



WP/07/18

IMF Working Paper

Building Supervisory Structures in Sub-Saharan Africa—An Analytical Framework

Marc Quintyn and Michael W. Taylor

IMF Working Paper

Monetary and Capital Markets Department

Building Supervisory Structures in Sub-Saharan Africa – An Analytical Framework

Prepared by Marc Quintyn and Michael W. Taylor¹

Authorized for distribution by Charles Enoch

January 2007

Abstract

This Working Paper should not be reported as representing the views of the IMF.

The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

Current trends in financial sector development in sub-Saharan Africa are prompting policymakers to focus on the design of appropriate supervisory structures. Against the backdrop of worldwide efforts to remodel supervisory structures, this paper develops an analytical framework for designing a regulatory strategy that could assist in prioritizing the needs for regulation and supervision over time. Such a strategy should facilitate the design of a supervisory structure suitable for an individual country's current and future needs. The paper emphasizes that in the case of sub-Saharan Africa, any such strategy is constrained by the reality of capacity limitations and should take into account the need to keep the central bank involved in the process. Building on the framework, the paper identifies a number of supervisory structures that could meet sub-Saharan Africa's needs.

JEL Classification Numbers: G18, G21, G22, G23, G28, N27, and O16.

Keywords: Africa, bank supervision, financial development, and financial regulation.

Author's E-Mail Address: mquintyn@imf.org and michael_taylor@hkma.hk.gov

¹ Michael Taylor is currently Head of Division, Banking Policy, Hong Kong Monetary Authority. An earlier version of this paper was presented at the World Bank-IMF Conference "Aligning Supervisory Structures with Country Needs" Washington DC, June 5-6, 2006. Without implication, the authors would like to thank the participants at the conference, as well as Martin Čihák and Etienne Yehoue for suggestions and comments.

Contents

I. Introduction	3
II. Revisiting Supervisory Structures—What Are the Arguments?	5
A. The “Changing Structure of the Financial System” Argument.....	5
B. The “Economies of Scale” Argument	6
C. The “Institutional Strengthening” Argument	8
III. Financial Sectors and Their Supervision in SSA	10
A. Key Facts and Trends in Financial Sector Development.....	10
B. Overview of Financial Sector Supervision.....	13
C. How Does the Emerging SSA Debate Fit into the Broader Debate?	15
IV. An Analytical Framework for Shaping SSA’s Supervisory Structures.....	17
A. Capacity Constraints	17
B. The Role of the Central Bank.....	17
C. Regulatory Strategy: Scope and Intensity	19
Regulatory scope.....	20
Regulatory intensity	21
The cost of regulation	22
V. A Typology of Possible Models.....	23
Model 1—The Singapore model.....	23
Model 2—The Irish model.....	25
Model 3—Bi-polar with banking supervision in the central bank.....	25
Model 4—Bi-polar with supervision of all deposit-taking institutions in the central bank	26
Model 5—The U.K.-FSA model	26
Synthesis	27
VI. Conclusions.....	27
References.....	29
Tables	
Table 1. Sub-Saharan Africa: Relative Importance of Segments in the Financial Systems of Selected Countries	12
Table 2. Sub-Saharan Countries: Financial Sector Supervisory Structures in Selected Countries.....	14
Table 3. Supervisory Models in SSA—Overview	15
Table 4. Overview of Advantages and Disadvantages of Selected Supervisory Structures...	24

“Structure follows strategy and the most complex type of structure is the concatenation of several basic strategies.”

Alfred Chandler (1962)

I. INTRODUCTION

Until just over a decade ago, the institutional structure of financial regulation and supervision was not considered a topic worthy of extensive policy debate, or even one that should warrant much academic attention (Goodhart, 2002). In the past decade, this perception has changed radically, as more and more countries have reviewed their supervisory structures and, in some cases, have embarked on extensive institutional changes. While the restructuring wave took off in advanced economies, it has since reached most corners of the world. Several middle- and low-income countries (MICs and LICs, respectively) have revisited their supervisory structures as well in recent years.²

The reform debate is very often cast as a choice between either separate supervisors for each of the main industry sectors, or the creation of a unified supervisory agency, i.e., one that combines the responsibility for the regulation and supervision of the banking, securities insurance, and other nonbank financial institutions (NBFI) sectors in a single organization. The latter model of regulation was pioneered in Scandinavia during the late 1980s and attracted wider international interest following its adoption in the United Kingdom in the late 1990s. It has since been taken up by a number of countries with widely different financial systems.

Three main justifications have been advanced for creating a unified regulatory agency.³ The first is that unification is necessary to ensure the effectiveness of regulation and supervision, given the convergence of the previously distinct banking, securities, and insurance sectors. This convergence has been stimulated by the emergence of financial conglomerates (the “industry change” argument). The second is that it is possible to achieve economies of scale in regulation, particularly in small countries or countries with small financial systems, and, thus, to achieve regulatory goals more cost-effectively (the “economies of scale” or “small economy” argument). Thirdly, unified supervision is also sometimes adopted as a measure to build supervisory capacity. What we will call the “institutional strengthening” argument is heard most often as part of the response to a financial crisis, the intention being that institutional change can be used as a way to break down entrenched interests, cultures, and work practices that are believed to have contributed to the crisis in the first place.

² For up-to-date overviews, see Courtis (2005), Čihák and Podpiera (2006), and Fleming and Vanicz (2006).

³ For a discussion of arguments for and against unification, see Abrams and Taylor (2000) and Llewellyn (2006).

