Policy Choices for an Efficient and Inclusive 
Financial System

Thorsten Beck1*

1 World Bank, Development Research Group. I am grateful to Edward Al-Hussainy for research assistance and Agnes Yaptenco for assistance with the manuscript. This paper’s findings, interpretations, and conclusions are entirely those of the author and do not necessarily represent the views of the World Bank, its Executive Directors, or the countries they represent.

1. Finance – pro-growth and pro-poor

Market frictions such as transaction costs, uncertainty, and asymmetric information prevent the smooth flow of society’s savings into investment projects. Financial institutions and markets arise to overcome these market frictions. Specifically, they arise to help ease the exchange of goods and services by providing payment services, mobilize and pool savings from a large number of investors, acquire and process information about enterprises and possible investment projects, thus allocating society’s savings to its most productive use, monitor investments and exert corporate governance, and diversify and reduce liquidity and intertemporal risk (Levine, 1997, 2005). However, there is large variation across countries in the efficiency with which financial institutions and markets reduce transaction costs and information asymmetries and reach out to households of different income levels and enterprises of different sizes. Private credit to
GDP was 228 per cent in the U.S. in 2005, but only 2 per cent in Congo. While in most Western European countries more than 90 per cent of the population has access to a financial account, less than 20 per cent of the population has in most of Sub-Saharan Africa (Honohan, 2007). While interest rate spreads – the difference between lending and deposit rates – vary typically between two and four percent in developed financial systems, they are over 30 per cent in Brazil (Laeven and Majnoni, 2005).

Countries with better developed financial systems, i.e. financial markets and institutions that more effectively channel society’s savings to its most productive use, experience faster economic growth. Figure 1 summarizes a well-established body of empirical evidence; countries with higher levels of credit to the private sector relative to GDP experienced higher average annual real GDP per capita growth rates over the period 1980 to 2003. This relationship is not only robust to controlling for other factors that are associated with economic growth, but is also robust to controlling for the reverse causation from faster economic growth to financial development and to the relationship being driven by a third factor. While Figure 1 shows the relationship between private sector lending and GDP per capita growth, other measures of financial development yield similar results and these findings are confirmed by cross-country, panel and by time-series estimation techniques (Levine, 2005).

Figure 1 here

Financial development is not only pro-growth, but also pro-poor. Recent cross-country evidence has shown that it is the lowest income quintile that stands to gain most

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2 Private Credit to GDP is a standard measure of financial intermediary development and is the ratio of claims by deposit money banks and other financial institutions on the private, domestic non-financial sector to GDP.

3 To be sure, there is also a feedback of faster economic growth on the development of the financial system.
from financial development. In countries with better developed financial systems, the share of the lowest income quintile grows at a faster rate and income inequality as measured by the Gini coefficient falls more rapidly (Beck, Demirgüç-Kunt and Levine, 2007). Further, countries with higher levels of Private Credit to GDP experience faster reductions in poverty rates as measured by the headcount, the proportion of the population living on less than a dollar per day (Figure 2). While the empirical literature on the links between finance, income inequality and poverty reduction is still in its early days, these initial findings suggest that there is no trade-off between pro-growth and pro-poor in the case of policies that enhance a sound and efficient financial system.

**Figure 2 here**

There is also evidence on the micro-level about the link between access to and use of financial services and firm growth and household well-being. Firms grow faster than predicted by their cash flow constraints and the relationship between financing constraints and growth is relaxed in countries with better developed financial systems (Demirgüç-Kunt and Maksimovic, 1998; Beck, Demirgüç-Kunt and Maksimovic, 2005). Firms whose financing constraints are exogenously alleviated, increase their sales accordingly (Banerjee and Duflo, 2004). Similarly, on the household-level, numerous studies have shown the positive impact that access to and use of financial services can have on household welfare (World Bank, 2007a).

While the academic and policy debate has for a long time focused on deep and efficient financial systems, the debate has recently been broadened towards broad and inclusive financial systems. The next section will therefore discuss these two different concepts, present measures of both depth and breadth, and show correlations between the
two. Given the importance of financial development for economic growth and poverty reduction, policy makers and academics alike are interested in the building blocks for an effective and inclusive financial system. Section 3 will therefore discuss three important policy areas for financial sector development and cross-country experience in these areas: macroeconomic stability and effective and reliable contractual and informational frameworks. What, however, is the role of government in the financial sector, if any? Section 4 describes different approaches to government involvement in the financial sector, discussing the limitation of both laissez-faire and the activist views and proposing a new approach, the market-enabling view. Section 5 concludes.

2. Financial development – depth vs. breadth

Financial systems have different functions, which result in the distinction of different specific services that financial institutions and markets provide. Specifically, a common distinction is between payments, deposit or savings, lending and insurance services.

The literature has developed different measures to gauge the depth and efficiency with which financial systems provide these services. For several reasons, however, these indicators are mostly based on institution- or market-specific data, rather than referring to specific services. First, institutions and markets often offer several services and it is often difficult to disentangle the institution- or market-specific data to measure these specific services. Second, institutions sell packages of services to their clients and it again it is difficult to disentangle the cost and benefits of individual services to the customers. Finally, it is very difficult to aggregate data from different providers of the same service
in a consistent manner. Economists have therefore focused on institution- or market-specific indicators.

