one priority as we want our families to be number one ... farming is where we get money for the education. We need our family to be a role model. In this area we have one engineer and he is the role model because of education... we need not only one but many (such educated people).

They commented that educational fees are a substantial burden, but education for their children was a critical aim.

Figure 48. Cassava farms at Ahero illustrating the farmland and cassava crop.
Source: Author
Thirdly, the surplus has been used to start a savings and loan group with 30 farmers as members. The savings and loan group was established with training from the NGO and is quite formal being divided into “shares” with different members having different numbers of shares depending on how much they input. One share is Khs 50 and each member buys between one and ten shares each week with proportional income distribution. They have been active in lending to members with interest charged at 10% a month. However, the group is not registered and has no bank account, as all the savings is lent out. Emergencies are also financed through the savings and loan group but as a gift, not a loan, between members.

The interviewees saw significant advantages of their cooperative savings and loan group over formal banking. They commented, for example, that they have “no need to go to Kisumu for a bank, but use the money locally ... We are not going to Kisumu (to formal banks) but banking within the community”, thus identifying retaining and using capital within their communities as important. Similar, an interviewee commented that

The Luo are afraid of taking loans but I have a strong feeling that group lending will really revolutionize the thinking and the attitude as controlled by the community... if we give money I know he will pay and when they come together they already know each other, they know their capabilities and they know their strengths.

Others compared the costs of group versus formal banking and saw a clear advantage in the savings and loan group cost and requirements. One interviewee said simply of the savings and loan group that “It’s cheaper”, another that banks’ “Interest rates are not within reach”.

They were also had very low levels of trust in formal banks, especially because of the risk of loss of collateral. The interviewees commented on a number of examples of people in the neighbourhood who had been impoverished by debt collection and loss of collateral. One commented that he had never taken a formal sector loan and that this was because “when they want their loan back they are harassing you, and this is why people are afraid to take a loan, especially in our area”. Another commented that

Some of these financial institutions ... like Equity and Kenya Women ... they came to the community and induced them to take money. Then at time of getting back that money it was a very bad experience. Actually at some point some people were left with nothing, in
poverty. Rumours go around ... (people think) they had better be careful ... you take a loan and somewhere along the way something goes wrong.

This distrust increased during the 2007 and 2008 election violence and the accompanying collection of bad loans by banks has fostered strong anti-bank views. For example, an interviewee commented, “I remember the post-election violence ... the repayment rate was very, very low for a few months, they were people that you know and had very, very good records but were not able to pay and put in very bad situation ... some institutions were very impatient and went raiding ... they took the (roofing) sheets”. The interviewees recalled a number of instances in the neighbourhood of people who were having trouble repaying and who were harassed by the banks and foreclosed on. KWFT, in particular, was criticized as they foreclosed on a number of people in the district and took collateral including livestock, domestic household goods and roofing. An interviewee commented that they “sold the compound while they were inside ... came with the auctioneers and take the properties in the house, all of them, even sell your house while you are in it ... we have seen many here” and another stated that “they come around and are not leaving anything”, concluding, “that’s why we are afraid to take a loan from the bank”. When I asked if this was just rumour or their direct experience, they commented that this was direct experience. For example, one commented “I saw them selling the animals, removing the chairs and tables from the house, and the iron sheets ... they come around and are not leaving”.

The level of advertising and promotion was also commented on as irresponsible and they again contrasted this with their savings and loan group. For example, one interviewee commented that, “Some of these people caused excitement with advertisements ... later on along the way things go wrong ... but (our group) starts from the ground roots and slowly, slowly”. They commented that people were attracted by the advertising without a proper understanding of the loans and repayment responsibilities. They could also use loans for irresponsible purposes such as non-essential items, vacations or a new second wife who “must be treated lavishly”.

Identified barriers in mainstream research, such as distance to banks, seemed relatively unimportant in their negative views of formal banking. Indeed, they commented that the “Banks are near,” with Equity Bank and Cooperative Bank agents within walking distance in Ahero, so accessibility was not an issue. One did comment, however, that formal ID was an issue, saying that, “you don’t need so many things to take a group loan. Even ID is not necessary because we
know one another ... that’s why people in this area have not embraced taking loans from the banks”.

Overall there was a strong commitment to self-help through agricultural cooperation and community banking, with an ethos of self-sufficiency and independence. There was also a deep disregard for help from private and government sources and a deep risk aversion to debt. They saw reinvesting their surplus funds in their agricultural businesses and their community as an option that offered them many advantages over placing funds into the formal banking system. They were also prepared to accept a slower pace of improvement in return for it being solid and under their control. They did not see using private loans, with its ability to accelerate change, as worth the risk of loss of collateral and the impoverishment that it might also bring.

Indeed, interviewees identified this as part of their moral philosophy, commenting that traditionally the Luo had given help to each other through “seed” but now saw this tradition as continuing through their communities self-help efforts. One commented that from these benefits “your life can change” and through cooperative banking “In the 5 years to come there will be very, very good chance ... (that) these are the innovations we need to serve the community’s needs”.

8.5.2 Poor Cassava Farmers: “Not saving, because whatever I get, I use immediately”.

West of Kisumu, the rural area is more remote and poorer than the farmlands south of Kisumu. The area the researcher visited for two group interviews was in Malanga district and both groups had been part of a cassava development project established by Farm Africa and CREP. In total, 25 interviewees were met in three groups. The interviewees were all subsistence farmers. They spoke Luo and Swahili and some spoke English. The farms were about three miles from the main road on a dirt track and some were only accessible by foot as the dirt roads to the farmhouse were not accessible by vehicles. The farmhouses were traditional thatch houses with enclosed farmyards with livestock and some with garden orchards. Crops included maize, corn and wheat. The areas has also been badly impacted by AIDS with infection rates of c. 25% and a number of interviewees were widows heading households with AIDs orphans. Interviewees also reported
high levels of migration to Nairobi and other urban areas, although they said they rarely received remittances from relatives. Overall, the interviewees were generally much poorer and closer to subsistence levels of livelihoods than other groups interviewed during fieldwork.

The introduction of the new varieties of cassava has been successful with high adoption rates following successful demonstration projects in the area. Cassava was reported as having become the main cash crop, replacing other cash activities such as day labouring on sugar plantations or banana-selling at local markets. Income levels from each harvest were reported as between Khs 5,000 and 12,000. The cassava harvest is particularly valued because it bridges the “hungry season” between the harvest of maize and corn when it is used for both cash crops and consumption. Indeed, the improvements in food security from cassava were seen as more important than as a cash crop. However, success had also lead to high rates of theft from fields, although theft seemed to be ignored as it was attributed to hunger. They also experienced problems in selling cassava as they were only able to access local markets where “middle men” from Nairobi and Kisumu drove down prices. For example, one woman reported a “farm gate price” of Khs 20 a cassava tuber that then sold for Khs 60 in a market. Consequently, there was a strong focus on developing value-added processing to the cassava crops, including chipping and drying and by production of cassava crisps and ugali, and through collective efforts to access markets directly.

