

ECONOMIC AND PRIVATE SECTOR

PROFESSIONAL EVIDENCE AND APPLIED KNOWLEDGE SERVICES

Economics Topic Guide: Financial Sector

Howard Miller and Subhrendu Chatterji

Nathan Associates

October 2013

EPS-PEAKS is a consortium of organisations that provides Economics and Private Sector Professional Evidence and Applied Knowledge Services to DFID. The core services include:

- 1) Helpdesk
- 2) Document library
- 3) Information on training and e-learning opportunities
- 4) Topic guides
- 5) Structured professional development sessions
- 6) E-Bulletin

To find out more or access EPS-PEAKS services or feedback on this or other output, visit the EPS-PEAKS community on <http://partnerplatform.org/eps-peaks> or contact Yurendra Basnett, Knowledge Manager, EPS-PEAKS core services at y.basnett@odi.org.uk.

Disclaimer statement:

The views presented in this paper are those of the authors and do not necessarily represent the views of consortium partner organisations, DFID or the UK government. The authors take full responsibility for any errors or omissions contained in this report.

Contents

Abbreviations	iii
1 Introduction	1
1.1 Scope of the topic guide	1
1.2 The role of the financial sector	1
1.3 Structures of financial systems	2
1.4 Financial services and poor people	4
2 Financial markets, policies and institutions	5
2.1 A market systems approach	5
2.2 The macro level: interaction of government and financial markets	6
2.3 The meso level: financial infrastructure and support services	12
2.4 The micro level: demand for and supply of financial services	14
2.5 Adding it all up: the financial sector in national accounts	16
3 Evidence and data on financial sector development and growth	17
3.1 Macro-level evidence	17
3.2 Financial sector surveys in developing countries	21
3.3 Financial sector indicators	22
4 Key and emerging issues	24
4.1 Donor approaches to financial sector development	24
4.2 Current issues in financial sector development	25
5 Conclusion	27
References	28
Annex 1: Summary of the Basel III Framework	30
Annex 2: Country implementation of various tiers of banking supervision	31

Abbreviations

CGAP	Consultative Group to Assist the Poor
DFID	UK Department for International Development
EPS-PEAKS	Economics and Private Sector Professional Evidence and Applied Knowledge Services
FAS	Financial Access Survey
FDI	Foreign Direct Investment
FSAP	Financial Sector Assessment Program
FSDK	Financial Sector Deepening Kenya
G2P	Government-to-Person
GDP	Gross Domestic Product
GIIN	Global Impact Investing Network
IAIS	International Association of Insurance Supervisors
IFC	International Finance Corporation
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
KYC	Know Your Customer
LIC	Low-Income Country
MDB	Multilateral Development Bank
MFI	Microfinance Institution
MIC	Middle-Income Country
MSME	Micro, Small and Medium-Sized Enterprise
NBFI	Non-Bank Financial Institution
NGO	Non-Governmental Organisation
NPL	Non-Performing Loan
OECD	Organisation for Economic Co-operation and Development
ROSC	Report on the Observance of Standards and Codes
ROSCA	Rotating Savings and Credit Association
SACCO	Savings and Credit Cooperative
SCA	Savings and Credit Association
S&L	Savings and Loans Association
SME	Small and Medium-Sized Enterprise
UK	United Kingdom
UN	United Nations
VSLA	Village Savings and Loan Association

1 Introduction

1.1 Scope of the topic guide

The purpose of this topic guide is to support economists in international development in understanding the financial sector, particularly in the context of developing economies. The guide is designed to provide:

- An understanding of the financial sector's role in the economy;
- An overview of the key relevant economic concepts;
- An introduction to the main current diagnostic tools for financial sector development;
- A summary of, and signposting to, recent evidence of finance's role in growth and development.

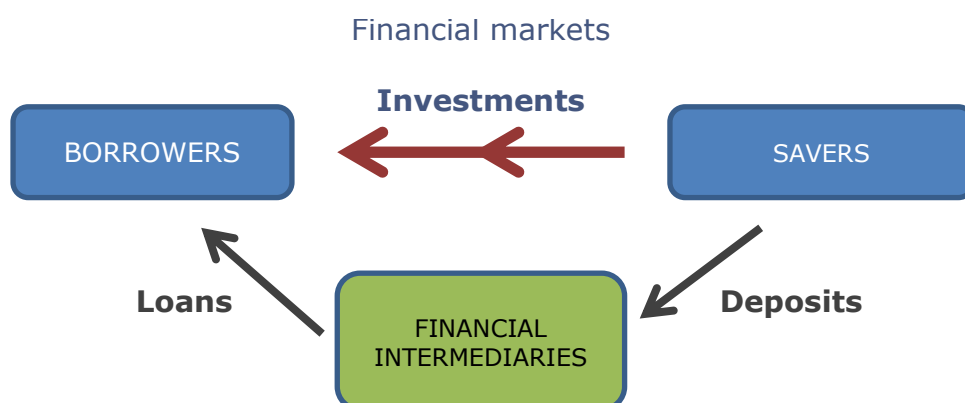
The broad structure of the guide is as follows: Section 2 covers the current conceptual and theoretical framework relevant to the financial sector, Section 3 maps the evidence on financial deepening and inclusion on a selection of development indicators and Section 4 covers key and emerging issues in financial sector development, including the range of donor approaches and tools.

1.2 The role of the financial sector

The fundamental role of the financial sector, which is an interlinked system of financial markets and intermediaries, is to channel funds in the economy from savers to borrowers. Typically, borrowers are seeking to invest in assets (productive capital for firms; housing, education, investments, savings or other assets for households). This is achieved either through:

- Financial markets, if borrower and saver risk and maturity preferences are similar; or
- Financial intermediaries, predominantly banks, when preferences differ or market transactions costs are high (primarily because of information imperfections).

Figure 1: Financial intermediation



In a developing country context, the intermediation function, especially that related to banking, is by far the more significant of the two mechanisms. This is principally because many of the prerequisites for efficient and effective markets, mainly related to market infrastructure and information flows between participants, are not well developed. As there is a wide range of risk and maturity preferences of savers and borrowers, it is valuable to have, in addition to banks, a variety of financial intermediaries and markets

suitable to these. Moreover, a wide range of financial markets also has a positive impact on banks' operations, for instance by improving their ability to manage risks.

1.3 Structures of financial systems

Financial systems vary considerably in structure between countries, and in particular between the developed and the developing world. A financial sector in a typical African country will be dominated by a small number of commercial banks serving the government and the mainly urban corporate and wealthier household sector, with some microfinance institutions (MFIs) increasing outreach into rural areas. The insurance market will be limited and capital markets very shallow.

In general, the interaction of the financial sector with the real sector can be summarised as per the diagram in Figure 2.

Figure 2: Interaction of the financial sector and the real sector

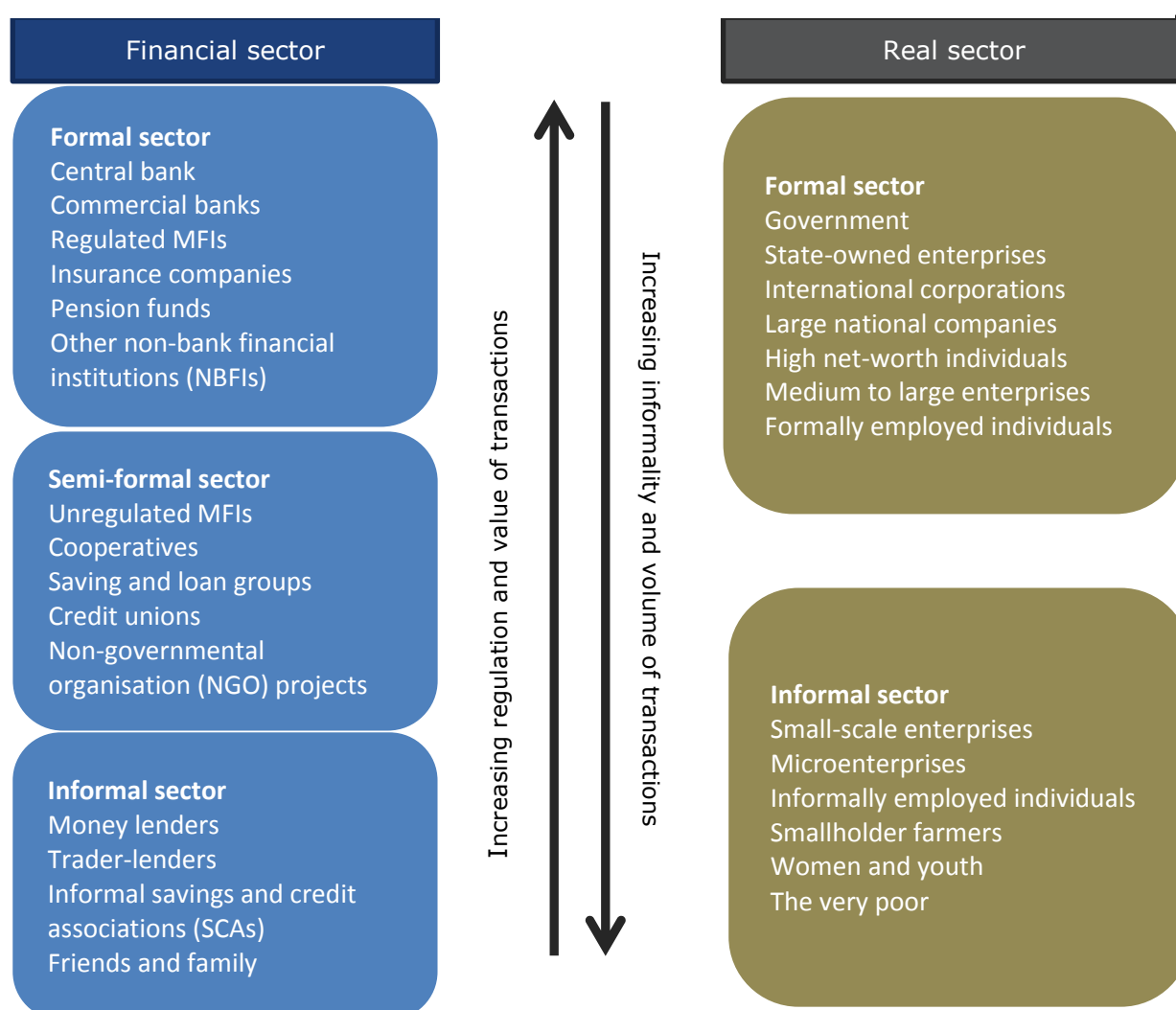


Table 1 provides a stylised perspective of financial markets at different stages of a country's economic development.