The most traditional measure of financial or rather monetary depth has been M2 or M3 as ratio of GDP (Goldsmith, 1969). While this is a very broad indicator of monetization, it is not necessarily a measure of financial depth or intermediation. Recently, researchers have therefore focused on Private Credit to GDP, the outstanding claims of financial institutions on the domestic non-financial sector relative to GDP. While not a perfect measure of the extent to which financial institutions screen potential borrowers and projects and monitor borrowers after credit approval, this is a proxy variable for the extent to which financial institutions channel society’s savings into private sector loans, thus fulfilling a key function of financial systems. For stock markets, economists have focused on the turnover ratio, which is the ratio of stocks traded to stocks listed, as an indicator of liquidity, as research has shown that it is the liquidity or activity rather than the size of stock markets, which is associated with economic development (Levine and Zervos, 1998). Insurance penetration, insurance premiums relative to GDP, has often been used as indicator of the depth of the insurance sector (Beck and Webb, 2003).

These aggregate indicators of financial depth and intermediation have the advantage that they are available for a broad cross-section of countries over a 30 or 40 year period, and they have formed the basis for the cross-country finance and growth literature and a literature on the determinants of financial sector development. More micro-level indicators on the efficiency of banks or insurance companies and the market
structure of specific financial markets or segments are more difficult to obtain and are typically available for fewer countries over shorter time periods.

While there are thus reasonably good data to assess and compare the financial depth of countries, much less is known about how inclusive financial systems are and who has access to which financial services. How many borrowers are behind the total outstanding loans of a country’s banking system, how many depositors are represented by the statistic on total deposits? Or taking the perspective from the demand side – what share of the population uses deposit accounts, what share of the population has taken out a loan? Unlike financial depth data, these statistics are not readily available. No accurate statistics are handily available to answer these questions.

Among the complications in measuring who is served by the financial sector is the fact that unlike in the case of financial depth measures, where data from individual institutions (or trades in the case of capital market) can be added up to obtain aggregate measures, data on financial use cannot be constructed this way, as households and enterprises might have business with several institutions. Further, regulatory entities traditionally do not collect data on individual accounts or account holders (unless they are large ones), as this information is not considered necessary input for stability analysis.

Another challenge is to distinguish between access to and use of financial services. Even in the most developed financial systems we do not observe penetration ratios of 100 per cent, i.e. every household having a deposit account, and the share of households with loan accounts is typically far below 100 per cent. To which extent do usage ratios of less than 100 per cent constitute a problem of access? The challenge is to distinguish between voluntary and involuntary self-exclusion, between lack of demand
and lack of the possibility to access, and between different dimensions of exclusion. Some recent data compilation efforts have made progress towards measuring access and use of financial services.

To measure use of financial services, one would ideally like to have census data on the share of households or enterprises using different financial services. In the absence of census data, one would at least like to have survey-based measures that are representative of the whole population. However, such survey-based representative indicators are very costly to collect and currently only exist for a few countries. Therefore proxy measures have been developed, such as the number of loan or deposit accounts. One such effort was recently undertaken by Beck, Demirgüç-Kunt and Martinez Peria (2007a) who compile loan and deposit account data for a broad cross-section of countries for the period 2003/4 and document the large variation in these indicators across countries. While in Austria there are three deposit accounts for every inhabitant, there are only 14 for 1,000 inhabitants in Madagascar. While in Greece there are 0.77 loan accounts for every inhabitant, there are only four for every 1,000 inhabitants in Albania.

These account-based indicators are subject to certain caveats, though, such as the non-linear relationship between the number of accounts and the share of population holding these accounts; people might have several accounts with one institution or accounts with several institutions, with the ratio of the number of accounts per account holder varying across countries. Further, there might be a number of dormant accounts, particularly common in many postal savings banks with free pass-book savings accounts and inefficient documentation systems. Nevertheless, Beck, Demirgüç-Kunt and
Martinez Peria (2007a) and Honohan (2007) show that such aggregate indicators of loan and deposit accounts are highly correlated with the actual proportion of households using financial services in countries for which this information is available from household surveys. Based on account data from Beck, Demirgüç-Kunt and Martinez Peria (2007a) for commercial banks, from Peachey and Roe (2006) for savings banks, and Christen, Rosenberg and Jayadeva (2004) for microfinance institutions, Honohan (2007) constructs a synthetic estimator of the share of population that uses a financial account. He finds a large cross-country variation in the breadth of financial systems, ranging from over 90 per cent in many European countries to less than 20 per cent of the population in many Sub-Saharan African countries.