All interviewees were members of various savings and loan groups. A critical goal of the savings and loan groups was to save to invest in the cassava business, especially in collective processing equipment. This was seen as critical to increasing the value-added potential of their crops and a key path to further improving their incomes. The contributions to the savings and loan group were low, typically Khs 20-50 a week with members able to take loans at 10% a month. There was concern to make sure that contributions were set at a realistic level that could be attained without too much difficulty. There were also “social funds” for emergencies that are given as a gift, not a loan. Key personal goals of savings were to rent or buy further land and livestock, and to provide for school fees. They were also planned to be used for smaller, everyday needs such as housing improvements (including tin roofing), household items (blankets and cooking pans), clothes and year-end celebrations.
However, a number of interviewees reported a lack of any savings capacity with a “hand to mouth” use of cash and “not saving because whatever I get I use immediately”. Assets were also less substantial. Most owned land. However, there were lower levels of livestock and only two had other assets, such as a bicycle. All participated in savings and loan groups and such groups provide an important social and community function as well as a financial one.

Livelihood problems were particularly acute amongst the women who were both widows and supporting large numbers of dependents, including their own and orphaned children. Their situation was worsened by the higher percentage of cassava used for consumption because of their dependents. In addition, they were responsible for multiple school fees that were reported to be between Khs 10,000 and 25,000 per annum per child. Where children or other relatives had migrated to Nairobi and elsewhere, remittances were rare, and in fact the women reported that, if visited by relatives, those relatives then took crops themselves for sale in the city and so were a negative drain on resources.

Borrowing from the savings and loan group was, however, reported as quite frequent due to the closer proximity of the interviewees in this poor area to subsistence living. Unusually, a number of defaults by members were reported. Defaults had occurred because of illness, including those who fell sick and died due to AIDS. Such defaults were taken to the chief if they were not resolved and next of kin were expected to take responsibility for debts.

Attitudes to formal banking were negative or apathetic. Ownership of bank accounts was one of the lowest of any interview groups at 40%, with 50% of these being dormant, giving an active bank account ownership of only 20%. None had ever had a formal loan. Several interviewees expressed fear of formal loans commenting that “many people” had lost household goods, land or livestock when they had defaulted. Interest rates were also seen as excessive. Remoteness was also reported as an issue.

Overall the interviewees’ main problems were not accessing finance, but simple income generation beyond a subsistence level. However, the lack of capital for assisting with this – such as the need to access funds to buy equipment for cassava processing which would then allow more value to be created from their crops – was clearly a barrier to increasing incomes. Nevertheless, the interviewees’ views were that the best way to access such funds was through collective
savings, even where this was slow and difficult. Formal bank lending, which would accelerate this process, was seen as too expensive and too high risk in relation to loss of collateral.

8.5.3 Fish Farmers in Nambototo: “We are not passive, only powerless”.
Interviewees were part of the collective groups organized by the NGO Farm Africa who are assisting in the development of cash farming, including programs for poor rural farmers. Prior to the project, all had been subsistence farmers with some petty trades and similar diversified income sources. The new project, dating from 2010, was intending to build fish ponds with farmed fish stock. Groups have been organized to give mutual aid, although the ponds are individually owned and harvested. A government grant was received to help meet start-up costs, including construction of the ponds, but has not provided on-going support. The fish being farmed are catfish and tilapia. They are organized by a local trader who also has a shop selling fish food and other supplies.
Figure 49. Fish farmers’ ponds in Nambototo illustrating the fish pond project and surrounding farmland.

Source: Author.

The agricultural cycle is important to the fish farming as the ponds are stocked with approximately 1,000 baby fish and then fed artificially for 8-12 months until a size suitable for sale is reached. Difficulties have been faced including theft of fish, especially during the “hungry season”. There are also problems with predators, including snakes and birds, and the ponds have been designed to prevent the latter gaining access to the fish stock. Local flooding has also washed fish stocks away. Sale of the fish is difficult because there is no facility to store the fish, either dried or frozen, and so all fish are sold locally on the day they are taken from the ponds. To date, two-three harvests have passed since the project started in 2010. Profits varied considerably by farmers, with some making up to Khs 29,000 in revenue and Khs 15,000 profit from each cycle whilst others, due to losses in stock, made only Khs 1,000 to 3,000 at most. Overall, the project’s profitability has been limited and the group is still struggling to establish it as a viable on-going business.
Part of the difficulty has been because inputs for each cycle are high and funding these costs through the 8-12 month cycle has been difficult. Costs include the expense of building the ponds, although as noted the government grant covered some of this and the farmers provided their labour. However, each cycle requires baby fish and artificial food from the organizer’s local shop (although one farmer reported having solved this issue through the production of food himself using white ants and dung). However no credit is provided by the project to fund this long cycle and the farmers reported an on-going struggle to self-finance due to lack of surplus funds.

Unusually, the group had not organized a savings and loan group, although they reported some vague plans to do so. Most, however, participated in non-farming, small-scale savings and loan groups, although these were largely directed towards savings for education and household needs. In total, 68% (11/18) had personal bank accounts, but of these the majority (7/11) were dormant leaving an active account holding of only 28% (4/18). They commented that “Savings culture is a big challenge” and that they “can have accounts but don’t save,” and described either a lack of surplus income to save or the preference for hard assets, especially farming assets such as livestock and land.

Instead, unlike other groups and encouraged by the NGO staff, they had attempted to apply for formal loans from banks and MFIs, but had been turned down. The group had applied to KWFT and Equity Bank, for example, who had come to visit the ponds but refused loans. Two main issues had caused this refusal. Firstly, the banks and MFIs were not willing to adjust their lending terms to match the agricultural cycle or the farmers’ situation. So, for example, KWFT required monthly repayments and would not allow credit for the full 8-12 months until fish sales were made, making the servicing of such a loan almost impossible. The banks also required established savings which, as one interviewee commented, if they had, they would not need a loan.

Secondly, the banks and MFIs demanded collateral. They had refused collateral for the ponds themselves and required collateral on land or property. However, either this was not available – for example, interviewees said that the land ownership remained with the older people or that there were no formal deeds, so they could not offer formal collateral – or there was a deep unwillingness amongst the group to provide this as it was the basic asset needed for their subsistence farming. Indeed, there was a clear anxiety about the potential loss of collateral. Interviewees commented, for example, that they were “scared” of loans and that “if you default
on the loan your land will be taken”. Several recounted anecdotes about people in the community who had had land or property seized or been harassed by debt-collectors. Several interviewees had attended training from Equity Bank, but were still reluctant to take a loan and there seemed a general scepticism about the information that had been provided.

They had also approached government agricultural banks who are active in the area in financing larger-scale commercial farming of tea and sugar beet, but they had also not been willing to lend to small farmers, only “serious farmers”. There was complaining about the lack of knowledge or engagement by government officials in charge of the program and their comments “land on deaf ears”.

Interviewees commented that they were interested in cooperative banking as it was “friendly and approachable” and avoided the problems of rigid terms and collateral. They commented that the group would be well able to judge how a person should be dealt with in the event of default and whether or not they could not or would not pay and, in the instance of understandable problems, if they should be treated more leniently. However they did not consider they had adequate knowledge or training to establish a cooperative banking scheme.