Table 1: Key characteristics of financial sectors across countries

	Advanced economies	Middle-income countries (MICs)	Low-income countries (LICs)	Fragile states
Financial markets	Deep, well-established markets: equity and debt markets	Equity and debt markets well established, many international and local companies. Increasingly accessing international capital markets	Equity markets shallow, usually restricted to multinationals and a few large corporates; bond markets locally denominated and lack of long-term finance	Often little or no functioning financial markets
<i>Market capitalisation of listed companies/gross domestic product (GDP)</i>	<i>Often >100%</i>	<i>Typically 50-80%</i>	<i>Often <25%</i>	<i>Very low, if any capital markets exist at all</i>
Banking sector	Investment banking and capital markets by large multinational banks, very well developed. Some local banks survive	Mix of multinational and strong local banks, still some financial exclusion, particularly in rural areas	Small number of large multinational banks dominate market, often large number of smaller national and regional banks, only small proportion of population covered	Some local banks, state intervention common. Very few individuals and businesses with access to formal finance
<i>Domestic credit to the private sector/GDP</i>	<i>Often >100%</i>	<i>Typically 40-80%</i>	<i>Often below 20%</i>	<i>Can be below 10%</i>
Insurance	Very well-established institutions across a range of sectors	Rapidly increasing depth and breadth of insurance coverage	Some institutions exist but mainly life and auto insurance with very little beyond	Very shallow coverage if present at all
Microfinance	Little or no use	Still widely used in rural and remote areas but less so in urban centres	Very widely used, particularly away from urban centres. For most people, the only financial services available	Some availability, but much of the population with still little or no access to microfinance
Moneylenders	Some presence of payday lenders. Some may be regulated	Some use of moneylenders but increasingly taken over by formal services	Still widely used owing to absence of formal services and ease of use	Often the only available source of credit
Transactions	Electronic payments and card transactions widespread	Emerging electronic and mobile payments but mostly still cash based	Mostly cash but mobile transactions increasingly significant	Mostly cash, some emerging mobile providers

Linkages between formal and informal sectors

In developing countries, there exists a substantial flow of funds from informal to formal sector financial institutions. The primary objective is generally safety of funds, with the monies predominantly placed on easily accessible demand deposit, although larger savings groups also rely on earning interest from longer-term deposits. There is considerable difference in the scope of linkages, however, depending on the nature of the informal agent's activities and the ease of access. For example, urban residents in the informal sector tend to utilise bank deposit services more than rural ones.

Demand deposits are not the only linkage between informal and formal markets. As they are in the same currency, inflation will affect both (though not evenly); and there is high substitution between them – someone will borrow from either formal or informal markets depending on the deal on offer, so they are competing for the available liquidity.

Deposit mobilisation linkages benefit both banks (by enabling them to access funds cheaply) and the informal sector (by ensuring safety of funds and making banking services (indirectly) accessible to informal sector clients). Moreover, such linkages result in further integration of the financial sector.

Financial flows from formal institutions to informal ones are often very limited.

1.4 Financial services and poor people

Poor people have limited access to resources and services, including financial services. Lack of financial services limits the ability both to invest productively in human and physical capital and to manage risk and build resilience more generally. Transaction costs are also relatively high as a result.

By relaxing the credit constraint, the provision of credit to poor people can help set in motion a virtuous circle out of poverty of 'low income, credit, investment, more income, more credit, more investment, more income'. There is extensive empirical evidence linking credit with increased incomes and investment, particularly among small and medium-sized enterprises (SMEs) (see, e.g., Beck et al., 2005b).

Poor people often badly need means of saving in a secure and manageable way. Transactional and payment services, or insurance products, are key financial services beyond credit that benefit the poor by helping manage risk and build resilience.

Financial services such as insurance and pensions are not yet widespread in most developing countries, and there is potential for substantial growth. Innovative models are now being implemented in many countries in the areas of life, health, crop, livestock, etc. insurance. Various infrastructure-related barriers, many of them outside the financial sector (e.g. weather stations, health care infrastructure) need to be overcome. Funeral insurance is one area where developing countries have seen some progress.

A number of reasons have been put forward to explain why poor people find it difficult to access financial services. Principal among these are:

- Difficulties in assessing, monitoring and managing credit risks associated with providing financial services to the poor. Lack of information to make credit assessment; variability and wider uncertainty associated with their incomes; and the often high cost of processing and monitoring their account performance (especially given their small transaction sizes) create barriers. In developing countries, banks overcome risk assessment barriers by requiring collateral, usually in the form of immovable property, or, increasingly, evidence of future income (such as salary or contractual income). The poor often do not have formal jobs or contracts, and do not possess property, or have their rights to land restricted.
- Weak legal systems that provide little support to the financial service provider in enforcing contracts or repossessing collateral. Moreover, given the relatively small

amounts per head lent to the poor, collateral enforcement would rarely be worthwhile, as it is too costly.

- Difficulty and high expense involved in reaching poor people in rural and remote areas. Although technology has lowered distribution costs for financial institutions, physical presence by way of branches is still usually necessary. In addition, mobile technology is increasingly lowering the cost of processing high volumes of low-value transactions.

2 Financial markets, policies and institutions

2.1 A market systems approach

Framework

Well-functioning financial sectors contribute to economic activity through a number of direct and indirect channels. Direct channels include:

- Establishing prices (required rates of return) of financial assets, given their risk – signalling how funds in the economy should be allocated among financial assets to optimise their productive use;
- Reducing the cost of transactions for economic actors by minimising search and information costs;
- Offering liquidity by providing a payment mechanism and also secondary markets, reducing risks and transaction costs;
- Providing vehicles and instruments for managing financial and non-financial risks for depositors, investors and the insured;
- Enabling maturity transformation, for example by pooling short-term funds and extending longer-term loans, and also providing secondary markets for longer-term financial instruments.

Indirect channels include:

- Providing delegated monitoring, with specialist lenders and investors monitoring depositor and client funds more effectively and efficiently, and improving corporate governance.

The principal role of the financial sector is the channelling of funds from surplus to deficit sectors in an economy, in the form of savings and investments. In meeting this objective, the sector creates assets and liabilities (e.g. loans and deposits in banks), or financial capital. It is through this process – the interaction of the financial sector with the real sector – that funds are intermediated to generate investment by government, the private sector and households to create jobs, generate profits and add value to the economy.

From the point of view of growth and development, the income stream generated by the stock of capital is generally more important than the magnitude of savings and investments *per se*. In determining this flow of income, the rate of return on investment is as important as the amount of resources available for investment. Thus, the financial sector's efficiency in maximising the returns from capital ultimately enables it to act most effectively as a channel of funds.

One of the key functions of financial markets (and in particular capital markets) is to provide debt and equity risk funds for long-term investments. Given the short-term maturity profile of deposits, financial intermediaries such as banks are considerably

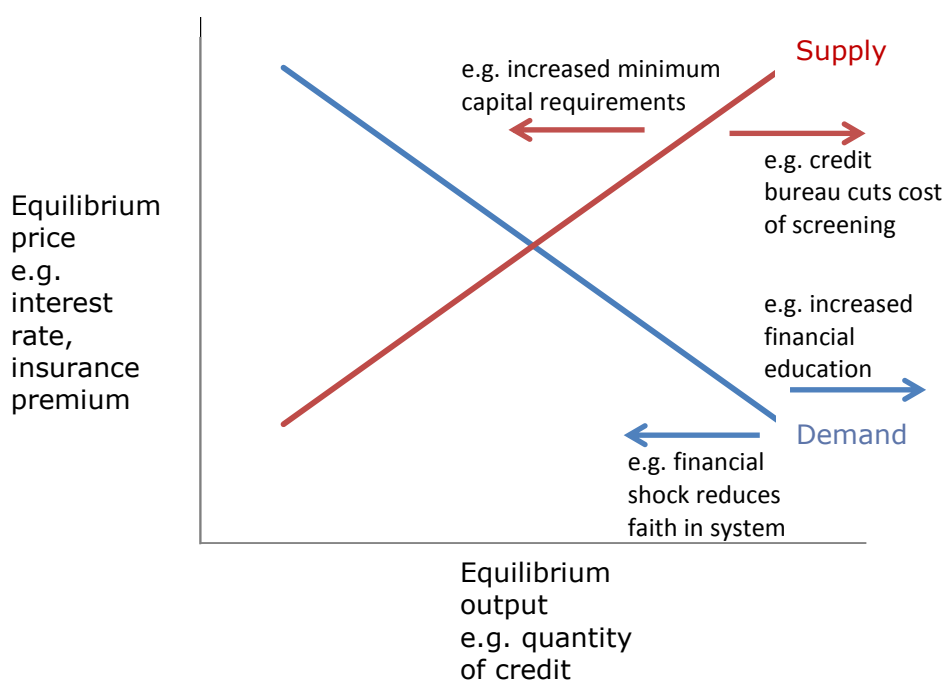
constrained in providing these, particularly in environments where they do not have ready access to alternative sources of finance through well-functioning financial markets.

By increasing the choice of financial instruments available to savers and investors, the financial sector also contributes to increased competition and helps channel resources toward the highest-return investments for given risk. This, in turn, lowers financial intermediation costs.

The level of development of financial markets is also an important determinant of the flexibility and pace with which the financial system can adjust to internal and external change and absorb shocks – it enables easier diversification and management of risk. Well-functioning financial markets are additionally an important link to international capital flows, as a stable and reliable financial system is a prerequisite for most investors from wealthier countries. Deep and wide financial sectors also improve a country's resilience to internal and external financial shocks.

The financial sector can be viewed as a system of related and interconnected markets, each subject to forces of supply and demand in an environment managed by government policies and regulations, and supported by a range of meso-level institutions and services. Forces at the macro level (such as central bank policy over minimum capital requirements for banks, or a financial shock that reduces public faith in the financial system) and at the meso level (such as the introduction of a credit reference bureau that helps manage information asymmetry) have impacts on the supply and demand curves for a financial service or product.

Figure 3: A simple market approach to the financial sector



2.2 The macro level: interaction of government and financial markets

Evolution of financial sector policy

The post-independence paradigm that emerged in the 1960s and early 1970s was one of financial sectors in developing countries dominated by ex-colonial banks, which often restricted their activities to financing foreign trade, resulting in missing markets and market failures and encouraging government intervention. Market failures in financial sectors owed, in general, to their inadequacies in providing long-term credit or in sharing

risks among financial institutions and industry. Additionally, oligopolistic banking markets meant that any market-determined rates of interest were artificially high. Government intervention to address this market failure was usually by way of imposing an interest rate ceiling to keep rates low (and real rates often negative), by credit rationing or by state-owned banks or credit cooperatives otherwise distorting the market.

Tobin formalised the prevailing economic ideas into a theoretical framework, analysing the effects of monetary policy on the steady-state growth rate of the economy. **Tobin's model** suggested that:

- An inflationary policy is conducive to economic growth in so much as it stimulates investment.
- The return on money must be sufficiently lower than the return on capital for investment and capital accumulation to occur.

In addition to **'repressing' interest rates**, in order to induce enough investment and lending to meet their policy goals, developing country governments engaged in allocating credit to preferred sectors through the use of controls (e.g. minimum sectoral lending requirements) and incentives (implicit or explicit guarantees). Expansionary policies financed by low interest rates and central bank printing of money led to inflationary pressures. In seeking to achieve monetary control, central banks had to impose quantitative limits either on private sector borrowing or on direct banks to meet high reserve requirements. This, and increased borrowing by the government and state-owned enterprises from financial institutions, led to further **crowding-out** of the private sector.