Turning to enterprises’ access to and use of financial services, firm-level surveys over the past decade have provided us with a better picture of financing patterns and constraints of firms of different sizes, ownership, legal forms and sectors. These sources include the RPED studies for Sub-Saharan Africa in the 1990s, BEEPS for the transition economies, the World Business Environment Survey (WBES) across 80 countries in 1999/2000 and the Investment Climate Assessment (ICA) surveys over the past five years and available for almost 100 countries. Similarly to household-based indicators, cross-country comparisons have found a positive link between economic and financial development and the use of external finance by firms. Research based on these firm-level surveys has also found that institutional development helps close the financing gap between large and small firms. Further, financing obstacles as reported by firms are lower
in economically, financially and institutionally more developed economies and financial
development helps close the growth gap between large and small firms.\(^4\)

Recent efforts have also been directed at developing cross-country indicators of
access to financial services, along different dimensions, including geography, eligibility
and affordability. Take first geographic access. Branches have been the traditional bank
outlet and geographic distance to the nearest branch or density of branches relative to the
population can provide a first crude indication of geographic access or lack of physical
access barriers (Beck, Demirgüç-Kunt and Martinez Peria, 2007a). As in the case of
usage, we can observe large variations in geographic access across countries. In
Ethiopia, there is less than one branch per 100,000 people, while in Spain, there are 96.
Similarly, Spain has 79 branches for every 1,000 square kilometers, while in Botswana
there is one branch for every 10,000 square kilometer. These indicators are only crude
proxies for geographic access though, since branches are never distributed equally across
the country. The high and positive correlation of these indicator with the usage ratios
discussed above, however, suggest that they are good proxies for geographic access to
financial services.

Documentation requirements can be another important barrier to access, limiting
eligibility. While banks in Albania, Czech Republic, Mozambique, Spain and Sweden
demand on average only one document to open a bank account, banks in Bangladesh,
Cameron, Chile, Nepal, Sierra Leone, Trinidad and Tobago, Uganda and Zambia require
at least four documents, including ID card or passport, recommendation letter, wage slip
and proof of domicile (Beck, Demirgüç-Kunt and Martinez Peria, 2007b). Given the
high degree of informality in many developing countries, only a small proportion of the

\(^4\) See Beck and Demirgüç-Kunt (2006) for an overview of this literature.
population can produce these documents. 60 percent of the population in Cameroon works in the informal sector and is thus not able to produce a wage slip. People in rural areas in Sub-Saharan Africa – 61 percent of the overall population - are often unable to provide a formal proof of domicile. Limiting banking services to customers with links to the formal economy and society thus automatically excludes a large share if not the majority of people in many low-income countries.

Affordability barriers form another important dimension of access to financial services. Customers in Cameroon need over 700 dollars to open a checking account, an amount higher than the GDP per capita of this country, and to maintain a checking account in Uganda, one needs 30 per cent of annual income (Beck, Demirgüç-Kunt and Martinez Peria, 2007b). Customers in Brazil, on the other hand, do not face any minimum amount when opening a checking or savings account and pay no annual fee on these accounts. Perhaps not surprising, in Brazil there are 630 deposit accounts per 1,000 people, while in Uganda there are only 47.

Lack of appropriate products and services for low-income households and micro-enterprises are another important barrier to access financial services. In Nepal, the minimum amount a consumer can borrow is 10 times GDP per capita, whereas in many others it is possible to borrow amounts of less than 10 percent of GDP per capita. While mortgage loans with a maturity of 40 years have been recently introduced in the U.S., borrowers in many developing countries cannot secure loans for a maturity of more than five years. While these statistics give an imperfect picture of appropriate product features and convenience of services, they give an indication of the cross-country variation in this dimension of access.
While financial depth and breadth are positively and significantly correlated, this correlation is far from perfect. Figure 3 presents a scatter plot of Private Credit to GDP and the share of households using deposit services, as estimated by Honohan (2007). While clearly showing a positive correlation, there is a dispersion that increases with higher depth and breadth. Take Colombia and Lithuania as examples. Both countries have similar levels of Private Credit to GDP of around 20 percent, but in Colombia 40 percent of households have accounts, whereas this ratio is 70 percent for Lithuania. Using other indicators of financial sector breadth yields similar positive but imperfect correlations with financial sector depth.

Figure 3 here

Unlike financial depth data, data on the use of and access to financial services are not available over long time-periods, which prevents their use to rigorously assess the impact of financial breadth on outcome variables such as economic development or poverty alleviation. As of now, the link between financial breadth and desirable outcome variables can thus not be established with cross-country comparisons, although initial work considering partial correlations finds that enterprises report lower financing obstacles in countries with higher geographic outreach of the banking system and higher deposit and loan account penetration (Beck, Demirgüç-Kunt and Martinez Peria, 2007a). As time-series data become available over time, more rigorous analysis of the impact of financial sector breadth will be possible.
3. Building an efficient and inclusive financial system

Given the importance of financial development for economic growth and poverty reductions, policy makers and academics alike are interested in identifying policies that are associated with efficient and inclusive financial systems. Cross-country analysis and specific country examples have shown the importance of macroeconomic stability and of the contractual and informational framework for a deep and efficient financial system. Recent research, however, has also linked these fundamental building blocks of financial development to measures of breadth as we will discuss in the following.\(^5\) The market structure and the regulation and supervision of institutions and markets are important for financial deepening and broadening; the discussion of these areas, however, will be left to the next section where I discuss the role of government.