The interviewees had a strong vision of how to develop the fish farms, including marketing. For example, they wanted to buy a refrigerated lorry to take fish to Nairobi where, rather than selling at Khs 50, they sell at Khs 700 or more, and saw the opportunities that commercial cash farming offered them, but were frustrated at their inability to build their businesses, including finding the capital for expansion. The group seemed at a loss as to how to break this cycle of lack of capital, as well as a lack of knowledge, in order to establish commercial farming.

The government agents, banks and MFIs had been unable or unwilling to provide the required help, including the adoption of any risks to them. One commented that it is “easy for farmers to produce ... but for production to become high (is difficult) as policies and mechanisms are out in place ... if we overlook other challenges you still get a minimal harvest”. There was a view that there was no support or assistance to help them realize their plans or share the risks of the entrepreneurial developments. An interviewee commented that, “even donors or sponsors don’t want to take risks” and left all the risks of both the new entrepreneurial projects and the farming cycles with those least able to bear their downsides, namely the farmers themselves.
One commented, “We are supposed to move from subsistence to commercial farming but we are not even halfway through. The knowledge for managing is also necessary because the types of seminars, the few we have attended, have not educated us enough to be able to manage the ponds”. Another remarked that, “The money is never enough” and that “it is a matter of planning for that money. It is that planning knowledge that we don’t have and require”. Another stated that, “if (we) had (a) loaning system, fish farming would develop very fast”.

Overall one interviewee summed up their situation in trying to start up entrepreneurial farming without any support and the rejection of their enterprises by microfinance-orientated banks, MFIs and government agencies, arguing, “They think we are passive, but we are not passive. We are only powerless”.

### 8.5.4 Women Fish Traders in Port Sia: High levels of formal sector debts.

Port Sia is a small town on the shores of Lake Victoria and the main economic activity is fishing. The interviewees were "ziababu" or fish traders, a traditionally female role intermediating trade between fishermen and local markets. The interviewees were all members of a women’s self-help group aimed at social and community development. The group was headed by a woman who had spent time in Nairobi and had been involved in community-based organizations to help slum-dwellers with goals that included “teach(ing) women their rights and (to) empower them”. Their group had created a “manifesto” and there was a strong impression of an ethos of self-help and self-sufficiency.

The women were, however, amongst the most impoverished interviewed. Average monthly incomes were reported as Khs 4,000 to 6,000 per month and are at a subsistence level only. Their incomes were largely derived from fish trading, but the volume of trading had declined because of low water levels in Lake Victoria, due to climate change, and by overfishing. They also engaged in subsistence farming and limited cash crops, such as maize and oranges. The subsistence farming was challenging as the land they farmed was arid, and also because many were tenant farmers and did not own land themselves. The group had tried to develop other sources of income, ranging from basket weaving and cage fishing, but incremental income had
been limited. The women also reported working casually as labourers for wealthier farmers and on road building.

**Figure 50.** The Port Sia Women’s Group illustrating their “manifesto”.

The group’s individual financial lives centred on informal services. It had formed a savings and loan group with “clusters” of 10 members. Contributions were Khs 50 to 100 daily and funds were distributed on a merry-go-round basis. They are also paired with a “sweetie” whose responsibility when you have the merry-go-round is to provide an additional gift or similar that they believe their partner will find useful, such as children’s clothing or groceries. The lump sum from the merry-go-rounds was rarely used for business, however, and instead was reported as being used primarily for household needs, including school fees. School fees, in particular, were repeatedly mentioned as a major financial burden for the women, the majority of who had children.

The group members also reported being involved in pawn brokering and bartering in many instances. For example, they reported pawning chickens or bicycles with local people during the
hungry season in order to raise funds for basic needs or when sickness required emergency funds. One interviewee reported that her husband had suffered medical emergencies and she had pawned her bicycle and taken chickens as payment to the local hospital. They commented on the importance of hard assets in their lives in creating some level and sense of security, with one commenting that it’s “not about the cash that you have,” but the assets available. Indeed the majority reported some level of assets, despite the lack of land ownership. The assets included poultry and bicycles. However, some commented that they did not have control of their assets as they required permission from their husbands to “slaughter or even sell a chicken”.

Of the interviewees engaged with, 33% (5/15) had formal bank accounts, but of these 40% were dormant, leaving only 20% (3/15) with active accounts, the lowest of any interviewee group. Accounts were held at National Bank, Kenya Commercial Bank, KWFT and Equity Bank. For those with bank accounts, balances were low. Only one, an old lady who reported savings that had been accumulated over many years, had a balance over Khs 1,000. None had obtained formal loans from microfinance-orientated banks as they commented that they had no collateral available. However, two had received loans from MFIs, namely KWFT. One had used the loan for fish stocks, but had also held back over 10% of the loan to ensure funds for repayment. Another had used the loan for school fees.

There are two notable aspects of this group. Firstly, providing for themselves and their children’s basic needs at a minimal subsistence level was a constant struggle. Even with reliance on self-help it was apparent that a daily struggle to provide was always present. Indeed, one interviewee simply commented that “(We are) always short of income”. There was also a notable lack of business or entrepreneurial activities amongst the group. Secondly, of all the interview groups, for those who had gained “financial access” the level of debts was highest and the level of savings was lowest with 40% of the interviewees with access gaining loans from microfinance-orientated banks or MFIs. Indeed, this was the most impoverished group and the least active in business, while they also the most successful in accessing formal sector debts, leading to an interpretation of forced indebtedness.

8.6 Conclusion
Two main lessons can be drawn from the fieldwork. The first is about the financial lives of the poor as presented by the poor themselves. The second refers to views regarding the barriers, values and preferred alternatives of the services available to them. Both challenge mainstream research in relation to its empirical methods and its presentations of “barriers” respectively.

To turn to the first point: how do the poor represent their financial lives? The interviews show how critical the ability to generate, and ideally grow and diversify, stable income sources is. Risk mitigation and aversion are important issues in the lives of the poor. In the absence of an opportunity for formal sector employment with a regular and fixed income, the interviewees showed a strong motivation to establish and invest in small businesses and many exhibited skills, entrepreneurial zeal and ambitions. However the key strategy in doing so, and that was expressed in multiple forms by interviewees, was to share and mitigate the risk and effort of entrepreneurial enterprise through collective action. These took a number of forms including collective businesses, mutual interest groups (such as the farming initiatives) and mutual assistance through savings and loans groups. Such collectivization shared both the need to generate capital for entrepreneurial enterprise and the risk of failure, and as such “crowded in” capital. This was reflected in the relatively high levels of capital within collective businesses and the almost complete absence of capital in individual businesses and employment. Such collective enterprises was then further diversified by individuals through other income sources, such as from petty trading or employment, which generally carried far lower levels of capital investment and consequently a lower risk of failure for individuals.

Such “portfolios” of work represent a search for stable and growing income in an environment where formal employment or government safety nets are absent and have been noted in other studies. However, past research has not consistently emphasized the importance of collective sharing of risk or its importance as a social and community support network. Many offered not only financial help but also gifted assistance through “social funds” and “soft” help through personal support and encouragement. Such community and personal support is an enabling “capability” as described by Sen (1999). Indeed, the ethos of self-help and community was a strong interviewee theme.