The level of government intervention continued to increase and soon resulted in major distortions in the financial sector's ability to mobilise resources effectively, allocate credit and operate economically. A mixture of non-benevolence, corruption and weak administration introduced distortions, rent seeking and inefficiency in all aspects of the financial sector. Firms that were given access to cheap credit were in effect being subsidised by depositors, who started withdrawing funds from intermediaries. Direct attempts at monetary control, and the resulting dis-intermediation, contributed to excessively fragmented financial sectors. Capital left the countries and savers refused to hold financial assets.

In 1973, **McKinnon and Shaw** separately highlighted the problems associated with excessive intervention. Their diagnosis was that the mass of controls on the financial system were 'repressing' it and causing it to malfunction. The **solution they proposed to this 'financial repression' was financial liberalisation**: the removal of government controls. Financial liberalisation theory is based on the assumption that there is a positive relationship between interest rates and economic growth. The underlying economic model adopted by McKinnon provides that higher real deposit rates of interest make the opportunity cost of saving real balances lower, and hence act as an impetus for firms wanting to finance investment projects. Shaw's focus is more on the role of financial intermediaries in development. His suggestion was that increasing returns offered to savers enhances banks' capacity to lend – the volume of investment funds in the economy is thereby increased. McKinnon and Shaw's work was further refined by other economists, who came to be known as the McKinnon-Shaw School.

Financial liberalisation theory was built on the belief that 'government failure' was best addressed by removing the government's influence on the financial sector. The main targets for liberalisation were interest rate ceilings, which were identified as the primary causes of repression. According to the theory, allowing the central price to reach its market-clearing level would increase both the quantity and the quality of investment, curing much that was wrong in the financial sector. The financial liberalisation espoused

by the likes of McKinnon, Shaw and Williamson laid the intellectual foundations for what became the Washington Consensus of the late 1980s and 1990s.

The financial crises in East Asia in 1997 and worldwide in 2008, as well as the success of countries following alternative pathways of development, have called into question whether financial liberalisation is always appropriate. There now seems to exist among the Bretton Woods institutions an implicit recognition that financial liberalisation may not be the most critical step in financial reform programmes at the initial stage, particularly in countries susceptible to macroeconomic instability. In general, it is increasingly accepted that **financial sector reform programmes in developing countries should address institution building in both the financial and the real sectors, before (or in parallel with) embarking on financial liberalisation**. In addition, individual circumstances of countries need to be taken into account in designing the architecture of its financial system, institutional arrangements and financial policies. Flexibility is also required in implementation. Given the uncertainties and impediments to change, a pragmatic approach, with an emphasis on continuous learning, is also necessary.

Monetary policy

The banking system creates money through the **money multiplier** effect, and has a direct long-term impact on the amount of money in circulation in the economy. Central banks can influence the latter through various tools, in particular setting the level of reserves banks must hold. In addition, money markets can be used by central banks to influence short-term monetary variables. By buying and selling government securities through open market operations, a central bank can manipulate the short-term interest rate and supply of base money to influence monetary targets such as money supply, inflation or interest rates.

Monetary policy frameworks and instruments vary considerably across developing countries. Most developing country financial sectors have traditionally been characterised by extensive interest rate and credit controls and subsidies, markets that are typically underdeveloped and uncompetitive, with a financial structure dominated by a few large banks. There is generally an absence of (or, at best, a lack of deep and liquid) money and debt markets. Officials tend to use a mix of direct and indirect monetary controls.

Essentially, **direct instruments** (such as interest rate controls, credit ceilings, directed lending) are simple to use and, when effectively implemented and monitored, can be useful in achieving narrowly defined targets, such as maintaining a particular interest rate at a certain level, or keeping a bank's overall credit expansion below a target ceiling. They can also be linked with other objectives, such as channelling of credit to particular sectors.

However, the main problem with direct instruments is that they inhibit efficiency in the financial sector and distort markets and allocation of funds. By forcing financial institutions to act as directed, they implicitly tax their activities each time the activity is different from the profit-maximising one they would otherwise have chosen. They are therefore prone to evasion and lose effectiveness over time. Direct instruments can result in misleading price signals, induce lack of transparency in the financial sector and become prone to political interference.

Perhaps most importantly in the context of financial sector development and reform, **direct monetary controls inhibit the development of financial markets and instruments**. Their tendency is to distort market signals, increase costs and encourage fragmentation. As developing countries have increasingly embarked on financial sector liberalisation, therefore, the trend has been toward the adoption of indirect monetary control instruments.

Particularly since the early 1990s, many developing countries have reformed their monetary control systems and placed a **greater emphasis on market-based instruments**, rather than direct controls. In a liberal system, the main instrument of monetary control would be the central bank's control over interest rates in the money market through its ability to manage the stock of reserve money (cash and balances with the central bank). Such a system relies primarily on the central banks' ability to manage its own balance sheet and to control the terms at which it is willing to provide assistance to cover reserve shortages.

Indirect instruments (such as open market operations and reserve requirements) can be considerably more effective and flexible than their direct counterparts in meeting monetary control objectives. They also produce fewer and less pronounced distortions and other undesirable side-effects in the functioning of the financial sector (although reserves can be seen as a tax on the banking sector, as they typically do not earn a market rate of interest). Indirect monetary policies and instruments are better, use wider transmission mechanisms and affect liquidity conditions and interest rates in the economy at large. This is in contrast with direct monetary instruments, whose impact is restricted predominantly to the targeted financial institutions. Also, indirect monetary policy permits authorities to modulate their policy better, because it opens more options and permits the use of alternative monetary instruments.

Indirect instruments facilitate the liberalisation of the financial sector, enable the deregulation of interest rates and the removal of credit controls and stimulate markets in new financial instruments – that is, they **stimulate the deepening of the financial sector**.

For the effectiveness of indirect monetary instruments to be optimised, however, there is a need for **well-developed financial (in particular money) markets**. The transition from direct to indirect conduct of monetary policy also requires **careful control and phasing**.

A survey of 49 countries by the International Monetary Fund (IMF) in 2010 tracked the incidence of a range of monetary instruments.

Table 2: Types of monetary instruments

Monetary instrument	Proportion of sample using instrument
Caps on loan-to-value ratios	41%
Caps on debt/loan-to-income ratios	27%
Caps on foreign currency lending	18%
Ceiling on credit or credit growth	14%
Limits on net open currency positions/currency mismatch	39%
Limits on maturity mismatch	27%
Reserve requirements	39%
Countercyclical capital requirement	22%
Time-varying/dynamic provisioning	29%
Restrictions on profit distribution	14%

Source: Lim et al. (2011).

Fiscal policy

The dominant relationship between fiscal policy and the financial sector is **the impact of government borrowing on interest rates and private sector borrowing**. It is common in developing countries for governments to finance fiscal deficits by running down reserves at the central bank and forcing captive buyers (primarily domestic

commercial banks) to buy government debt at below-market rates. Both of these are associated with higher inflation, lower savings rates and lower growth (Fry, 1997).

Even when governments borrow at market rates, a large domestic borrowing requirement can push up interest rates across the board and discourage private sector borrowing: **the crowding-out effect**. This squeezes private investment and thus has a detrimental impact on growth.

The taxation of financial sector institutions and transactions can be seen by governments as ready sources of revenues. Such taxes may be levied indirectly (such as requiring banks to hold interest-free reserves at the central bank, or forcing banks to invest in government bonds at below-market rates), or more directly through taxing bank or financial institution profits at a higher rate.

A deep financial sector, through which a relatively high proportion of economic activity is conducted, also contributes to more effective fiscal management, by **reducing the scope for leakages**. In addition, it **lowers the costs of government tax collection and spending**.

On the reverse side, systemic banking crises have the potential to have a significant negative impact on countries' fiscal position, as public funds are used for bank rescues.

Most MICs and an increasing number of LICs now borrow on **international debt markets**, particularly for large capital investments. Countries like Nigeria, Zambia and Rwanda now finance a portion of their budgets internationally, and more are likely to follow. Major challenges associated with this strategy include debt sustainability, the management of foreign exchange rate risk and original sin (currency mismatch associated with the inability to borrow abroad in domestic currency).

Regulation and supervision

As the 2007/08 global financial crisis has shown, the financial sector plays a unique role in modern economies. In its role as the keeper of deposits, the financial sector carries a burden that governments must protect in order to retain consumer confidence. **Banks are particularly susceptible to market failures**, such as runs, and the high externalities and spill-overs in the economy that can result from such failure. The systemic role that banks and other financial institutions play therefore requires that regulatory oversight and supervision are vital roles for government and other regulatory institutions.

Regulation is concerned with formulating rules for banks and financial institutions, which include licensing or authorisation, ownership rules, conduct of business, adequacy of capital, reserves and liquidity ratios, rules on foreign currency and other risk exposures and deposit insurance. Supervision, on the other hand, involves the inspection and monitoring process to ensure the implementation and effectiveness of these rules, and is targeted at ensuring the financial soundness and safety of banks.

Three broad objectives in regulating financial intermediaries are generally cited:

- **Safety and soundness of the financial system**, to prevent disruption to the payments system and to avoid the system-wide collapse of financial intermediaries. This is generally done through a combination of close monitoring and supervision combined with, for instance, fit and proper ownership rules, capital and liquidity requirements, deposit insurance and lender of last-resort arrangements; as well as establishing the framework for a stable payments system.
- **Consumer and investor protection**, usually with the aim of standardising and simplifying information, such as interest rates charged or offered. Insider transactions and potentially fraudulent schemes are also restricted or closely monitored.

- **Information disclosure**, so financial sector participants can make informed decisions about borrowing and saving/investing, and also to prevent fraud.

In most developing countries, regulators and supervisory authorities now have laws and regulations covering their financial systems and the formal institutions and markets, such as banks and stock exchanges, that operate within them. However, effective supervision is usually a challenge. This is particularly the case where state-owned financial institutions play a significant role, and where supervisory bodies lack resources and capacity.

Regulation of the often vast informal financial sector provides its own challenges. While it is important for the regulatory authorities to acknowledge the presence of the informal financial sector and support it, regulation needs to be carefully applied. In the first instance, inappropriately designed regulation could potentially damage many of the strengths of the informal sector, in particular **its flexibility, its low cost of operations and its provision of credit to small borrowers**. Perhaps more importantly, it may be impossible to police and enforce such regulations, given the way most informal agents operate.

At the same time, authorities need to recognise that the informal financial sector constitutes a wide range of operators, varying in size, intermediation capacity and structure. In some countries, unregulated financial institutions such as savings and credit cooperatives (SACCOs) have grown to the size of medium-sized banks without any formal oversight. Moreover, some of the larger informal agents may possess strong enough links with the formal sector that regulation is required to provide them legitimacy in the eyes of formal institutions, while at the same time addressing risks to the formal sector from any difficulties in such institutions. Informal institutions may still be subject to fraud or used as conduits for money laundering.