Financial contracts consist of an exchange of money today for the promise of money tomorrow, thus an enormous leap of faith into an uncertain future. The intertemporal nature of the contract and several market frictions make financial contracts critically different from other contracts in a market-based economy. First, there is uncertainty whether today’s contracted or expected repayment – be in the form of interest, insurance payout, dividends or capital gains - will be the same in terms of tomorrow’s consumption units due to inflation. Second, information asymmetries between borrowers and lenders lead to principal-agent problems, resulting in adverse selection and moral hazard problem (Stiglitz and Weiss, 1981).\(^6\)

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\(^5\) There is also an extensive literature on historic determinants of financial sector development, such as the colonial experience, and the impact of political institutions on finance. See Beck and Levine (2005) for an overview.

\(^6\) See Levine (1997, 2005) for an overview over theoretical models discussing these market frictions.
These market frictions give rise to financial institutions and markets. Financial institutions take on the role of “delegated monitors” (Diamond, 1984) for savers vis-à-vis borrowers; financial markets allow the transformation of claims on multi-year illiquid investment projects into liquid tradable securities. On behalf of their depositors, financial institutions acquire and process information about borrowers and the success probabilities of their investment projects; prices in financial markets reflect the evaluation of diverse investors of the issuers’ business prospects. While financial institutions and markets are thus the results of market frictions, their efficiency critically depends on the macroeconomic stability and an effective contractual and informational framework.

3.1. Macroeconomic stability

The intertemporal character of financial contracts makes macroeconomic stability a prerequisite for financial development and a first building block for an effective financial system. Theory has shown that inflation can exacerbate credit market frictions, resulting in even higher credit rationing (Huybens and Smith, 1998, 1999). A low and stable rate of inflation provides incentives for financial rather than non-financial forms of savings. It is also conducive to long-term contracting and thus long-term savings and investment by providing monetary certainty. Savers are more likely to entrust their savings for a given interest rate if they can be ensured the expected return in terms of real consumption units. Similarly, monetary stability allows investors to adequately compute the return on projects and commit to payments in real terms.

Empirical studies have confirmed these predictions. Countries with lower and more stable inflation rates experience higher levels of banking and stock market
development (Boyd, Levine and Smith, 2001). This is illustrated in Figure 4, which plots Private Credit to GDP over the period 1980 to 2003 against the average annual inflation rate for the same period.

Figure 4 here

3.2. Contractual framework

Financial contracts depend on the certainty of legal rights of borrowers, creditors and outside investors and the predictability and speed of their fair and impartial enforcement. Private property rights and enforcement of contracts – both vis-à-vis other private parties and vis-à-vis the government - are thus a second crucial pillar of an effective financial system. Savers and investors will be only willing to relinquish control over their funds if they are ensured repayment including the contracted or market return. Creditor and shareholder rights are therefore crucial for a functioning financial system. Even more important, however, is their effective and swift enforcement.

Recent cross-country comparisons have shown the importance of the contractual framework for the depth of the financial system. Countries with better creditor rights protection and more efficient judicial systems experience higher levels of financial development (La Porta et al., 1997; Levine, Loayza and Beck, 2000, Djankov, McLiesh and Shleifer, 2007). Countries whose legal systems more effectively prevent looting of corporations by controlling shareholders suffered milder financial crises in 1997-98 (Acemoglu et al., 2003). Cross-country comparisons have shown that financial systems that can rely on more effective legal systems, have lower interest rate spreads and are more efficient (Demirgüç-Kunt, Laeven and Levine, 2004; Laeven and Majnoni, 2005).
The efficiency of the contractual framework, however, is also critical for the breadth of financial systems. More effective legal systems provide for more flexible, adaptable and rapid conflict resolution rather than rigid, lengthy statutorily based processes with positive repercussions for firms’ access to finance (Djankov et al., 2003; Beck, Demirgüç-Kunt and Levine, 2005). More effective governance structures are associated with better firm performance (Klapper and Love, 2004). Countries with higher cost of contract enforcement have lower levels of deposit account and branch penetration, higher affordability barriers and higher documentation requirements for bank customers (Beck, Demirgüç-Kunt and Martinez Peria, 2007a, b). Interestingly, the laws on the books, such creditor rights, are not robustly associated with the breadth of financial systems. Figure 5 illustrates these results and shows a strong negative correlation between the cost of contract enforcement and the estimated share of households with a financial account.

**Figure 5 here**

Regional and country-specific studies have given us additional insights into the importance of the contractual framework for the breadth of the financial system and specific channels through which this relationship works. Some of these studies exploit the introduction of new legal mechanism at different times across different sub-national entities. An expedited mechanism for loan contract enforcement - debt recovery tribunals for loans over one million rupees – had a positive impact on repayment delays and helped reduce interest rates for eligible borrowers in states where it was introduced (Visaria, 2006). The transition economies offer a good laboratory to assess the effect of legal system characteristics since all of these countries had to start building new market-
compatible institutions after the start of transition, but did so at different speeds and with different priorities. Haselmann, Pistor and Vig (2006) show for a sample of 12 transition economies that creditor rights outside bankruptcy are more important than creditor rights inside bankruptcy for private sector lending. Haselmann and Wachtel (2006) show that banks in transition economies whose managers have more trust in the country’s legal system, also provide more SME and mortgage lending.