Another important aspect of the poor, including their management of risk within their financial lives is the importance of hard assets. The most popular assets were business investments (such
as various pieces of equipment), land, housing and livestock. As the fieldwork showed, one of the key purposes of savings is to accumulate lump sums for the acquisition of hard assets. Indeed there was a disregard of financial assets as a store of long-term value\(^\text{59}\) and they were largely represented as a short-term store for longer-term non-financial asset accumulation. The reasons for the preference for hard asset included both their ability to not only store value in the long run, and hence provide assets for security, but also to be productive assets in their own right, hence providing additional income streams. Such income included that generated from business assets, rents and livestock-based incomes. Such stores of value in hard assets are, of course, common in many developing countries with the asset varying – livestock, jewellery and land are all common – but in this study there was a greater emphasis on income generation as a key advantage.

The poor’s views of their financial needs were set within this context of income generation goals, hard asset accumulation and risk mitigation. Interviewees saw a need to save and borrow small amounts of money for consumption, including the smoothing of daily needs and managing consumption requiring lump sums such as education and healthcare. For those on subsistence incomes, the poor were also borrowing in order to meet their most basic daily needs such as food.

However, they also expressed a need for capital for further income generating assets, including business investments. Such assets were important, in particular for increasing productivity, especially in small industries and agriculture where the alternative was manual labour. Indeed, those groups who had been successful in sourcing and applying even relatively small sums of capital to their projects had significantly higher levels of income than those who were continuing to struggle to fund investments. The need to raise such capital for business investments was a major barrier to overcome when creating small businesses and is consistent with mainstream thinking on financial access and small and medium-sized enterprise development.

However, for both consumption and investment, the poor’s preference to accessing monies, either for capital for businesses or for consumption, was through collective savings and loan groups. The majority preferred this because of flexibility in repayments and collateral. Collective savings

\(^{59}\) Hard assets are also a “hedge” against inflation as their real value is retained despite the high inflation that prevails in Kenya. However, inflation protection was not given as a reason by interviewees despite Kenyan high inflation rates.
and loan groups were seen as having “soft” terms because the group was able to judge fairly a person’s reasons and circumstance in the instance of non-payment and act accordingly. In particular, in relation to collateral, it was seen that this discretion by your own social or community group was a very real advantage and, again, a method of risk sharing and mitigation for borrowers.

Furthermore, for both income and borrowing, collective action provides risk mitigation. When considering the broader context of the lives of the poor it is clear why this is so important. Most of the interviewees lived on, or slightly above, subsistence levels. Consequently, the difference, even for the wealthiest interviewees, between their current levels of security and livelihoods and impoverishment is small, where not even basic needs such as food, housing, educational and healthcare can be met. In addition, their lives are set in the context of volatile income from employment, trading and agriculture, and without social security nets. Consequently, interviewees are very risk adverse. Their preference to avoid downside risk is much stronger than their preference to take risks that might lead to an upside. In addition, and as shown through their preference to self-fund capital investments through savings and loan groups, risk mitigation is more important than speed when they consider business investments and their view is that it is better to slowly build a business that is secure and funded through savings, than build a business quickly on borrowed money.

This central concern also feeds directly into interviewees’ negative views of formal financial services and their low levels of participation. As noted previously, 66% of interviewees had bank accounts but only 40% actively used them, indicating a high drop-out or dormancy rate. In relation to borrowing, only one interviewee had ever successfully accessed a formal sector loan and only two groups had attempted to access a loan. Negative views of formal banks were almost universal and almost no one presented a positive perspective. There was a deep distrust of banks, particularly relating the latter being outside of the community’s concerns and issues. This was despite active marketing and promotion by banks in their areas where interviewees lived including “financial literacy training”. The key reason for such negative views and voluntary non-participation in relation to borrowing was the risk of collateral loss. In the case of payment problems, the banks were seen as inflexible and likely to seize collateral, without any consideration of the impact this might have on the borrower. Recall of the catastrophic seizure of
essential assets – housing, land, and livestock – from members of the community was frequent. Such seizure would have been likely to cast defaulters into destitution but the banks were seen as unconcerned about this consequence compared to recouping their loans. Overall, and despite the need for capital for business investments, the interviewees did not see formal banks as presenting an attractive option to raise funds.

Figure 51. Cartoon from The Daily Nation, 27 October 2011.

Note: The cartoon illustrates the populist view of the banks involved in expanding financial access as behaving in an exploitative and commercial manner.

Equally, deposit accounts, which carry no downside risk in the way loans do, were also viewed negatively by most interviewees. A common experience was a bank account had been opened but
had fallen into disuse. The “barriers” to using these accounts were not, however, those identified in much research, such as distance, formal documentation or formality. Instead, they were “voluntary”, including the perceived low rates of interest paid on deposit accounts compared to those received through alternatives uses of funds such as business investments or lending through in savings and loan groups. In addition, some of the more sophisticated interviewees saw deposit accounts in formal banks as removing capital from their communities that could be more usefully employed within them if used in community banking. These findings contradict the finding of mainstream research [ref] in two ways.

Firstly, they challenge the identified involuntary barriers to financial access found in other research. The majority of past research attributed barriers to involuntary exclusion, including requirements to open and maintain an account or loan such as formal identification or other documentation, minimum balances, fees and other costs and collateral requirements, as well as a lack of “financial literacy”. In addition, some past research focused on limitations in service, such as “lack of respect and missing trust in the safety of banks” (Financial Sector Deepening Program, 2009, p.27) or “documentation and qualifications, product characteristics, literacy and geography” (p.23). Although some of these “barriers” were raised, the most significant for interviewees were the voluntary barriers of low returns on deposits, high risk of loss of collateral, lack of flexibility in loan arrangements and loss of investment potential for the immediate community.

We also contradict the findings and methodology of mainstream research about the levels and measurement of financial access. Past research has reported high levels of financial access in Kenya. However, such financial access is measured as the number of registered accounts but fails to measure the degree of effective use of such accounts. We found a high level of dormant accounts or insubstantial use following the opening of bank accounts such as negligible balances and infrequent use. The levels of financial access, as represented by substantive and regular engagement with the formal sector, may be materially overstated by existing surveys.
9. THE IMPLICATIONS OF THE THESIS FINDINGS

In this concluding chapter we return to the core question posed by the thesis: the role that the expansion of financial access is playing in financial development that supports structural transformation in developing economies.

The chapter does this by examining three themes relating to this core question that we have examined in the thesis. These are:

- Is the expansion of financial access contributing to structural transformation?
- What is the effect of the expansion of financial access on financial stability?
- What role is the expansion of financial access playing in the financial lives of the poor?

Each section will begin with a summary of the thesis findings reported in earlier chapters and then considers the implications for policy and for theory.

The chapter concludes by returning to its theoretical framework regarding applying the balance sheet approach to examine financial access and financial development.

9.1 THE EXPANSION OF FINANCIAL ACCESS AND STRUCTURAL TRANSFORMATION

The structural transformation of economies that defines development includes the transformation of sectors – especially agriculture and industry – from low to high productivity. Pro-poor transformation requires employment creation, the creation of public services and equitable distribution of income and wealth.

Structural transformation requires investment to achieve these goals and the fundamental function of the financial system in structural transformation is to mobilise and intermediate financial resources into “pro-development” investment. Pro-development investment is defined as being
investment that not only contributes to growth but, in conditions of scarce capital, maximises that contribution to growth.