It is common in developing countries for regulatory authorities to take **a tiered approach to regulation**, with rising stringency as the informal institutions rise in size and formality and/or have increasing access to third-party funds. This might include:

- Unfettered operation at the lowest informal market niches, such as moneylenders, savings collectors and closed membership groups such as rotating savings and credit associations (ROSCAs);
- Self-regulation and registration for small semi-formal activities such as savings and credit associations and NGOs providing credit;
- Full registration and prudential regulation when institutions are large enough and sufficiently well connected with the formal financial sector that their failure could have an important impact.

Typically, the regulatory net is extended once an institution starts taking deposits from the wider public.

Financial sector regulation and supervision is typically benchmarked and assessed against international standards. These include the [Basel Core Principles for Effective Banking Supervision](#), the [International Organization of Securities Commissions \(IOSCO\) Objectives and Principles of Securities Regulation](#) and [the International Association of Insurance Supervisors \(IAIS\) Insurance Core Principles](#). The IMF/World Bank's [Financial Sector Assessment Program](#) (FSAP) and the World Bank's [Report on Observance of Standards and Codes](#) (ROSC) are the primary means of benchmarking cross-country financial stability, regulation and supervision. Given their expense, however, FSAPs are being carried out to a more limited extent in developing countries.

Most developing countries still use Basel I, and a few have adopted a simplified version of Basel II. A list of developing country adoption of the different standards is included in Annex 2.

The 2007/08 global financial crisis has triggered a new round of regulatory reforms around the world, aimed at strengthening financial institutions and markets. One of the key developments is the introduction of a new framework for regulating bank capital and liquidity. The table in Annex 1 summarises the principal provisions of Basel III.

Basel III is aimed at more complex, internationally active banks, and developing countries are likely to be most affected to the extent that international banks have local subsidiaries. Furthermore, LIC banks are generally well capitalised (above Basel III levels, although they fare less well on the liquidity front). This owes in part to conservative regulatory approaches in LICs, and because banks in these economies tend to have capital structures that are a relatively straightforward composition of common shares and retained earnings (i.e. core Tier 1 capital). They also tend to have lower leverage compared with developed world banks, reflecting their greater risk exposures, in terms of being able to assess as well as manage risks.

2.3 The meso level: financial infrastructure and support services

Pooled credit information

Economic theory suggests that market imperfections will result from information asymmetry and the inability of lenders to differentiate between safe and risky borrowers (Stiglitz and Weiss, 1981). Credit market failures are so important in financial sectors because they can also be the source of many other market failures.

When making a credit decision, a bank or an MFI cannot fully identify a client's potential for repayment. This opacity can create both adverse selection (by selecting higher-risk credits) and moral hazard (higher-risk projects may be taken on to meet higher interest rates).

Adverse selection results from the fact that clients that are demonstrably lower risk are likely to have already received some form of credit. Those that remain will be either higher risk or lower risk but unable to prove it. Unable to differentiate, the lender will charge an aggregated rate that will be more attractive to the higher-risk client. This leads to a raised probability of default *ex ante*.

The second problem is that clients borrowing at a higher rate might be required to make riskier investments in order to cover their borrowing costs. This is **moral hazard** and leads to a higher probability of default *ex post*.

Without good quality risk analysis and credit information systems, the lenders have the following options:

- Incur considerable time and costs assessing the borrower;
- Insist on collateral, which limits credit supply to those who already have significant assets;
- Charge higher interest rates and fees to cover additional risk and cost of serving, in particular, micro, small and medium-sized enterprises (MSMEs);
- Be cautious and concentrate on other less risky market segments.

These strategies all have the effect of restricting access to credit for households and businesses. The World Bank and the International Finance Corporation (IFC) have been leading the way in promoting the downscaling of bank lending, based on risk and credit information, not collateral. Good-quality, easily accessible credit information provides a number of significant benefits:

- It reduces risk for lenders (past performance provides a clue to future behaviour).
- It encourages borrowers to build up a positive credit history.

- Historical data provide opportunities to build up statistical models that are critical to cost-effectively serving a large number of marginal customers.
- It encourages competition, as borrowers can leverage their credit history to assess value for money for competing products rather than be constrained in using the only provider who has information on the customer's past performance.

Two main types of credit reporting institutions can be found around the world:

- Credit registries, which are public entities that are managed by bank supervisors or central banks and typically collect information from supervised financial institutions;
- Credit bureaux, which are privately owned enterprises that tend to cover smaller loans, often collect credit information from bank and nonbank lenders and provide a range of value-added services, such as credit scores, to banks and nonbank lenders (World Bank, 2013).

Table 3: Credit reporting, coverage by region

	Credit registry coverage		Credit bureau coverage	
	% population	% GDP	% population	% GDP
East Asia and Pacific	8.2	60.5	17.3	20.2
Eastern Europe and Central Asia	13.1	38.9	21.3	35.8
Latin America and Caribbean	10.1	19.5	31.5	18.1
Middle East and North Africa	5.3	53.2	7.0	13.2
Organisation for Economic Co-operation and Development (OECD)	8.0	157.1	61.1	36.6
South Asia	0.8	46.2	3.8	108.4
Sub-Saharan Africa	2.7	16.6	4.9	7.9

Source: World Bank (2013).

Collateral registry systems

According to the IFC (nd), in developing countries in 2012, nearly 80% of firms' assets were inventory, machinery and accounts receivable, while 78% of the assets taken by financial institutions as collateral were real estate (land or buildings). Effective secured transactions laws and collateral registries are a crucial component of a healthy financial sector and business climate. In their absence, entrepreneurs are unable to leverage current assets into capital for investment. Modern secured transactions systems allow the use of movable assets (both tangible and intangible) such as equipment, inventory, accounts receivable, cash flows, livestock, crops and others as collateral in exchange for loans. However, effective insurance and security arrangements also need to be present before banks can rely on such assets as collateral.

Payment and securities settlement systems⁸

Payment and securities settlement systems are the infrastructure that enables the transfer of monetary value between parties discharging mutual obligations. This infrastructure consists of several components, which include the legal, regulatory and oversight frameworks for payment transactions, large-value funds transfer systems, retail payment systems, foreign exchange settlement systems and securities settlement systems.

Robust payment and security settlement systems promote economic activity by controlling the counterparty risk inherent in the transfer of high-value funds and by helping with the implementation of monetary policy. Payment systems are essential for financial sector development because they contribute to the innovation and development of new financial products and facilitate the functioning of financial markets. The smooth functioning of payment systems can mitigate financial crises by reducing or eliminating counterparty risk related to financial market transactions, and is therefore vital for

⁸ This section draws on World Bank (2013).

ensuring financial stability. Finally, improvements in payment infrastructure can result in significant efficiency gains, reductions in transaction costs (including time-related opportunity costs) and increased economies of scale in financial intermediation. Greater efficiency of interbank payment systems can therefore have a wider positive impact on credit creation and financial development.

2.4 The micro level: demand for and supply of financial services

Markets

Capital markets

Governments, businesses and individuals use capital markets to raise long-term funds and trade financial securities. Securities traded on capital markets may be equity or debt. The initial offering of debt or equity is made in *primary markets*, while subsequent trading takes place in *secondary markets*.

In equity (or stock) markets, shares in publicly traded companies are available to be bought and sold, allowing investors to take a share in the future profits of a company. In developing countries, stock markets tend to be very shallow, with a few multinationals and large corporates listed. Trading activity on secondary markets is usually particularly weak. There is considerable doubt about the financial sustainability of stock exchanges in many developing countries. The majority of investors tend to be institutions, including insurance companies or (often state-owned) pension funds.

Debt markets are used by (usually larger) corporates and governments (national and local) to raise funds, usually for capital investment projects. In developing countries where the private sector is relatively narrow, government bonds tend to contribute significantly to the total value of the bond market. In most LICs, the secondary market for debt (often managed by the stock exchange) tends to be either absent or very shallow. Moreover, the maturity horizon of bonds tends to be restricted (lack of demand for longer-term instrument owing to, for example, economic uncertainty).

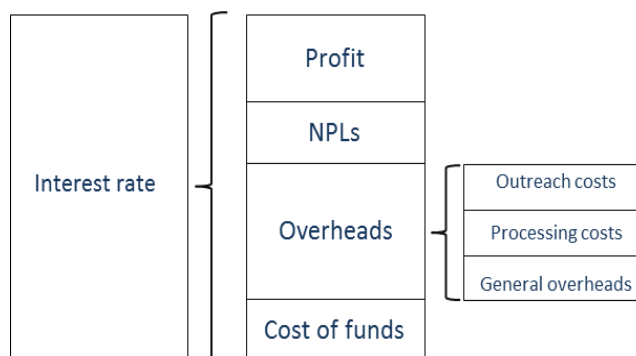
Money markets

In contrast to capital markets, money markets are used to trade short-maturity (less than one year), high-liquidity securities. They are mainly used for short-term liquidity management by the government and private sector borrowers.

Derivatives markets

More common in financial markets of more developed countries, derivatives markets are used to trade more complex financial instruments than vanilla bonds and equities. The complexity of the instruments tends to lead to greater complexity in pricing, and often higher-risk and rewards. Derivatives are mainly used to hedge against financial and non-financial risk, but are also used purely for financial speculation.

Figure 1: Composition of the interest rate



Financial institutions

Banks

Banks are the most visible entity in any financial system and contribute the greatest share of financial sector assets, particularly in developing countries. Where markets are deep, investment banks broker deals and advise in large mergers and acquisitions. At a lower level, their primary function is one of intermediating savings and balances from

those with a capital surplus to those with a deficit, in the form of loans or bonds. In return for repackaging small, short-term deposits into longer-term, larger loans, banks charge a spread between the rate at which they receive funds from depositors and the rate at which they lend them back out. They also charge fees for their services.

In developing countries, banking sectors are often dominated by a few large institutions, one or more of which is or was previously under the control of the state. Larger banks, particularly in many African countries, tend to be very profitable, channelling deposits and cash balances from government, corporates and the wealthy back to governments, corporates and the wealthy. Few banks have yet worked out an effective way to provide financial services at a small enough scale to service SMEs in developing countries, although progress has been made in this area in recent years.

Microfinance institutions

The microcredit revolution made famous by Muhammad Yunus and his Grameen Bank in Bangladesh is based on a group lending methodology in which customers use social capital and trust within a group of known members to insure each other's use of financial services. MFIs now exist in all parts of the developing world and offer a far greater range of financial products and services, including savings and insurance.

MFIs have tended to work very well at a household level, providing small amounts of credit to smooth consumption over time. Although many MFIs are still run on a non-commercial basis with external support, the sector now attracts substantial private and commercial funding, and does significant lending to individuals rather than group lending. Attempts to scale microfinance up to enterprise level have had mixed results. MFIs tend to be small and often locally or regionally focused, although some, such as BRAC and Grameen, have developed an international presence.

MFIs typically do not have the capacity to provide transaction services and usually have no or a limited range of savings products.

Informal savings and loans organisations

In poorer and particularly remote and rural areas in developing countries where it is too costly for the formal financial sector to develop a presence, informal structures providing basic financial services have emerged. Various examples include:

- SACCOs (savings and credit cooperatives);
- S&Ls (savings and loans associations);
- VSLAs (village savings and loans associations);
- ROSCAs (rotating savings and credit cooperatives).