3.3. Informational framework

While financial markets and institutions arise due to information asymmetries that prevent direct interaction between multiple savers and investors, effective financial intermediation depends on tools to reduce these information asymmetries. The informational framework is thus a third fundamental requirement for effective financial intermediation.

Proper accounting and auditing standards can help deepen and broaden financial systems. Financial statements that give an accurate picture of a firm’s financial situation reduce screening and monitoring costs for financial institutions and increase the efficiency of resource allocation. Cross-country comparisons have shown a positive association of more transparent and comprehensive accounting standards with higher levels of banking sector and stock market development (Levine, Loayza and Beck, 2000; La Porta et al., 1997).

International experience has shown that the sharing of credit information sharing is important to reduce adverse selection problems, foster competition and thus deepen in the financial system (Jappelli and Pagano, 2002; Djankov, McLiesh and Shleifer, 2007;
see Miller, 2003, for an overview). Credit registries that give easy and reliable access to clients’ credit history and both negative and positive information can dramatically reduce the time and costs of obtaining such information from individual sources and therefore reduce the total costs of financial intermediation. Credit reporting makes borrower quality much more transparent, which benefits good borrowers and increases the cost of defaulting on one’s obligations. It helps borrowers build up a credit history – “reputation collateral” - and thus eases access to credit. Credit registries are especially important for SMEs as their creditworthiness is harder to evaluate and they have less visibility and transparency relative to large enterprises. Consumer rights to access their information and challenge erroneous information have to be effectively protected to make such a system a widely acceptable part of the financial system infrastructure and balance consumer rights with efficiency considerations.

Empirical evidence has not only shown the importance of credit information sharing for financial depth, but also for firms’ access to finance. More effective credit information sharing systems ease firms’ financing constraints, and there is some evidence that this effect is stronger for smaller and more opaque firms (Love and Mylenko, 2003; Brown, Jappelli and Pagano, 2006). Countries with more effective systems of credit information sharing have higher loan and deposit account penetration and higher branch penetration and depositors face lower barriers in accessing financial services (Beck, Demirgüç-Kunt and Martinez-Peria, 2007a, b). Figure 6 illustrates this evidence by showing the positive relationship between the effectiveness of credit information sharing and the estimate of the share of households with a financial account.

7 Djankov, McLiesh and Shleifer (2007) also find that credit registries seem to be more important for financial deepening in low-income countries, while their analysis suggests a higher priority for creditor right protection in middle-income countries.
4. The role of government

The different policy areas discussed in the previous section seem to call for an important role of government in the deepening and broadening of financial systems. But what exactly government’s role is, is still subject to discussion. Least controversial is the role of government in providing the contractual and informational framework and ensuring a stable macroeconomic environment. Government is the natural provider of key institutions such as legislation and court systems. Similarly, given the government’s monopoly over the issue of monetary instruments, ensuring macroeconomic stability is a natural government task. However, government in most developed and developing countries have taken a much more active approach to financial sector policies over the past 50 years, going beyond the provision of basic “institutional infrastructure”. This section briefly discusses different approaches to government’s involvement in financial systems, before focusing on three specific policy areas: competition, supervision and regulation, and market-friendly activist policies.

4.1. Laissez-faire vs. activist approach

The laissez-faire approach to financial sector policy sees the role of government limited to providing for this basic institutional framework and sees any wider ranging government involvement in the financial sector as damaging rather than helping. Related to this, a modernist approach draws lessons from the development of financial systems in North America and Western Europe and tries to apply them to today’s
developing and emerging economies. Both approaches, however, have been criticized for ignoring market failures and blindly transplanting successful models from developed countries and imposing them on developing economies without taking into account the more challenging socio-economic and political reality of these countries (Honohan and Beck, 2007).

The activist approach, on the other hand, takes market failures as starting points and defines a very active role for government in financial sector policy. Accordingly, governments in many developed and emerging economies took a very active if not interventionist role in the financial system in the 1960s and 1970s. Through ownership of financial institutions governments hoped to enhance savings mobilization, direct credit to priority sectors, and make financial services affordable to larger parts of the population. Through ceilings on lending interest rates governments hoped to reduce lending costs for borrowers, while floors for deposits interest rate were to provide incentives to savers. Credit quotas imposed even on private providers were supposed to guarantee that financial resources flowed to priority and underserved sectors, such as agriculture and small-scale enterprises. Through specialized institutions, such as agricultural banks or housing finance companies, governments hoped to provide more financial resources to these sectors.

Most of these attempts to overcome market failures with government interventions, however, have failed. Not only are bureaucrats poor bankers, lacking the skills and incentives to secure sustainable financial service provision, but the lack of appropriate governance structures has condemned most of these efforts to failure. The public interest view that governments maximize social welfare has been proven wrong by

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8 See Fry (1988) for a discussion of these policies and numerous examples.
the overwhelming evidence across the developed and developing world. Bureaucrats have turned out to have limited knowledge and expertise to run financial institutions and systems and they do not maximize society’s welfare, but are rather subject to political and regulatory capture, i.e. influence by the political sphere and the regulated entities, as hypothesized by the private-interest view.