The thesis found that the expansion of financial access is contributing to the mobilization of resources. This includes domestic deposit mobilization. However, the extent to which deposits being mobilised are incremental was unclear as deposits may only be shifts in deposits between institutions. This issue requires further empirical research to conclude whether deposits being mobilised by microfinance-orientated institutions are incremental or not.

The thesis findings also suggest that the binding constraint on savings – and hence mobilization of domestic deposits – at low levels of income is not access to finance, but household income. As income increases the binding constraint then changes to become – in addition to access – the perceived returns (in the form of interest rates) and security of deposits in formal financial institutions. This issue requires further empirical research to examine the relationship between financial savings and household income in developing countries and how binding constraints evolve as GDP per capita increases.

The thesis found the main source of resources being mobilised for the expansion of financial access is domestic and international private capital. The main form of this was debt. This is accompanied by incentives relating to profit-making by these private investors. Again, it cannot be concluded from the thesis whether these resources are incremental to the economy or not, or whether they have crowded out investments in other sectors compared to the financial sector. This requires further empirical research.

In order for mobilized resources to contribute to structural transformation, those resources need to be intermediated into investments that make a contribution to the transformative process. The thesis found that the expansion of financial access has made a limited contribution to this. This is because significant resources are being intermediated into the expansion of credit in sectors that are likely to make either a weak or no contribution to structural transformation. The thesis links these outcomes to the incentives of private financial institutions in relation to the relative risk and return in those sectors. These include the following findings:
Business lending has expanded. However, the contribution of this expansion can be questioned in relation to a number of points. Firstly, as discussed in Chapters 6 and 7, the majority of the lending has been to “microbusinesses”. Research indicates that small and medium-sized enterprises in developing countries make a limited contribution to structural transformation because they are typically located in low productivity activities and there is little graduation of small and medium-sized enterprises to larger-scale firms (Nissanke, 2001). Structural transformation requires the development of higher-productivity firms and on a scale that can provide mass employment and this is unlikely to be achieved through the form of business lending made by microfinance-orientated institutions.

However, this conclusion is more ambiguous in relation to lending to other “business” categories such as “wholesale”, “trading” and “retail”. It is possible that such lending is not closely associated with outcomes that underlie structural transformation – such as the emergence of large-scale manufacturing – but to small-scale and short-term trading activities. However, it is also possible that these may be linked to, for example, export growth that would contribute to structural transformation. For these categories, the links to structural transformation require further research for a conclusion to be reached including investigation as to what these categories represent and examination of their relationship to structural transformation.

The expansion of financial access has been accompanied by a relative – but not absolute – contraction in lending to the agricultural sector. This is because of its perception by private microfinance-orientated institutions as a sector that is unattractive due to low profitability and high risk. Increasing productivity to move the sector from low-skilled, labour-intensive subsistence agriculture to higher-productivity commercial agriculture is at the core of structural transformation. This is especially the case in sub-Saharan Africa where large percentages of the population remain employed in subsistence agriculture and its low-productivity is associated with high poverty levels. The relationship of the expansion of financial access to the relative contraction of agricultural credit makes the long-term transformation of the sector more difficult and is an actively damaging outcome derived from the expansion of financial access through private institutions.
The thesis found that the expansion of financial access is also associated with the expansion of consumption lending. This is because private microfinance-orientated institutions see it as a high return and low risk business. Use of mobilized resources for consumption diverts them from investment in sectors such as agriculture and industry and represents a negative “opportunity cost” in countries that suffer from capital scarcity. Backward linkages are more ambiguous, as they may be positive – for example, increased consumer demand for consumer goods or for construction – or negative, namely, they may increased import for consumption. The relationship of increased consumer lending to economic growth and structural transformation in developing countries requires further study to conclude what the effect is on economic development.

The theories discussed in Chapter 2 present one of the functions of the financial sector as the efficient allocation of resources in the economy. However, the allocations that have occurred relating to credit - as discussed above - reflect the incentives of private agents only. This approach is inadequate because in developing economies, firstly, capital is scarce, and secondly, there are externalities associated with the contribution of investment to structural transformation. A different approach needs to be taken to understand the “efficiency” of the allocation of capital by the financial system that takes into account these two issues.

As noted earlier, the thesis assigns these outcomes to the incentives of private financial institutions. However, this implies that similar sub-optimal allocation of credit would be observed where credit growth has occurred through private financial institutions acting in liberalized financial systems. This includes in all types of institutions – not just microfinance institutions – and in other countries. If this is not observed, it could be concluded that the observed outcomes are not the result of processes related to private financial institutions generally, but only those in the microfinance sector in Kenya.

Further research is required to conclude on this point. However, the author has begun such an analysis based on examining all banking institutions in a number of sub-Saharan Africa countries and consistent results have been found. The research is examining the empirical relationship between the expansion of private sector credit by private banking institutions – not only
microfinance-orientated institutions – and the sectors that receive that credit. The analysis is based on the balance sheet approach used in this thesis and analyses the balance sheet structures of institutions. This analysis shows consistent findings with the thesis: credit has expanded greatly but the expansion has been directed into consumer finance and low “development return” businesses (such as commerce, finance and real estate). Credit expansion in manufacturing, agriculture and infrastructure – critical sectors for structural transformation – remains limited.

Figure 52 below show results for Kenya. Consistent results were found for Nigeria, Tanzania, Ghana and Zambia (Tyson & Patel, 2015). This work requires further research to confirm these initial findings.

Figure 52. Total credit growth in Kenyan banking institutions by sector (2006-2012).

In relation to pragmatic policy, we conclude that there is an immediate need to develop policies that will improve the development externalities of the scarce capital that is being mobilized from the private sector. This is because public funds are likely to be limited as international development agencies – such as the World Bank and the African Development Bank – are developing a “knowledge bank” strategy, in which financing is being replaced by technical assistance (Griffith-Jones & Tyson, 2012).

Various policy approaches have already been developed by international development agencies. Approaches include partnering with the private sector in order to leverage private capital into pro-development sectors. For example, international development agencies are executing new approaches that seek to partner with the private sector in funds or subordinated financing in infrastructure. Direct credit policies – including direct regulatory controls, such as lending limits on private institutions or contingent lending programs for international development agencies and government funds – are being developed. For example, the EIB in Emerging Europe and Andean Development Corporation in Latin America execute such programs (Tyson et al., 2014). However, they require strong institutional environments in order to ensure they are well executed (Griffith-Jones & Tyson, 2012). In addition, their effectiveness in directing private sector credit into sectors with positive externalities for development remains open because they are relatively new approaches and so have not been operational for long enough to allow a conclusion.

For some sectors, notably the agricultural sector, a different approach is required: direct government finance. Climate change is increasingly adversely affecting agricultural areas in sub-Saharan Africa and increasing the risk of lending to the agricultural sector. The tendency for private lenders to drain capital from the sector is likely to increase. Ensuring that capital is available for agricultural investment not only promotes its modernization and broad economic development, but also serves other basic needs including food security. It is unlikely that private financial institutions will provide such financing even as partners with development agencies. In fact, such a gap in financing is another example of “missing markets” – as discussed in Chapter 2 in relation to the “missing markets” in lending to the poor – that has been addressed by development banks. Financing should instead be directed though dedicated public agricultural development banks whose function in developing countries has been to fill “missing markets”
where that lending is constrained or missing and where its potential positive externalities warrant it.