Detailed knowledge of borrowers, often based on a close relationship, gives informal lenders a competitive advantage in transaction costs, although at the same time it limits them to local networks. They insist less on physical assets as collateral, relying instead on inter-linked credit contracts with land, labour or product markets, group guarantees, social pressure and personal knowledge of borrowers for risk management. Informal associations and agents also have a competitive edge in small and short-term deposit gathering, which is often untapped by formal institutions. However, they are often limited in their ability to mobilise resources, and lack of regulation makes enforcement of contracts problematic. Even informal services also often fail to reach the very poor.

Other informal financial services

In parts of the developing world, usually those that are poorer or more remote, other informal intermediaries provide the only available financial services. Actors in this space include specialised moneylenders, farmer lenders, trader-lenders and retailer lenders, pawnbrokers and family and friends.

Insurance companies

Insurance companies allow households and businesses to manage risk by pooling premiums and paying out against specific losses, such as car accidents, fire, illness or death. In developing countries, life and auto insurance dominates the insurance market, and markets for more sophisticated forms of insurance, particularly at a household level, are very shallow indeed.

Mobile phone companies

Particularly in Sub-Saharan Africa, a number of mobile phone companies have in recent years started providing transaction services to mainly poorer segments of the population.

Products and services

The sophistication of financial products increases as the financial system develops and market fragmentation is reduced, mainly because financial risks are more accurately evaluated, and partly because of the reduction of information asymmetry. Another implication is that investor and borrower choice is widened and products that better match their specific requirements are likely to be found, encouraging better use of the financial sector. In addition, financial products, like instruments with market-determined returns (e.g. government bonds), derivatives (e.g. financial futures) and foreign exchange products facilitate arbitrage that links prices across time, markets and countries.

2.5 Adding it all up: the financial sector in national accounts

Given the informal nature of many financial transactions in developing countries, it has often been difficult to capture financial sector activities in national accounts and in tax revenue collections. While regulated banking activities tend to be well covered, the myriad operations of smaller, unregulated MFIs, savings and loan organisations and even less formal operators such as moneylenders are not captured in national accounts. Including the activities of the black and the grey economy with regard to the financial sector is a challenge to revenue authorities and governments across the developing (and to a lesser extent the developed) world.

The UN's System of National Accounts recommends the following breakdown of the financial sector in national accounts:

1. The central bank;
2. Deposit money corporations (commercial banks);
3. Other deposit money corporations (trustee savings banks, savings banks, loan associations, credit unions, mortgage banks, building societies, post office savings banks etc.);
4. Other financial intermediaries except insurance corporations and pension funds (corporations financing investment, corporations involving financial leasing, hire purchase, consumer credit);
5. Financial auxiliaries (securities, insurance and loan brokers, flotation corporations, corporations involving in arranging hedging instruments);
6. Insurance corporations and pension funds.

Further reading

- Demirgüç-Kunt, A. and Levine, R. (2004) *Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets and Development*. Cambridge, MA: MIT.
- Honohan, P. and Beck, T. (2007) *Making Finance Work for Africa*. Washington, DC: World Bank.
- World Bank (2013) *Global Financial Development Report 2013: Rethinking the Role of the State in Finance*. Washington, DC: World Bank.

3 Evidence and data on financial sector development and growth

3.1 Macro-level evidence

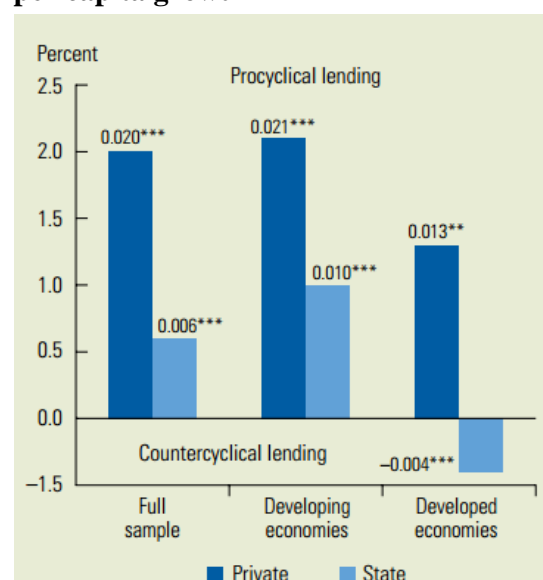
Financial sector development and economic growth

A growing body of evidence presents a compelling case for a finance–growth nexus, through which the services provided by the financial system have a first-order impact on long-run economic growth. A consensus is developing among academia and development professionals that financial sector development can have a positive impact on economic growth and development indicators.

Economists back to Bagehot and then Schumpeter proposed a positive relationship between finance and growth, although it was in the late 1980s onwards that the relationship was really absorbed into the research agenda. In 1993, King and Levine presented cross-country evidence consistent with the view that the financial system can promote economic growth, using data on 80 countries over the 1960–1989 period. Various measures of the level of financial development were found to be strongly associated with real per capita GDP growth, the rate of physical capital accumulation and improvements in the efficiency with which economies employ physical capital. Furthermore, the predetermined component of financial development is robustly correlated with future rates of economic growth, physical capital accumulation and economic efficiency improvements.

In a thorough survey of the literature, Demirgüç-Kunt and Levine (2008) found significant consistency of results across a range of methodologies, tentatively concluding that **countries with better-developed financial systems tend to grow faster, and that the level of banking development and stock market liquidity each exerts an independent, positive effect on economic growth**. The authors also found that simultaneity bias is unlikely to cause this result, and that one channel through which financial development influences growth is by easing the external financing constraints that otherwise impede firm and industrial expansion.

Figure 2: Change in bank lending associated with a 1% increase in GDP per capita growth



Source: World Bank (2013).

In the World Bank's opus on the subject for Sub-Saharan Africa, Honohan and Beck (2007) concluded that careful **comparative analysis of the growth rates of different countries over a 30-year period has produced convincing evidence that having a deeper financial system contributes to growth and is not merely a reflection of prosperity.**

Financial inclusion and economic growth

While the evidence on financial deepening and growth is reasonably well established, and a causative relationship between the ratio of private sector credit to GDP and economic growth has been found to be robust, the relationship between financial inclusion and growth is newer to the research agenda, has fewer available data and is less proven. While having access to financial services has been shown to help in coping with external shocks and managing consumption over time, it is less clear that it necessarily has a significant positive impact on the growth of the economy.

One channel through which financial exclusion could feed into growth is by addressing underinvestment in education. Lack of access to credit has been shown to perpetuate poverty by reducing investment by poor households in their children's education (Jacoby, 1994). At the firm level, access to finance is consistently cited in the World Bank's Enterprise Surveys as a key obstacle to business growth for SMEs. This is supported by research finding that financing obstacles are the most constraining among different barriers to growth (Ayyagari et al., 2005).

As the World Bank's 2013 *Global Financial Development Report* summarises, 'the existing body of evidence suggests that developing the financial sector and improving access to finance are likely not only to accelerate economic growth but also to reduce income inequality and poverty'. It states that, besides the direct benefits of enhanced access to financial services, such as consumption smoothing, finance also reduces inequality, particularly through indirect labour market mechanisms: 'Specifically, accumulated evidence shows that financial access accelerates economic growth, intensifies competition, and boosts the demand for labour—and it usually brings bigger benefits to those at the lower end of the income distribution.' It is important to emphasise that the issue is not only access to any form of finance, but also the quality of financial services available to people. That is, access alone is not sufficient to ensure welfare-enhancing outcomes if the services are not responsible, convenient, appropriate to meet needs etc. This quality dimension is an increasingly recognised part of the financial inclusion agenda. For example, it is much easier to extend transaction- and, to a lesser extent, savings-related services to lower-income groups given recent technological advances, than to develop the infrastructure to extend and manage loans.

Investment and job creation

Given the increasing importance of jobs and job creation in developing countries at the very core of the development agenda,¹⁶ the role of the financial sector in facilitating the investment that leads to the growth of companies and the creation of jobs is coming under increasing scrutiny. The IFC proposes four channels through which access to finance positively affects employment:

- Start-up capital for new businesses and entrepreneurs;
- Larger investments in capital and technology for established businesses;
- Liquidity, risk management and the acquisition of productive assets;
- Creation of indirect jobs along the supply chain.

Using cross-country data, Klapper et al. (2007) found a positive correlation between domestic credit to the private sector as a ratio of GDP and entry rate of firms (though no

¹⁶ The World Bank's *World Development Report* for 2013 was simply called *Jobs*.

causative relationship was proved). Work by Beck et al. (2005a) found that financial development facilitates economic growth **not only by boosting growth of firms that rely heavily on external finance, but also by relieving constraints on the growth of small firms**. They also found that financial sector development disproportionately boosts the growth of smaller firms. Ayyagari et al. (2005) showed that, in developing countries, small firms have the largest shares of job creation, and highest sales growth and employment growth, even after controlling for firm age. Small, young firms have higher job creation rates than large, mature firms.

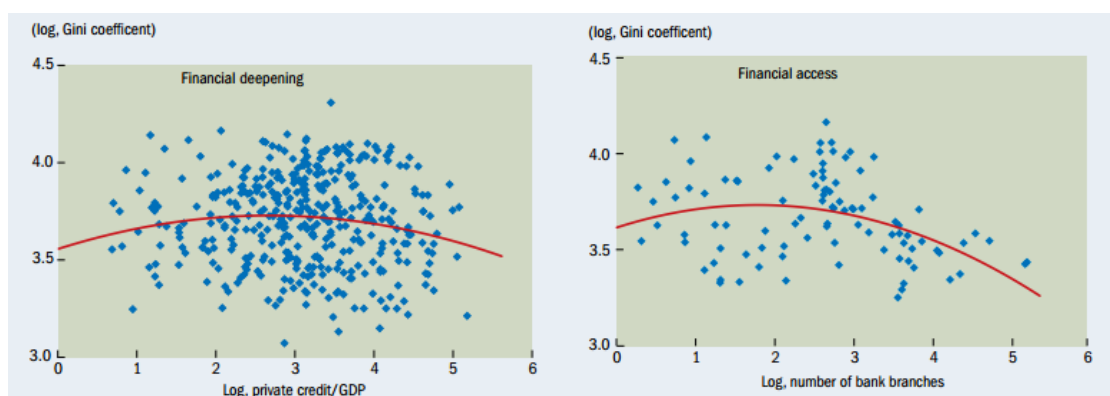
Beck et al. (2005b) found that **high interest rates and lack of financial depth significantly reduced the growth rate of companies**. Additionally, individual financing obstacles such as bank paperwork and bureaucracies (associated with inefficient financial sectors) and collateral requirements and other access barriers such as unavailability of leasing also significantly constrained firm growth. These effects remained significant even after controlling for the level of financial development. A micro-level study in Sri Lanka (Urenda, 2012) sampled 100 MSMEs that had obtained loans from a local commercial bank and found that, over three years, those firms had created jobs at more than double the average job creation rate for businesses in the country.