Bureaucrats as bankers have failed almost everywhere, but especially in developing countries; economies with a higher share of government-owned banks experience lower levels of financial development, more concentrated lending and lower economic growth and are more likely to suffer systemic fragility (La Porta et al, 2002; Barth, Caprio and Levine, 2004). Experience in many countries has shown that government-owned banks are often used by politicians to finance commercially unviable government projects or state-owned enterprises. Politicians use government-owned banks for electoral purposes; experience across developing countries has pointed to increased lending in election years and especially to contested districts (Cole, 2005; Dinc, 2005, Khwaja and Mian, 2005). The resulting non-performing loans (NPLs) have resulted in large fiscal costs and often in banking crises (Barth, Caprio and Levine, 2004).

While empirical work has provided a clear picture of the negative association of government-owned banking with the depth and stability of financial systems, proponents of government ownership often point to the positive impact that government-owned banks might have on the breadth of financial systems. Beck, Demirgüç-Kunt and Martinez Peria (2007a), however, find no significant relationship of the share of government-owned banks with deposit or loan account penetration and a negative

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9 For a in-depth discussion on the public- and private interest views in the context of financial regulation and supervision, see Barth, Caprio and Levine (2006).
association with branch penetration. Similarly, while Beck, Demirgüç-Kunt and Martinez Peria (2007a) find some evidence of lower barriers to accessing deposit services in countries with higher shares of government-owned banks, they find higher barriers to loan services in countries with predominantly government-owned banking systems.

Interventionist policies, however, have gone beyond government provision of financial services. Credit quotas and interest caps and floors have impeded the efficient allocation of society’s savings to its most productive uses and have especially hurt “smaller” depositors and borrowers (Fry, 1988). In case of binding ceilings, banks are prevented from charging adequate risk premiums for riskier and more opaque borrowers or from recovering fixed transaction costs through a mark-up on smaller loan amounts. Subsidized credit schemes have often failed to reach their targeted clientele (Zia, 2007). Credit quotas have resulted in fragmentation of credit markets and higher costs for non-priority sectors. Further, competition between credit institutions and for more deposits is hampered as financial institutions have no incentives to become more efficient or to attract more deposits if they cannot finance more marginal customers. Similarly, given fixed transaction costs in financial intermediation, floors on deposit interest rates make savers with small transaction amount unattractive for financial institutions. In many cases, financial institutions have found ways around these restrictions, but at high costs and with consequent efficiency losses.

The failure of market-substituting financial sector policies and the realization that long-term institution building and macroeconomic stability will not be enough to deepen and broaden the financial system in most developing countries has led economists to explore a more active role for governments than the laissez-faire view would allow, while
avoiding the pitfalls of direct market-substituting government interventions. This market-enabling approach relies on private institutions to provide financial services efficiently but takes into account their incentive structure. This approach foresees a government that works with the market, but does not leave it to the market.

The market-enabling approach starts from the observation that financial institutions and markets might not maximize the constrained optimum given by the fundamentals such as the macroeconomic environment and the contractual and informational frameworks (Beck and de la Torre, 2007). It tries to push financial institutions and markets to this constrained optimum through an array of measures, including competition policies, the regulatory and supervisory framework and even market-friendly interventionist approaches. We will discuss each in turn.

4.2. Competition policies

Competitive financial markets can have a positive impact on financial sector depth and breadth. Cross-country comparisons have shown that countries with lower entry barriers into the financial system, fewer restrictions on banking and a higher share of foreign-owned banks have more competitive, more efficient and more stable banking systems (Claessens and Laeven, 2004; Demirgüç-Kunt, Laeven, Levine, 2004). Allowing or even encouraging entry by sound and prudent new institutions, whether they be domestic or foreign, is important to maintain contestability. While theory and some empirical work suggest that market power might entice banks to invest in long-term relationships with small and opaque enterprises as they know that they can regain the initial investment in the relationship at a later stage (Petersen and Rajan, 1995;
Bonaccorsi di Patti and Dell’Ariccia, 2004), other empirical papers point to the healthy effect of competition on availability of lending to SMEs (Cetorelli and Strahan, 2004; Beck, Demirgüç-Kunt and Maksimovic, 2004). Depositors and borrowers face lower barriers to accessing financial services in economies with more competitive and contestable banking systems (Beck, Demirgüç-Kunt and Martinez Peria, 2007b).

Complicating the debate on the effect of competition on financial market depth and breadth is that market structure, as for example measured by concentration ratios, is not the same as competitiveness, which is also influenced by the segmentation and contestability of a market (Claessens and Laeven, 2004). Further, state variables such as the contractual and informational frameworks can influence the competitiveness of a financial system through the ability to transfer collateral easily from one lender to another and the ability of SMEs to build up reputation capital through a credit registry. On the one hand, the lack of a credit registry can reduce the contestability of a financial system by raising the cost of entry; on the other hand, the lack of credit information sharing can have negative effects on the stability of financial institutions in a competitive environment as the recent experience of competing microfinance institutions in Uganda shows (McInstosh, de Janvry and Sadoulet, 2005).