9.2 The Expansion of Financial Access and Financial Stability

Expansion of financial access in Kenya has been achieved through the growth of private financial institutions that have the dual goals of being “sustainable” – that is profitable – and providing assistance to the poor through financial services (although a few have purely commercial goals). The expansion has been funded primarily through private capital – and predominately debt – including international private capital flows.

This has been reflected in changes in the balance sheet structures of microfinance-orientated institutions. Institutions have experienced rising credit, foreign exchange and liquidity risks. Existing mitigation of these risks is through building institutional and regulatory capacity with a focus on microprudential regulation, including the introduction of “best practice”.

The thesis identified a number of problems associated with these developments:

- Important aspects of the rising credit, foreign exchange and liquidity risks cannot be mitigated. In particular:
  - Credit risk cannot be fully mitigated because assets are concentrated in uncollateralized lending to the poor that has inherently high risk. The thesis found that this has materialized in high levels of bad debts in response to credit shocks from political, natural (weather) and economic events.
  - There has been a growth in linkages to pro-cyclical international capital inflows and domestic interbank funds. These can enhance liquidity and facilitate risk management during periods of market tranquillity (Minsky, 2008) while increasing liquidity and foreign exchange risk within institutions and the financial system (through contagion and coordinated institutional failure) in the event of market disruptions.
  - Hedging strategies are limited for these risks. There is very limited liquidity in conventional hedging instruments for foreign exchange and interest rates risks.
such as foreign exchange futures and options or interest rate swaps. For credit risk there are no hedging instruments\(^6\).

- The reliance on institutional capacity building has limitations as identified by the thesis including:
  - Weaker institutions are finding building institutional capacity difficult.
  - An oligopolistic market has emerged with systemically important institutions whose continued soundness is critical to financial stability.

- The thesis found weaknesses in the current microprudential regulatory framework including:
  - The fieldwork indicates that there is weak compliance with regulation. Regulatory and financial reporting can be inaccurate and incomplete. This undermines the efficacy of liquidity and capital ratio regulations.
  - Multiple and over-indebtedness are present although hard to measure precisely. Progress is being made to contain the problem – for example, in 2013, Kenyan credit bureaus made nearly 3 million annual credit checks resulting in over 600,000 “names” being banned (Central Bank of Kenya, 2013b). Further progress is needed.
  - There is a need for a formal financial services registration for employees of regulated institutions to prevent fraud.

Addressing these issues requires greater institutional capacity at microfinance-orientated institutions and regulators. Building such capacity is difficult and requires a long-term approach and remains a policy constraint in sub-Saharan Africa (World Bank, 2013a). In addition, risk mitigation is reliant on the development of capital and derivative markets that facilitate risk management but which are only likely to develop in the medium-term.

Microprudential regulation must be complemented with macroprudential regulation to manage systemic risk if regulation is to be effective (Independent Commission on Banking, 2011). Current macroprudential regulatory approaches in Kenya are limited to high capital thresholds for

\(^6\) However, credit risk could be managed through alternative strategies such as securitization or asset diversification.
institutions and some minor limitations on mortgage lending, such as prohibiting foreign currency denominated mortgages (IMF, 2013). The Central Bank of Kenya’s 2012 Financial Stability Report (Central Bank of Kenya, 2013a) fails to discuss systemic risks in relation to the expansion of financial access.

Macroprudential issues of relevance to the expansion of financial access are identified by international bodies. For example, the recent G20 report emphasizes the need to capture the systemic risk in the shadow banking system, defined broadly as “the system of credit intermediation that involves entities and activities outside the regulated banking system”. [ref]

As such, shadow banking in low-income countries includes microfinance institutions. For such shadow banking activities, monitoring of concentration of risk within the system is important, including common exposures and interconnectedness among financial institutions, which are issues identified in the thesis as increasing in relation to microfinance-orientated institutions.

Strengthening of macroprudential regulation is needed. Specific measures that the Central Bank of Kenya could consider for microfinance-orientated institutions include the following:

- Limits for loan to deposit ratios to limit risks from interbank funding. Such measures, although likely to slow growth due to forcing institutions to build funding based on deposits rather than interbank financing, will reduce liquidity and contagion risks.
- Monitoring leverage amongst institutions and using macroprudential instruments designed to control excessive credit expansion, such as risk-weighted capital requirements or ceilings on credit and credit growth.
- Introducing stress testing for individual institutions and the financial system as a whole. Such a procedure is likely to give an early warning of problems arising either in institutions or at a systemic level. This is of particular relevance to the expansion of financial access in developing countries because of the susceptibility of institutions to credit and liquidity shocks – as highlighted by the thesis – including inflation, political and climate shocks.

More generally, pro-cyclical capital inflows and outflows have often been identified as a cause of financial crisis. As reported by the thesis, such flows are linked to the high growth rates of microfinance-orientated institutions in Kenya. Consideration should be given to constraining
these flows. This could be achieved through introducing capital controls at an institutional level, such as limiting the amount of inflows in absolute or relative terms as measured against institutional size or against deposit base, imposing equity or subordinated debt requirements for senior debt investors, or imposing maturity requirements on debt investments. It could also include macroeconomic capital controls, including temporary ones imposed during any crisis, in order to prevent destabilizing capital flows.

9.3 Financial Access & the Financial Lives of the Poor

Poor individuals in both urban and rural areas confirmed the findings of other research such as Collins et al. (2008) that they use formal and informal financial services for consumption smoothing. This is important to them given their low and volatile incomes and is to be valued.

Poor individuals strongly prefer informal financial services and support community and self-help programs. These provided high levels of control and transparency and fostered community businesses, investments and profit-sharing. There were “voluntary” barriers to using formal finance because of a distrust of microfinance-orientated institutions and aversion to borrowing due to the possibility of loss of collateral compared to the “soft” lending terms offered by informal finance. Poor people do have short-term – but not long-term – savings capacity. Income was a constraint on savings and when savings capacity was present they preferred savings in the form of hard, not financial, assets, which offer productive uses as well as being a store of value.

These finding need to be reflected in policy so that the voices of the poor are heard. However, current organizational structures for informal services are a limited foundation for the development of financial institutions that can not only serve the poor but also mobilize deposits and intermediate investment within the economy.

Cooperative banking may be an alternative approach. In sub-Saharan Africa, including in Kenya, cooperatives have been common especially for agriculture (Bank of Tanzania, 1988; Bagachwa, 1996; Ojo & Adewunmi, 1980; Ijere & Okorie, 1986; Ijere, 1992). However, state-ownership and sponsorship of cooperatives was substantially dismantled as part of structural adjustment programs.
Despite this, cooperative movements continued but evolved from state sponsorship to independent and autonomous organizations (Wanyama, 2009a). Examples in sub-Saharan Africa include self-help savings and loans organizations such as these studied in this thesis (Smith & Ross, 2006). Self-help activities offer significant advantages to members and their communities which profit-seeking, commercially-owned organizations do not. These include being under the control of members, the ability to have “soft” collateral and repayment terms controlled by the members and allowing members to retain “profits” for their own and their community’s benefit.