In a meta-analysis of 12 evaluations of access to finance programmes and their job creation impact, Paniagua and Denisova (2012) found that improving financial access helps firms expand their operations, which can have a positive effect on both **the quantity and the quality of jobs in an economy**. The effect is greatest for small firms and is even more pronounced when access to finance is combined with advisory services. The study also found that, in rural areas, job creation in micro-enterprises came primarily through expansion of existing businesses, as opposed to the establishment of new ones.

While harder to test, the IFC (2013) analysed the **indirect link (by which financial growth creates jobs along the supply chain)** in investments made in financial institutions in Ghana and Jordan. In Ghana, a \$1 million investment by the IFC in a financial institution was found to have an economy-wide impact of 228 jobs, compared with 40 jobs generated by an investment in a non-financial institution. Similarly in Jordan, the same investment in a financial institution would create 107 direct and indirect jobs compared with 14 in a non-financial institution, implying that the financial sector can induce job creation by diversifying investment across businesses and sectors and financially leveraging the investment.

Poverty reduction and inequality

Assuming that the link between financial sector development and economic growth is robust, further work has analysed the relationship between growth and poverty reduction. Dollar and Kraay (2001) used a sample of 92 countries across four decades to analyse the evidence on the importance of economic growth for poverty reduction. They found that **average incomes of the poorest quintile rise proportionately with average incomes in the economy as a whole**, and that this result is robust across regions, time periods, income levels and growth rates. A recent update of this work (Dollar et al., 2013) found again the central importance of overall growth for improvements in living standards among the poorest in societies.

Figure 3: Relationship between finance and inequality

Source: World Bank World Development Indicators; IMF International Financial Statistics and IMF staff calculations, in IMF Finance & Development, September 2011 (Sarwat Jahan and Brad McDonald, "A Bigger Slice of a Growing Pie").

Some attempts have been made to draw a more direct line between financial sector development and poverty reduction. Using macro-level data, Jalilian and Kirkpatrick (2001) found that **financial development has a positive impact on the growth prospects of incomes of the poor, and that this effect is stronger in poorer countries than in wealthier ones**. Honohan (2003) showed that **finance-intensive growth is pro-poor**, that poverty levels fall as the depth of the financial sector (which the author acknowledges is an imperfect measure of financial development) increases and that this result holds even after taking account of mean income and inequality.

Furthermore, Beck et al. (2004) found that **financial development has a disproportionately large impact on the poor**, with incomes of the poor growing faster than average per capita GDP, thus causing income inequality to fall and poverty rates to decrease at a faster rate. The results are robust to variations in average economic growth rate, implying that financial development has a poverty alleviation effect beyond its impact on aggregate growth.

DFID Systematic Reviews

DFID has funded a number of financial sector Systematic Reviews in recent years focused at the micro level, and largely on credit, reflecting the limited studies available on savings, insurance, payments and other types of lending such as mortgages. **Systematic Reviews do not produce new evidence but synthesise and benchmark results from existing studies**. They are biased towards evidence generated by experimental and quasi-experimental research, with qualitative studies excluded. The Systematic Reviews have significant limitations, as acknowledged by the authors in each case.

The main finding of the Systematic Reviews is that evidence of sufficient quality is too scarce to determine conclusively whether microcredit has a negative or positive impact on development outcomes (Duvendack et al., 2011). Identified outcomes were heterogenous, showing a distribution of impacts that are both positive and negative across individuals, but do show clear positive impacts for enterprise. Evidence for savings, insurance and leasing is even more limited (Stewart et al., 2010). However, one of the independent Systematic Reviews (Pande et al., 2012) found positive evidence in support of financial inclusion. It found, among other things, that:

1. Improving banking technology by using mobile phones to facilitate remittances, transfers and payments, and enable savings, has the potential to increase income by allowing households to smooth consumption and accumulate assets.

2. State-led expansion of the banking sector in rural areas increases the supply of banking services, which in turn can reduce rural poverty, increase rural wages and increase agricultural investment.
3. Access to credit can increase household income by increasing consumption and/or smoothing consumption. Further, it could raise agricultural incomes by allowing farmers to purchase better and more optimal levels of inputs, leading to higher outputs and income. Moreover, an individual's access to credit could also increase incomes of members in the individual's social network.

3.2 Financial sector surveys in developing countries

Demand side

The World Bank's **Enterprise Surveys**³² provide firm-level evidence on a range of business environment topics including financial access, and are the primary source of demand-side financial usage data at the business level. The surveys have been used in 135 countries and generally use a standardised methodology and questionnaire with additional country-specific questions. Results, reports and data are published online.

At the household level, the **FinScope**³³ studies pioneered by the Department for International Development (DFID)-backed FinMark Trust in South Africa have over the past decade provided a wealth of new evidence on financial access and usage. FinScope studies are nationally representative studies of consumer perceptions and usage of formal and informal financial services in developing countries, and assess the 'landscape of access' across four strands: transactions, savings, credit and insurance. FinScope studies have taken place in 14 African countries as well as Pakistan.

The micro-level evidence provided by FinScope has generated information for governments, private sectors and donors to develop policy and implement action around the financial sector. Some attempt has been made to test FinScope micro-level data against development indicators. Honohan and King (2009) found that, at an aggregate level, FinScope data indicated a positive effect of usage of formal financial services on income, but that this effect may be explained by country fixed effect. Given country-specific design variations, the information is useful mainly at a national level, although work is ongoing to standardise data across surveys and countries.

The Global Financial Inclusion Index (**Global Findex**) (Demirgüç-Kunt and Klapper, 2012) is a recent World Bank and Bill and Melinda Gates Foundation initiative to develop internationally comparable financial inclusion indicators. The underlying survey was carried out across 148 countries in 2011 and is designed to analyse and compare how people around the world save, borrow, make payments and manage risk³⁶. The initial results showed that 59% of adults in developing economies and 77% of adults earning less than \$2 per day did not have an account at a formal financial institution.

Supply Side

The IMF's **Financial Access Survey** (FAS)³⁸ provides the best internationally comparable supply-side data on financial inclusion. Data on access to and usage of financial services are collected from central banks and financial regulators in 187 countries. Indicators include bank branches per 100,000 adults, bank loans outstanding as a percentage of GDP and number of ATMs per 1,000 square kilometres.

³² <http://www.enterprisesurveys.org/>

³³ <http://www.finscope.co.za/>

³⁶ http://data.worldbank.org/data-catalog/financial_inclusion

³⁸ <http://fas.imf.org/>

3.3 Financial sector indicators

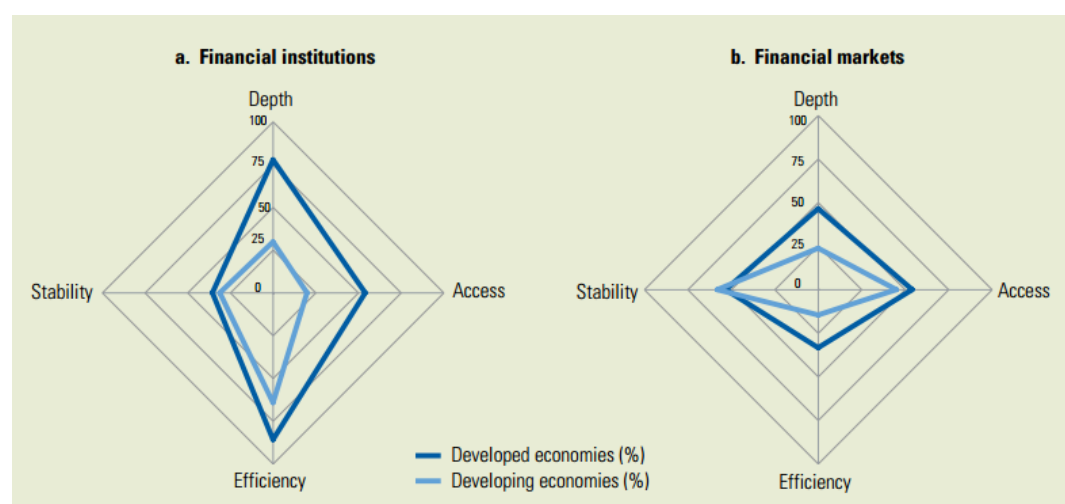
Historically, the principal measures for financial sector development have revolved around assessing financial sector depth, typically by comparing various measures of money circulation or credit with GDP (e.g. M2/GDP or private credit/GDP). In more recent years the measures have been broadened, and both the IMF and the World Bank use additional parameters for their assessments.

For example, the 2013 World Bank *Global Financial Development Report* sets out a '4x2 framework' covering financial sector depth, access, efficiency and stability, for financial institutions and markets, respectively. Table 4, taken from the World Bank, sets out various indicators.

Table 4: Key indicators of financial depth, access, efficiency and stability

	Financial institutions	Financial markets
Depth	Private sector credit to GDP Financial institutions' asset to GDP M2 to GDP Deposits to GDP Gross value added of the financial sector to GDP	Stock market capitalisation and outstanding domestic private debt securities to GDP Private debt securities to GDP Public debt securities to GDP International debt securities to GDP Stock market capitalisation to GDP Stocks traded to GDP
Access	Accounts per thousand adults (commercial banks) Branches per 100,000 adults (commercial banks) % of people with a bank account (from user survey) % of firms with line of credit (all firms) % of firms with line of credit (small firms)	Percent of market capitalisation outside of top 10 largest companies Percent of value traded outside of top 10 traded companies Government bond yields (3 month and 10 years) Ratio of domestic to total debt securities Ratio of private to total debt securities (domestic) Ratio of new corporate bond issues to GDP
Efficiency	Net interest margin Lending–deposits spread Non-interest income to total income Overhead costs (% of total assets) Profitability (return on assets, return on equity) Boone indicator (or Herfindahl or H-statistics)	Turnover ratio for stock market Price synchronicity (co-movement) Private information trading Price impact Liquidity/transaction costs Quoted bid–ask spread for government bonds Turnover of bonds (private, public) on securities exchange Settlement efficiency
Stability	Z-score Capital adequacy ratios Asset quality ratios Liquidity ratios Others (net foreign exchange position to capital etc.)	Volatility (standard deviation/average) of stock price index, sovereign bond index Skewness of the index (stock price, sovereign bond) Vulnerability to earnings manipulation Price to earnings ratio Duration Ratio of short-term to total bonds (domestic, international) Correlation with major bond returns (German, US)

Source: <http://go.worldbank.org/2XC2CDMGZ0>

Figure 4: Benchmarking financial development, 2008-2010

Source: World Bank (2013).