4.3. Supervision and regulation

Given the maturity transformation – using deposits withdrawable at short notice to finance medium- to long-term loans – and given the limited transparency of financial institutions, banks have been subject to special regulation and supervision not applied to non-financial corporations. Given the put-option character of bank equity, bank

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10 See Berger et al. (2004) for an overview.
shareholders participate only in the up-side risk of the bank business and have therefore strong incentives to take too aggressive risks, ignoring sound and prudent risk management. Effective bank regulation and supervision, as well as market discipline exercised by large depositors and creditors can keep bank owners and managers in check.

Deposit insurance has often been seen as an instrument to reduce bank fragility by limiting the possibilities of bank runs (Diamond and Dybvig, 1983). Research for the U.S. and across countries, however, has shown that the moral hazard risk stemming from generous and poorly designed deposit insurance schemes more than outweighs its positive effects. By bailing out not only small, but also large depositors and creditors, poorly designed deposit insurance schemes can reduce market discipline, which in the absence of effective bank supervision has often resulted in imprudent and unchecked risk taking by banks with subsequent fragility (Demirgüç-Kunt and Detragiache, 2002; Demirgüç-Kunt and Huizinga, 2004). This negative effect is even stronger in weak regulatory and supervisory environments, as is the case in many developing countries. Further, cross-country comparisons have not confirmed the assertion that deposit insurance is crucial for financial sector development; to the opposite, countries with more generous deposit insurance schemes tend to have lower levels of financial savings and private sector lending (Cull, Senbet and Sorge, 2005).

Regulatory and supervisory approaches, however, might also have a critical impact on financial sector breadth. Enterprises face higher financing obstacles in economies with more restrictive regulatory policies, such as restrictions on banks’ activities, entry barriers for foreign banks, deposit insurance and a large share of government-owned banks while both depositors and borrowers face higher barriers to
accessing financial services (Beck, Demirgüç-Kunt and Maksimovic, 2004; Beck, Demirgüç-Kunt and Martinez Peria, 2007b).

Supervisory approaches that rely on powerful supervisors that can intervene in banks in good and bad times are not associated with higher financial sector development and there is even evidence that it might results in higher barriers for firms to access bank finance, while firms in countries where supervisors rely more on market signals and market discipline are less likely to report major obstacles due to corruption in lending (Beck, Demirgüç-Kunt and Levine, 2006). Similarly, borrowers face lower barriers to accessing financial services in banking systems where supervisors rely more on private sector monitoring, while depositors face higher barriers to accessing financial services in economies with powerful bank supervisors (Beck, Demirgüç-Kunt and Martinez Peria, 2007b).

However, there also very specific regulations that can help make a financial system more or less inclusive. On the negative side, high compliance costs with unduly complicated “Know Your Customer” (KYC) and anti-money laundering (AML) regulations may prevent financial institutions from reaching out to marginal customers (Claessens, 2006). On the positive side, relaxing branching restrictions by allowing financial institutions to offer limited services through non-financial correspondents can significantly reduce the fixed cost element of financial service provision and thus problems of diseconomies of scale in remote and small market places.11 A further step would be to allow the use of public post office networks as platform for service provision by different financial institutions, as in India and South Africa (see World Bank, 2004a,

11 In Brazil, for instance, some of the largest banks have expanded their network through correspondent agreements with the Post Office, lottery shops and supermarkets (Kumar, 2005).
2004b). This cannot only help overcome problems of scale economies, but address concerns of competition compared to the situation where only one institution is allowed to use post offices as correspondents as in Brazil or a situation where one financial institution dominates service provision in remote areas, as is the case in large parts of Sub-Saharan Africa.

4.4. Market-friendly activist policies

The role of the government might have to go beyond competition and regulatory policies in order to create competitive and inclusive financial systems. The setting up of credit reference bureaus, for example, often requires involvement of the government to overcome resistance by financial institutions as especially the sharing of positive information can diminish information rents of incumbent banks. Avoiding segmentation in the financial sector through expanding access to the payment system or the credit information sharing system beyond the commercial banks to bank-like institutions such as cooperatives or regulated microfinance institutions can help the financial system cater to marginal customers in all financial services. Sometimes, government action takes the form of “affirmative regulatory” policy, such as the moral suasion exercised by authorities to make South African banks introduce the Mzansi (basic transaction) account or make British banks introduce the Basic Bank Account (BBA). Government authorities might also have an important role in defining the border between cooperation and competition across financial institutions: inducing banks to share or ensure interoperability of payments infrastructures (including ATM networks) can help avoid
undesirable competition on access to infrastructure while enhancing desirable
competition on price and quality of service.