Problems have been experienced in these organizations including inefficient and corrupt administration, over and multiple lending, and lending for non-policy purposes. They have resulted in a series of institutional failures and widespread bad debts that undermined public confidence in them. In Kenya legislation was established to try to control these issues. This included the Cooperative Societies (Amendment) Act of 2004, which sought to re-enforce state regulation through widening the cooperative commissioners’ powers and scope of regulation, and the SACCO Societies Act of 2008, which established further licensing, regulation, supervision including deposit insurance, minimum capital requirements and a supervisory body (Wanyama, 2009a).

This chequered history and recent adverse experiences with private cooperatives suggest that cooperatives are problematic, which is an argument in favour of commercially-led microfinance. This history can be used to support the case that cooperatives have governance weaknesses, including corruption, inadequate regulation and supervision and that the use of external funds by cooperatives can “decrease the incentive to mobilize deposits” (Consultative Group to Assist the Poor, 2005).

However, these problems are equally present in commercial microfinance-orientated institutions and are not unique to cooperative institutions. Indeed, the issue of the pressure of private capital with its profit-seeking incentives is, arguably, stronger than organizations with a commitment to “social returns”. There is a need for stricter regulation of all types of institution, whatever their ownership structures.

The reestablishment of cooperative banking as a policy choice to address these issues should be actively considered.
9.4 THEORETICAL IMPLICATIONS: LINKING FINANCIAL DEVELOPMENT TO STRUCTURAL TRANSFORMATION THROUGH BALANCE SHEETS

We have offered an alternative definition of financial development, namely the contribution of the financial system to structural transformation and economic stabilization. This sets a new research agenda: to identify and examine empirically the transmission channels from credit growth in the financial system to structural transformation and economic stability.

As discussed in Chapter 2, current theoretical frameworks relating to financial development including microfinance does not present a coherent framework for analysing these channels. The theoretical approach we adopted as an alternative – the balance sheet approach – has enabled us to explore the impact of increasing financial access to the Kenyan financial system. It has also guided our enquiries into the resulting impact on the real economy.

Nevertheless, the thesis definition of financial development – namely its contribution to structural transformation – and the implication that development in financial systems is determined by its relationship to the real economy, has some affinities with the structuralist approach. As discussed in Chapter 2, both approaches seeks to link structural transformation in the real sector – defined as productivity increases – with finance acting to efficiently mobilise and allocate capital for structural transformation (Lin & Xu, 2012). It also allows for the concept of an “optimal financial structure” that performs these functions and that changes dynamically as development progresses (Lin & Xu, 2012).

However, the structuralist approach proposes exogenously-determined financial systems with no specified transmission channels. The thesis challenges this approach and instead sees the financial system as subject to endogenous processes – such as responses of financial institutions to risk – and requiring transmission channels to be specified – in the thesis through balance sheet analysis.
The structuralist approach also presents the financial system as embedded in the neo-classical “rational choices of economic agents” (Lin, Xifang & Ye, 2011, p.25). The thesis accepts this as valid in some instances – for example, the determination of lending to different sectors is determined by the choices of individual agents as represented by private institutions – but considers it as incomplete. Important financial phenomena – for example, coordinated institutional failures or herd behaviour in markets – are determined by systemic, not individual agent, behaviour. The neo-classical foundations of the structuralist approach remain a “necessary but not sufficient” theoretical framework to understand the role of finance in development.

The thesis also challenges the Stiglitz view of non-clearing financial markets as being due to imperfect information. The thesis proposes that information is another example of a “necessary but not sufficient” condition for financial markets to function. This is because it proposes that financial system agents respond primarily to risk, not information. This thesis illustrates by showing that, even in the presence of near-perfect information, there are “missing markets” in credit to the poor. This includes in the agricultural sector or where there are credit bureaus61 many would-be borrowers are still denied credit despite good information because the risk of lending to them is too high and private institutions then refuse credit outright because of the information they have – not the information they don’t have - about these borrowers and the related risk of lending to them.

Empirically, the structuralist framework also remains underdeveloped, with “financial structure” being defined clumsily in terms of institutional structures and financial development by growth of credit. These empirical weaknesses are of interest because the body of research as performed in the structuralist school seeks to use a broader and more sophisticated empirical definition of financial structure and development, but the actual empirical measures selected are, by admission of its authors, “primitive” (Lin, Xifang & Ye, 2011, p.25).

However, the key advantages of the structuralist approach of linking finance to productivity leads to an important question: can the thesis findings extend the structuralist approach to address some

61 In Kenya since the introduction of credit bureaus more than 600,000 people have been denied credit after credit bureau checks exposed their lending histories (source: CBK, 2015).
of its weaknesses whilst retaining its important innovations linking finance and productivity change in the real sector?

If this is to be achieved then we suggest a number of goals need to be addressed as follows:

- The framework needs to retain the important innovation of the approach – its focus on productivity changes as the essential process of development – and address the fundamental issue that this defines regarding how the financial sector serves productivity changes in the real sector. This makes the growth and cost of credit secondary issues in the context of this fundamental question;

- It needs to have endogenous processes within the financial system, driven – not by market imperfections including those relating to information – but by risk. Here market imperfections (such as imperfect information) may exist, but removing them does not create an equilibrium. This is because risk remains, even in the presence of perfect information;

- These endogenous processes need to incorporate the independent and interdependent choices of agents within the financial system in response to risk. The interdependent choices then define systemic phenomena within financial systems;

- Empirical research then needs to be more sophisticated in order to examine the relationship of the financial system to productivity changes via its endogenous processes determined by risk.

This framework – while having the same start and end point for the financial system as the structuralist view – the intermediation of savings into productivity-increasing investments, is different from the neo-classical view of financial systems. For example, markets can be non-clearing due to risk – that is due to reasons other than market imperfections – while agents are not independent but interdependent and information is a necessary, but not sufficient, condition of well-functioning financial markets.

The thesis has attempted to use the balance sheet approach to examine the development of the financial system. It adopted the generalised empirical approach that focuses on aggregate ratios
such as leverage, temporal and currency ratios as used in previous research (e.g., Cozzi & Toporowski, 2006), but with greater detail regarding institutional assets and liabilities.

We suggest this greater detail has the potential to provide an improved empirical and theoretical basis to examine how finance relates to productivity changes. The approach is an improvement on the existing empirical work relating to the structuralist approach (including Lin, Xifang & Ye, 2011). This is because it provides an empirical and theoretical foundation for specifying transmission mechanisms that reflect independent and interdependent agent choices in relation to risk within financial systems.

Nevertheless, it has significant limitations and requires deeper development. In particular, it does not capture well the dynamic role of risk in the financial system’s endogenous processes. It also needs a more specific and rigorous theoretical structure. Nevertheless, it presents a field of further research that moves towards an improved representation of the financial system and its role in development that the author plans to pursue in future research.

9.5 **CONCLUSION**

The findings indicate that the recent growth of financial systems in sub-Saharan Africa through private financial institutions – including the expansion of financial access – is not maximizing its potential contribution to structural transformation.

There are open questions as to how much of the resources being mobilized in deposits and private investment is incremental. More importantly, the resources being mobilized are not being directed to uses that maximize their contribution to structural transformation. This is of concern because of the scarcity of capital in sub-Saharan Africa.