Table 5: Key indicators of financial sector depth and inclusion in some developing countries

Country	Depth: domestic credit provided by banking sector (% of GDP) (2012 unless stated)	Inclusion: commercial bank branches per 100,000 adults (2011 unless stated)
Deep financial sectors		
Vietnam	120.8% (2011)	3.6
South Africa	80.4%	10.7
Moderately deep financial sectors		
India	76.6%	10.6
Bangladesh	69.2%	7.8
Nepal	67.0%	6.7
Kenya	52.5%	5.2
Pakistan	44.5%	8.7
Ethiopia	37.1% (2008)	2.0
Malawi	35.6%	1.1
Nigeria	35.3%	6.4
Shallow financial sectors		
Liberia	29.1%	3.8
Mozambique	28.1%	3.6
Ghana	27.8% (2011)	5.5
Tajikistan	27.5% (2007)	6.7
Yemen	26.9%	1.8
Tanzania	24.8%	1.9
Sudan	24.5%	2.4
Zambia	18.5%	4.4
Uganda	16.4%	2.4
Kyrgyzstan	14.0% (2007)	7.3
Sierra Leone	14.0%	3.0
Democratic Republic of Congo	9.5%	0.7
Afghanistan	4.2% (2010)	1.9
Rwanda	-	5.5
Zimbabwe	-	4.6 (2010)
Burma	-	1.7
South Sudan	-	0.5
Somalia	-	-

Source: World Bank World Development Indicators; IMF Financial Access Survey.

4 Key and emerging issues

4.1 Donor approaches to financial sector development

The IMF and the World Bank each play a key role in financial sector development in developing countries. The IMF is tasked with surveillance of financial markets and of wider economic policies and performance; all states that are members have annual 'Article IV' reviews of their economies. The IMF provides technical assistance to central banks and others for effective regulation of financial markets; and provides loans and concessional finance when necessary to maintain (global) financial stability. The World Bank Group focuses on developing financial services needed for key sectors or under-served segments in developing countries.

The Washington Consensus led by the IMF and the World Bank through the late 1980s and 1990s recommended policies including market-determined interest rates, competitive exchange rates, liberalisation of foreign direct investment (FDI) and deregulation. Focusing on the policy and regulatory environment, the goal was to lay the foundations on which the private sector could build a functioning and stable financial system.

The prevailing wisdom in the Bretton Woods institutions remains that a conducive policy and regulatory environment is key to financial sector development, with an additional focus on supporting the structures at the meso level that allow the financial sector to function efficiently. In *Making Finance Work for Africa* (Honohan and Beck, 2007), the World Bank proposed that African countries prioritise two areas for early reform: i) strengthening credit registries and streamlining court procedures; and ii) establishing independent supervision.

Instruments used to develop the financial sector include:

- Credit lines or credit guarantee schemes to boost bank lending by providing liquidity or risk sharing;
- Challenge funds to stimulate supply-side innovation on the part of banks and other financial institutions; for example, the Financial Deepening Challenge Fund funded by DFID helped the development of M-PESA in Kenya, radically altering the financial landscape in the country;
- Long-term trusts for financial development: following from the success of the FinMark trust in promoting financial inclusion in Southern Africa and beyond, DFID and other donors are increasingly following the model of developing long-term trusts tasked with supporting financial inclusion in countries. Financial Sector Deepening Kenya (FSDK) was an early example of this, and the model is being rolled out across LICs. The recently launched FSD Africa aims to harness the successes of the individual country programmes.⁴²
- Microfinance: money transfer, micro-savings and microcredit; with controversy over interest rates charged, varying practice in subsidising these services may undermine sustainable financial market development;
- Investments and provision of funding in developing country banks by the IFC, regional multilateral development banks (MDBs) and the investment arms of a number of bilateral donors, aimed at strengthening their finances and operations (through linked technical assistance).

⁴² http://www.fsdkenya.org/news/fsd_africa.php

4.2 Current issues in financial sector development

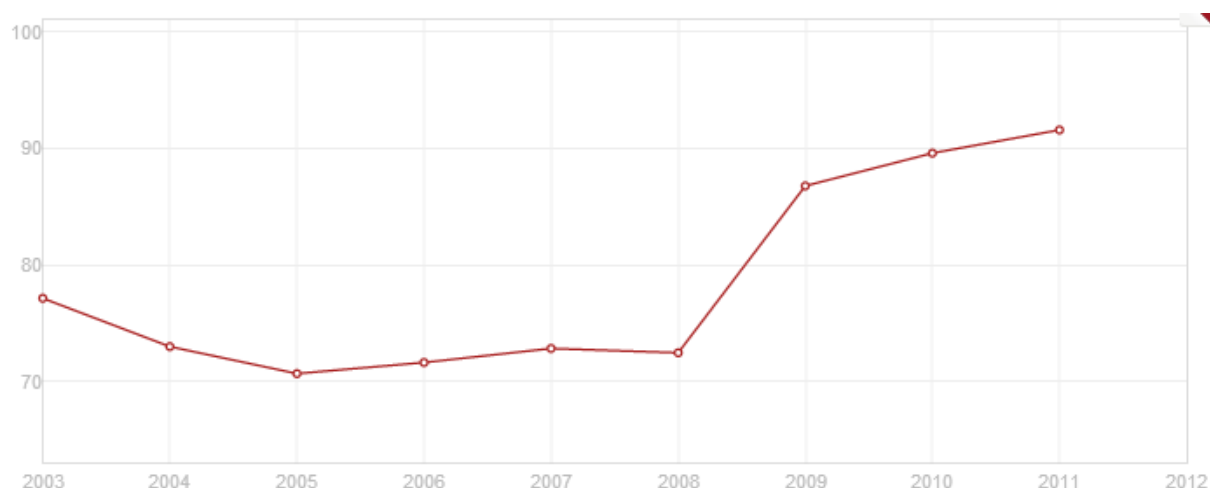
Aftermath of and response to the 2007/08 global financial crisis

In contrast with more developed countries with interconnected financial systems heavily exposed to sub-prime debts, most developing countries remain at a low level of financial integration and hence were relatively isolated from the first-round effects of the global financial crisis of 2007/08. Where financial systems were affected, it was mainly in the area of financial markets rather than financial intermediation, and this was more pronounced in larger, relatively liquid financial markets with higher levels of foreign investment and pre-crisis currency overvaluation, for example in Nigeria and Egypt (Kasekende et al., 2009).

The second-round effects were more significant, and had an impact on financial sectors of developing countries through a number of channels, such as falling remittances, declining exports and a lack of investment through a flight to safety of international capital.

Coming out of the crisis, most developing countries are returning to long-run trend growth in financial indicators, after a slight slowdown in 2008.

Figure 5: Domestic credit from the banking sector as a % of GDP for LICs and MICs

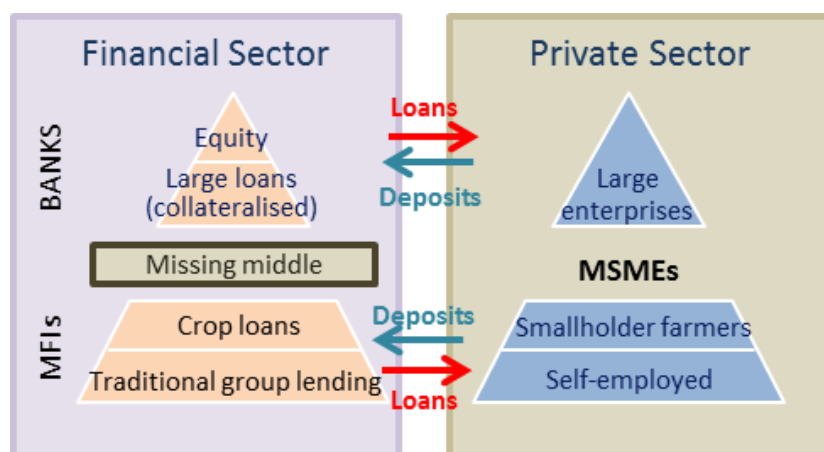


Source: World Bank World Development Indicators.

SME banking and the missing middle

While the explosive growth in microcredit from the 1970s onwards has had a wide and profound impact on developing economies, its basic product has largely failed to serve businesses effectively. The group lending methodology, in which individuals insure one another, has been shown to be most effective for low-value loans, mainly for consumption smoothing over time, and to have limitations for scaling-up with respect to size of both loans and organization.

SMEs in developing countries generally seek larger value loans (typically of around \$500 upwards) for investment in business growth. The size of and risk on these loans make them unsuitable for most MFIs. Meanwhile, at the higher end of the market, banks are typically locked into collateralised lending models that suit larger businesses and corporates, while financial products for larger SMEs, and in particular agricultural businesses, remain lacking.

Figure 9: Interaction of financial and private sectors

This creates a so-called 'missing middle' of financing for businesses from micro-entrepreneurs to medium-sized businesses, which is a key and growing problem in most developing countries (although limitations on lending to small enterprises is a problem in most developed countries as well). The challenge of finding effective methodologies of upscaling microfinance or downscaling commercial banking can have a transformative impact in terms of business growth, wealth generation and job creation. While there have been some successes in this area, it remains a priority for many donor organisations.

Technology and agency banking

The growth of Safaricom's M-PESA in Kenya has highlighted the potential for use of alternative delivery channels such as mobile technology in the provision of financial services. Initially built as a money transfer service through which urban workers could remit funds back to families in rural villages, a number of products have been built on top such that, in many countries, mobile phone subscribers can now deposit money in a savings account, buy insurance products and even in some cases take low-value uncollateralised loans. That is, while the first generation of mobile money services was mainly transactional, the second generation provides a range of banking products that allows telecommunications companies to compete with the traditional banking sector and become a financial sector player in its own right. The World Bank predicts that, by 2020, mobile money services could have an impact on the lives of 2 billion people.

Mobile banking remains a young product, and in most developing countries usage remains relatively low, despite significant market penetration. The challenge of **converting subscribers to active users** is considerable, and is in part a function of financial literacy and awareness. Given the youth of the industry, evidence on the economic impact of mobile banking services is as yet unclear; evidence from the first generation (transactional) suggests there is a small positive economic impact in terms of reduced transaction costs, although this is unlikely to be transformational.

Agency banking allows for banks and other financial operators to use internal or external networks of low-level agents to carry out financial transactions in the absence of a full branch. An agent of a bank is typically an existing shopkeeper or mobile phone airtime seller and will allow clients to deposit, withdraw or transfer funds from an existing account. In many cases, as long as Know Your Customer (KYC) regulations are adhered to, agents may also open accounts for rural or remote populations.

The regulation of mobile and agency banking in many developing countries presents a challenge for governments and regulators, as its mechanics and potential impacts are not yet fully understood. For example, telecommunications companies are usually regulated by a specialised regulator used to dealing with voice and data issues. It is rare that a central bank or financial regulator will have power over a telecommunications

company, even if it is processing transactions of values larger than some banks are. Similarly, agents of banks may carry out financial transactions of banks and therefore should be regulated but are usually small and remote. The challenge of regulating these new financial models and dealing with the risk of fraud, money laundering and other financial issues is significant for financial authorities in many developing countries.

As indicated previously, while mobile phone technology has been effectively increasing the penetration of transaction services, it has to date shown limited scope as a channel for lending.

Private equity and impact investment

There is a growing trend in much of Africa and the developing world of investments intended to generate social and/or environmental impact beyond financial return. A range of instruments are being used, from simple loans to equity stakes and *quasi-equity* (such as subordinated or convertible debt) instruments.