Governments can also try to move the financial system to be more inclusive by
addressing hindrances such as coordination failures, first mover disincentives, and
obstacles to risk distribution and sharing. While not easy to define in general terms, given
their variety, these government interventions tend to share a common feature in creating
incentives for private lenders and investors to step in, without unduly shifting risks and
costs to the government (de la Torre, Gozzi and Schmukler, 2006). Three examples
illustrate this approach. One is the creation by NAFIN (a Mexican development bank) of
an internet-based market, which allows small suppliers to use their receivable from large
credit-worthy buyers to receive working capital financing (Klapper, 2006). Another
example is the Chilean program (FOGAPE) to promote lending to SMEs via the
auctioning of partial government guarantees (Benavente, Galetovic, and Sanhueza, 2006).
Finally, the Mexican development fund FIRA has brokered a variety of structured finance
packages to finance agricultural production (e.g., shrimp, corn) to realign credit risks with
the pattern of information between financial institutions and different participants in the
supply chains of these agricultural products. While intriguing examples, it is not for sure
whether risk is really not being shifted to government and taxpayers through such
interventions and whether these interventions have sunset clauses that will allow the
government to withdraw once its engagement is not needed anymore. There are also
governance concerns stemming from a government intervention in a private market.
Finally, from political economy viewpoint, such schemes might take away the pressure to
implement the long-term institution building to create effective contractual and informational frameworks

5. Conclusions

This chapter discussed the policy choices for building efficient and inclusive financial systems. While measures of financial depth have been compiled for a long time period and have formed the basis for an extensive literature assessing the determinants and implications of financial sector depth, it is only recently that measures of financial breadth, i.e. access to and use of financial services, have been designed and constructed. Initial results show a positive but imperfect correlation of financial breadth with financial depth. Many policies that are fundamental for creating a deep, efficient and stable financial system, however, are also associated with financial breadth. Macroeconomic stability and effective contractual and informational frameworks are important for creating inclusive financial systems. Government’s role in financial sector policy, however, is still controversial and still subject to debate. While government solutions such as state-owned commercial banks, directed credit and interest rate regulations have proven to be not only ineffective but damaging for financial depth and breadth, governments might have an important role in enabling financial markets beyond long-term institution building. We discussed three areas – competition, supervision and regulation, and interventionist but market-friendly approaches – where governments can play a role beyond providing the institutional infrastructure for financial service provision.
This last area – the role of government in enabling markets and thus fostering efficient and inclusive financial systems – is still subject to debate and more research is certainly needed. Especially in the case of government interventions, which imply subsidies and thus taxpayer’s money, a careful cost-benefit analysis, including a comparison to other non-financial sector interventions, is needed.

To properly assess and benchmark the inclusiveness of financial systems across countries, more data collection is needed. Investment climate surveys have been conducted in over 80 countries and have formed the basis for an analysis of the effect of the business environment, including access to finance, on firms’ investment decisions and performance. Efforts are under way to conduct consistent household surveys for a large number of individual countries to benchmark individual financial systems and follow their progress over time. In the end, however, only a combination of aggregate, supplier and demand-side data will help to form a complete picture of how inclusive a financial system is and where the bottlenecks are for a further broadening.
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Figure 1: GDP per Capita Growth and Financial Depth

This graph illustrates a regression of real GDP per capita growth on log of initial GDP per capita, government consumption as share of GDP, trade as share of GDP, black market premium, average years of schooling, inflation and Private Credit. Specifically, this figure represents the two-dimensional representation of the regression plane in GDP per capita growth – Private Credit space. To obtain this figure, we regress GDP per capita growth on all explanatory variables except Private Credit, collect the residuals, and call them (GDP per Capita Growth | X). Next, we regress Private Credit against all other explanatory variables, collect the residuals, and call them e(Private Credit | X). Then, we plot e(GDP per Capita Growth | X) against e(Private Credit | X). All data for the regressions are averaged over the period 1980-2003. Private Credit is the claims of financial institutions on the private non-financial sector to GDP.
Figure 2: Poverty Alleviation and Financial Depth

This graph illustrates a regression of Growth of Headcount against log of initial Headcount, GDP per capita Growth and Private Credit. Specifically, this figure represents the two-dimensional representation of the regression plane in Growth of Headcount – Private Credit space. To obtain this figure, we regress Growth of Headcount on log of initial Headcount and GDP per capita Growth, collect the residuals, and call them (Growth of Headcount | X). Next, we regress Private Credit against log of initial Headcount and GDP per capita Growth, collect the residuals, and call them e(Private Credit | X). Then, we plot e(Growth of Headcount | X) against e(Private Credit | X).

Figure 3: Financial Depth and Breadth

This graph plots Private Credit against the Share of Households Using Financial Services. Private Credit/GDP is the claims of financial institutions on the private non-financial sector to GDP. Share of Households Using Financial Services is an estimate of the proportion of households in a country that uses financial services (Honohan, 2007).
Figure 4: Financial Depth and Inflation

Private Credit/GDP is the claims of financial institutions on the private non-financial sector to GDP. Inflation is the log of (1 + average annual CPI inflation). Data averaged for 1980-2003.
Figure 5: Financial Breadth and Contract Enforcement

Share of Households Using Financial Services is an estimate of the proportion of households in a country that uses financial services (Honohan, 2007). Cost of Contract Enforcement is an indicators that measure the cost of the judicial (or administrative) system in the collection of overdue debt relative to Gross National Income (World Bank, 2007b).
Figure 6: Financial Breadth and Creditor Information Sharing

Share of Households Using Financial Services is an estimate of the proportion of households in a country that uses financial services (Honohan, 2007). Credit Information Index measures rules affecting the scope, accessibility and quality of credit information available through either public or private bureaus; the index ranges from 0 to 6, with higher values indicating that more credit information is available from either a public registry or a private bureau to facilitate lending decisions (World Bank, 2007b).