There is an open question as to the impact of the expansion of financial access on financial stability. The thesis has shown that there are serious weaknesses in some microfinance-orientated institutions and in the regulatory framework for microfinance and that risk – both within institutions and systemic risk – are growing.

These findings lead to the need to redefine “financial sector development”. We offer an alternative definition of financial development, namely that financial development is the contribution of the
financial system to structural transformation and economic stabilization. Without contributing to structural transformation, the financial system is dysfunctional and cannot be considered to be “developing” – inferring as it does progress to a more desirable state. The externalities associated with incentives of private agents in the financial system need to be understood more fully including how they aggregate into systemic phenomena and how they interact with information and risk. Equally, given the importance of financial stability to economic growth – and the economic damage that is done by financial instability – financial growth needs to be combined with financial stability. A deeper understanding of the relationships that this definition infers – those between the growth of finance, its contribution to growth, and its effect on financial stability – is needed.

This requires the development of an empirical framework that measures these relationships. Current research exclusively defines financial development by the size of the financial system. It measures the scale and growth of credit, for example, the ratio of financial institutions’ assets to GDP, ratio of liquid liabilities to GDP, and ratio of deposits to GDP (source: World Bank’s Global Financial Development Database; Beck et al., 2008).

It fails to capture the vital link as to whether credit growth is being intermediated into purposes that serve structural transformation. More recent research that aims to develop an understanding of this relationship remains “primitive” and focused on an excessively narrow set of parameters.

We have laid the groundwork for such a renewed empirical approach, using the example of financial access, by presenting a detailed examination of the changes in the structures of balance sheets at individual microfinance-orientated institutions and the systemic implications of their interconnectivity.

It remains for this theoretical approach to be used to build a more general theory that extends beyond financial access to encompass all financial institutions and the systems of which they are a part and apply it to financial systems in developing economies. Such a development would provide greater insight into the developing financial system, including its potential to stabilize and promote growth as well as being the source of financial crisis.

Critically, it would provide insights in the linking of the financial system in structural transformation and redefine “financial development” through its contribution to the latter. The
author plans to continue research in this area to develop this approach and to contribute to the theoretical framework and its policy implications. Generating a deeper understanding of the role of the financial system in structural transformation is needed if the goal of the development community of which we are part – an end to poverty in developing countries – is to be achieved.

**EPILOGUE**

During the writing of the thesis between 2010 and 2015, the economic environment for sub-Saharan Africa underwent a structural shift. In the 2000s, external economic factors were supportive and economic growth was strong. But by 2015 these factors had faded with “the new mediocre” bringing sharp declines in demand from the regions major export markets – including Europe, the United States and China – and in the commodity prices which many sub-Saharan African countries are dependent upon. Political instability and insecurity was again affecting the region. These factors have led to a decline in growth expectations (IMF, 2015).

More worryingly, however, was evidence that the strong growth of the 2000s was superficial, with limited structural change in domestic economies. Economies remain dominated by low productivity agriculture, and manufacturing has only gained traction in a few countries. The continuing rapid urbanization and on-going demographic transition – unlike that in Europe or Asia – has not been accompanied by the absorption of surplus labour into higher productivity industrial activities. Instead, growing urban populations are engaged in low productivity services, largely in the informal sector, and that serves to trap them in poverty.

This “premature industrialization” – where levels of industrialization are peaking at ever lower percentages of GDP – raises concerns about the future path that sub-Saharan Africa can take to convergence with richer nations (e.g., Rodrik, 2015). It makes the understanding of the processes of structural transformation – including the role of finance – more urgent as new growth models are needed. Policy debate is currently suggesting looking to agri-processing or services as alternatives to industrialization or focusing on tackling “binding constraints” in trade and infrastructure. Nevertheless there remains an open question regarding what will be the sources of future strong and durable growth in the region and how productivity changes can be effected.
Also being questioned is the nature of finance and its role in development – echoing the themes of the thesis. In May 2015, the IMF published a report concluding that there is a bell-shaped relationship of finance and growth and a non-linear relationship of finance to productivity. The report also commented that measures of financial development that focus on size need to be complemented with measures of efficiency and access (Sahay et al., 2015). The authors conclude that “the pace of financial development matters. When it proceeds too fast, deepening financial institutions can lead to economic and financial instability. It encourages greater risk-taking and high leverage … when it comes to financial deepening, there are speed limits”. (Sahay et al., 2015, p.5) The empirical facts are increasingly supporting this view and imply that there can be too much finance as well as too little with “excessive” finance negatively impacting productivity.

However, it is too soon to herald a new paradigm in thinking about development finance. The paper concludes with the same old policy approaches – “developing good institutional and regulatory frameworks” (Sahay et al., 2015, p.5). They may be the necessary condition to ensure that finance serves the real economy – rather than the opposite – but they are insufficient and, as the financial crisis of 2007-08 showed, on occasion are entirely inadequate.

This author suggests a bolder period of rethinking is needed, one that incorporates the view that financial systems are inherently risky and unstable. This is an old view – long espoused by Keynes and Minsky – and one that cannot be tackled by neo-classical prescriptions aimed at perfecting markets. It requires a deeper recognition of the nature of financial markets and a more nuanced understanding of their potential contribution – and damage – to structural transformation.
BIBLIOGRAPHY


Basel Committee on Banking Supervision. 2015. “International regulatory framework for banks (Basel III)” http://www.bis.org/bcbs/basel3.htm?m=3%7C14%7C572


Www.Centralbank.Go.Ke

Central Bank of Kenya, 2010b. “Competition In The Mobile Telephony Industry In Kenya:


Central Bank Of Kenya, 2013b, “Developments In The Kenyan Banking Sector For The Quarter

Summit Campaign, Washington DC. Retrieved February 11, 2012 from
Http://Www.Microcreditsummit.Org/


Consultative Group to Assist the Poor Washington DC: Consultative Group to Assist the Poor.
www.cgap.org

in Latin America “. Consultative Group to Assist the Poor. www.cgap.org.


Consultative Group for Assistance to the Poor. 2001. “Commercialization and Mission Drift:
The Transformation of Microfinance in Latin America”. Occasional Paper No.5. www.cgap.org

Consultative Group for Assistance to the Poor. 2002. “Making Sense of Microfinance Interest
Rates”. Donor Brief. No.6. www.cgap.org

Consultative Group for Assistance to the Poor. 2003. “Definitions of Selected Financial Terms,
Ratios, and Adjustments for Microfinance”. www.cgap.org

Consultative Group for Assistance to the Poor. 2005 “Working with Savings and Credit

Line in Microfinance”, www.cgap.org

Consultative Group for Assistance to the Poor. 2008-2012. “Microfinance Banana Skins”.
www.cgap.org

Consultative Group for Assistance to the Poor. 2009. “Are Deposits A Stable Source Of
Funding For Microfinance Institutions?” www.cgap.org


Consultative Group for Assistance to the Poor, 2010b. “Consultative Group to Assist the Poor
2009 MIV Survey”. www.cgap.org

Consultative Group for Assistance to the Poor. 2010c. “Regulation of Branchless Banking in
Kenya” www.cgap.org


Www.Microfinancegateway.Org