A combination of private and donor capital is feeding into the private equity and impact investment space, most of it with the goal of investing in larger SMEs with high potential for growth and job creation. Private equity firms involved in developing countries include Aureos Capital and Root Capital, whereas donor capital tends to be channelled through development finance institutions such as the UK's CDC Group and Norway's Norfund. They either lend directly or, increasingly, through specialised locally based country and regional funds.

Government-to-person payments and financial inclusion

Social cash transfers and government-to-person (G2P) payments have risen in prominence in recent years as a result of successful programmes such as Brazil's Bolsa Família. G2P payments also have a role to play in financial inclusion: according to the Consultative Group to Assist the Poor (CGAP), governments make regular payments to 170 million poor people worldwide, far more than the 99 million who have active microloans (Pickens et al., 2009). Some schemes are now offering financial services to poor G2P recipients, often through new low-cost, technological channels such as mobile money services.

Further reading

- Beck, T. and Demirgüç-Kunt, A. (2006) 'Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint'. *Journal of Banking & Finance* 30(11): 2931-2943.
- Dermish, A., Kneiding, C., Leishman, P. and Mas, I. (2011) 'Branchless and Mobile Banking Solutions for the Poor: A Survey'. Working Paper.
- Global Impact Investing Network (GIIN) (2011) *Insight into the Impact Investment Market*. New York: GIIN.
- McKinsey & Company (2010) *Global Financial Inclusion*. <http://mckinseysociety.com/global-financial-inclusion/>

5 Conclusion

In order for the private sectors of developing countries to push the investment that will lead to job creation and economic development, they must be supported by efficient financial sectors. Financial sectors intermediate funds from those with an excess to those with a need and the efficiency with which they do this is key to overcoming what is oft cited as the greatest constraint to development of households and enterprises in developing countries.

References

- Ayyagari, M., Demirgüç-Kunt, A. and Maksimovic, V. (2005) *How Important Are Financing Constraints? The Role of Finance in the Business Environment*. Washington, DC: World Bank.
- Beck, T. and Demirgüç-Kunt, A. (2006) 'Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint'. *Journal of Banking & Finance* 30(11): 2931-2943.
- Beck, T., Demirgüç-Kunt, A. and Levine, R. (2004) 'Finance, Inequality, and Poverty: Cross-Country Evidence'. Working Paper 10979. Cambridge, MA: NBER.
- Beck, T., Demirgüç-Kunt, A., Laeven, L. and Levine, R. (2005a) 'Finance, Firm Size and Growth'. *Journal of Money, Credit, and Banking* 40(7): 1379-1405.
- Beck, T., Demirgüç-Kunt, A. and Maksimovic, V. (2005b) 'Financial and Legal Constraints to Growth: Does Firm Size Matter?' *Journal of Finance* 60(1): 137-177.
- Demirgüç-Kunt, A. and Levine, R. (2004) *Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets and Development*. Cambridge, MA: MIT.
- Demirgüç-Kunt, A. and Levine, R. (2008) 'Finance, Financial Sector Policies, and Long-Run Growth'. M. Spence Growth Commission Background Paper 11. Washington, DC: World Bank.
- Demirgüç-Kunt, A. and Klapper, L. (2012) 'Measuring Financial Inclusion: The Global Findex Database'. Policy Research Working Paper 6025. Washington, DC: World Bank.
- Dermish, A., Kneiding, C., Leishman, P. and Mas, I. (2011) 'Branchless and Mobile Banking Solutions for the Poor: A Survey'. Working Paper.
- Dollar, D. and Kraay, A. (2001) 'Growth Is Good for the Poor'. Washington, DC: Development Research Group, World Bank.
- Dollar, D., Kleineberg, T. and Kraay, A. (2013) 'Growth Still Is Good for the Poor'. Policy Research Working Paper 6568. Washington, DC: World Bank.
- Duvendack, M., Palmer-Jones, R., Copestake, J.G., Hooper, L., Loke, Y. and Rao, N. (2011) 'What Is the Evidence of the Impact of Microfinance on the Well-Being of Poor People?' London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Fry, M.J. (1997) 'In Favour of Financial Liberalisation'. *The Economic Journal* 107(442): 754-770.
- Global Impact Investing Network (GIIN) (2011) *Insight into the Impact Investment Market*. New York: GIIN.
- Honohan, P. (2003) 'Financial Development, Growth and Poverty: How Close Are the Links?' Washington, DC: Development Research Group and Financial Sector Operations and Policy Department, World Bank.
- Honohan, P. and Beck, T. (2007) *Making Finance Work for Africa*. Washington, DC: World Bank.
- Honohan, P. and King, M. (2009) 'Cause and Effect of Financial Access: Cross-Country Evidence from the FinScope Surveys'. Dublin: Trinity College.
- IFC (International Finance Corporation) (2013) *Job Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction*. Washington, DC: IFC.
- IFC (International Finance Corporation) (nd) 'Access to Finance – Financial Infrastructure'. Poverty Literature Review Brief. Washington, DC: IFC.
- Jacoby, H.G. (1994) 'Borrowing Constraints and Progress Through School: Evidence from Peru'. *Review of Economics and Statistics* 76(1): 151-160.

Jalilian, H. and Kirkpatrick, C. (2001) 'Financial Development and Poverty Reduction in Developing Countries'. Manchester: Institute for Development Policy and Management.

Kasekende, L., Ndikumana, L. and Taoufik, R. (2009) 'Impact of the Global Financial and Economic Crisis on Africa'. Tunis: AfDB.

King, R.G. and Levine, R. (1993) 'Finance and Growth: Schumpeter Might Be Right'. *The Quarterly Journal of Economics* 108(3): 717-737.

Klapper, L., Amit, R., Guillen, M.F. and Quesada, J.M. (2007) 'Entrepreneurship and Firm Formation across Countries'. Research Paper 4313. Washington, DC: World Bank.

Lim, C., Columba, F., Costa, A., Kongsamut, P., Otani, A., Saiyid, M., Wezel, T. and Wu, X. (2011) 'Macroprudential Policy: What Instruments and How to Use Them?' Working Paper. Washington, DC: IMF.

McKinsey & Company (2010) *Global Financial Inclusion*. <http://mckinseysociety.com/global-financial-inclusion/>

Pande, R., Cole, S., Sivasankaran, A., Bastian, G. and Durlacher, K. (2012) 'Does Poor People's Access to Formal Banking Services Raise Their Incomes?' London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Paniagua, G. and Denisova, A. (2012) 'Meta-Evaluation on Job Creation Effects of Private Sector Interventions'. Washington, DC: IFC.

Pickens, M., Porteous, D. and Rotman, S. (2009) 'Banking the Poor via G2P Payments'. CGAP Focus Note 58. Washington, DC: CGAP.

Stewart, R., van Rooyen, C., Dickson, K., Majoro, M. and de Wet, T. (2010) 'What Is the Impact of Microfinance on Poor People? A Systematic Review of Evidence from sub-Saharan Africa'. Technical Report. London: EPPI-Centre, Social Science Research Unit, University of London.

Stiglitz, J. and Weiss, A. (1981) 'Credit Rationing in Markets with Imperfect Information'. *American Economic Review* 71(3): 393-410.

Urenda, L. (2012) 'CBC: Micro-Case Study of Job Creation Effects'. Background Paper for IFC Jobs Study.

World Bank (2013) *Global Financial Development Report 2013: Rethinking the Role of the State in Finance*. Washington, DC: World Bank.

Annex 1: Summary of the Basel III Framework

Proposed changes	Specific steps
Raising quality, consistency and transparency of the capital base	<p>The predominant form of Tier 1 capital must be common shares and retained earnings</p> <p>Tier 2 capital instruments will be harmonised</p> <p>Tier 3 capital will be eliminated</p>
Strengthening risk coverage of the capital framework	<p>Promote more integrated management of market and counterparty credit risk</p> <p>Add the credit valuation adjustment arising from deterioration in the counterparty's credit rating</p> <p>Strengthen the capital requirements for counterparty credit exposures arising from banks' derivatives, repo and securities financing transactions</p> <p>Raise the capital buffers backing these exposures</p> <p>Reduce procyclicality</p> <p>Provide additional incentives to move over-the-counter derivative contracts to central counterparties</p> <p>Provide incentives to strengthen the risk management of counterparty credit exposures</p> <p>Raise counterparty credit risk management standards by including wrong-way risk</p>
Introducing a leverage ratio as a supplementary measure to the Basel II risk-based framework	<p>The committee therefore is introducing a leverage ratio requirement that is intended to put a floor under the build-up of leverage in the banking sector</p> <p>Introduce additional safeguards against model risk and measurement error by supplementing the risk-based measure with a simple measure that is based on gross exposures</p>
Reducing procyclicality and promoting countercyclical buffers	<p>Dampen any excess cyclicality of the minimum capital requirement</p> <p>Promote more forward-looking provisions</p> <p>Conserve capital to build buffers at individual banks and the banking sector that can be used in stress</p>
Protecting the banking sector from periods of excess credit growth	<p>Requirement to use long-term data horizons to estimate probabilities of default</p> <p>Downturn loss-given-default estimates, recommended in Basel II, to become mandatory</p> <p>Improved calibration of the risk functions, which convert loss estimates into regulatory capital requirements</p> <p>Banks must conduct stress tests that include widening credit spreads in recessionary scenarios</p>
Promoting stronger provisioning practices (forward-looking provisioning)	<p>Advocate a change in the accounting standards towards an expected loss amount</p>
Introducing a global minimum liquidity standard for internationally active banks	<p>A 30-day liquidity coverage ratio requirement underpinned by a longer-term structural liquidity ratio called the net stable funding ratio</p>

Source: World Bank (2013).

Annex 2: Country implementation of various tiers of banking supervision

Implemented/in the process of implementing (as of 31 May 2013)			
Basel II		Basel 2.5	Basel III
Armenia	Macedonia	Bahrain	Belarus
Bahrain	Madagascar	Barbados	Bolivia
Bangladesh	Malawi	Egypt	Colombia
Barbados	Malaysia	Gibraltar	Costa Rica
Belarus	Mauritius	Iceland	Egypt
Bermuda	Montenegro	Lebanon	Georgia
Bolivia	Morocco	Liechtenstein	Gibraltar
Bosnia and Herzegovina	Mozambique	Malawi	Kosovo
Colombia	Namibia	Morocco	Lebanon
Congo	Nepal	Nepal	Macedonia
Costa Rica	Norway	Norway	Malaysia
Dominican Republic	Oman	United Arab Emirates	Morocco
Egypt	Paraguay	Uganda	Namibia
Georgia	Peru		Nepal
Gibraltar	Philippines		New Zealand
Guatemala	Qatar		Norway
Guernsey	Serbia		Peru
Honduras	Seychelles		Philippines
Iceland	Sri Lanka		Qatar
Jordan	Thailand		Serbia
Kosovo	Uganda		Thailand
Kuwait	Uruguay		United Arab Emirates
Lebanon	Zimbabwe		Uganda
Liechtenstein			Uruguay
			Zimbabwe