In addition to these three main arguments, other factors have also been at work in the trend toward restructuring supervisory institutions. For example, within the euro zone, the transfer of monetary policy functions to the European Central Bank left national central banks with an opportunity to redefine their role with respect to financial regulation and financial stability more generally. Some have done this by adding other regulatory responsibilities to their traditional banking supervision function.

Finally, another factor behind some recent revisions of institutional structures has been simply that it has become fashionable to do so. Because unified regulation has been adopted in several of the most advanced financial markets, it is tempting to engage in reform merely to be seen as being part of the current trend. Thus, the decision to adopt unified regulation can be taken without considering the appropriateness of this model for the circumstances of a particular country. In some cases, the idea that regulatory reform is necessary because it is the trend in other countries can be used to provide cover for less high-minded motives for embarking on institutional reform, such as the desire by some finance ministries to obtain greater control over financial regulation by wresting it from the hands of the central bank.

At the end of 2004, 29 countries had adopted the unified supervisory model, while an additional 22 countries had restructured around at least one multi-sector supervisor (see Courtis, 2005 and Čihák and Podpiera, 2006). Thus, the reform debate has become richer than the bipolar choice (unified versus separate agencies), and countries are considering a wider range of institutional forms with varying degrees of central bank involvement in regulation.⁴ Moreover, even within the model of unified supervision, there is scope for some variation. The “FSA model” represents one type of arrangement (no central bank involvement), but a variety of different structures has seen the daylight—including the Irish unified regulator as a subsidiary of the central bank and the Singaporean model of locating all financial regulatory functions within the central bank.

This paper contributes to the restructuring debate in a part of the world that has only received partial attention to date, but which introduces a number of important new dimensions and challenges to the debate—sub-Saharan Africa (SSA). The new dimension can be characterized as the growing systemic significance of a number of NBFIs (more specifically, deposit-taking NBFIs) that have hitherto remained unregulated. The main challenges include (i) the presence of severe capacity constraints in most SSA countries; and, related to this, (ii) the need to preserve a role of significance for the central bank in financial sector supervision of SSA. In many developing economies, only the central bank has the financial resources and budgetary independence to ensure that regulation is adequately funded. Moreover,

⁴ Based on earlier work in Masciandaro (2004) and (2006a), the same author (Masciandaro, forthcoming) demonstrates that in the reshaping of the financial supervision architectures in a sample of 89 countries, the institutional role of the central bank in the supervisory process (the path dependence hypothesis) is the determining factor, more than any other structural variable such as features of the banking and financial markets (the convergence hypothesis). In other words, the policymakers who intend to reform the supervisory structure are primarily influenced by the actual role of the central bank in the process, and by its reputational endowment as well. The inverse relationship between consolidation in financial supervision and the degree of central bank involvement is confirmed by different case studies in Masciandaro (2006b).

developing economies are typically more prone to periods of financial instability than advanced countries. Hence, there is a premium in keeping the central bank involved in the regulatory process. Both factors will play a crucial (and constraining) role in the design of an appropriate supervisory structure.

The structure of this paper is as follows. The next section reviews the three main strands of argument in favor of a unified supervisor. Section III reviews key characteristics of SSA's financial systems and supervisory structures, and derives the arguments for aligning supervisory structures with country needs from those characteristics. Section IV presents an analytical framework for establishing supervisory structures. Regulatory scope and intensity are used as two key tools in a strategy to develop a supervisory structure tailored to the needs of an individual country. Section V reviews the pros and cons of a number of stylized models based on this framework. Section VI presents the conclusions.

II. REVISITING SUPERVISORY STRUCTURES—WHAT ARE THE ARGUMENTS?

This section briefly reviews the main arguments that have been used to justify the reform of institutional structures of regulation in the past decade and a half.

A. The “Changing Structure of the Financial System” Argument

The primary factor behind the consolidation of Scandinavian regulatory agencies—where it all began during the late 1980s—was the growing importance of financial groups that combined banking and insurance activities. Banking supervision had not been a central bank responsibility in any of these countries before, and the combination of previously separate banking and insurance commissions seemed to be a natural step in response to these industry trends.⁵ In the Scandinavian countries, therefore, the creation of unified regulatory agencies was driven by market developments and was mainly an attempt to ensure that regulation remained effective in light of them (Taylor and Fleming, 1999).

The argument that the institutional structure of regulation needed to be adapted to the changing nature of the financial industry was also influential in Australia and Britain, where the existing role of the central bank in banking supervision did spark an active public and academic debate on the need for regulatory reform. In Australia, the “industry change” argument formed a major justification for the recommendations on the organizational structure of regulation made by the Wallis Commission (1996). Australia has subsequently moved to a type of “twin peaks” structure,⁶ where responsibility for regulation is divided between agencies specializing in prudential supervision on the one hand—the Australian Prudential Regulatory Agency (APRA)—and consumer protection and market regulation on the other (the Australian Securities and Investments Commission).

⁵ For example, in Norway, the banking commission had absorbed the regulatory agency for savings banks in the 1920s and had acquired responsibility for the oversight of securities brokers and dealers (in reality mainly banks) in the 1960s.

⁶ The “twin peaks” model is developed in Taylor (1995).

In Britain, the creation of the Financial Services Authority (FSA) took place without extensive public discussion, although there had been an active debate on the need for regulatory reform for several years before.⁷ In this debate, the Bank of England had stressed the need to keep monetary policy making and banking supervision in the same body which, it argued, enabled the sharing of market intelligence and led to some important synergies.⁸ On the opposite side of the argument, however, was the claim that regulatory reform was necessary to reflect the new reality of the financial sector.⁹

In both Australia and Britain, the main argument advanced in favor of unification was that the formation of financial conglomerates necessitated a financial regulatory structure that could adopt a “group-wide perspective” on the risks that they incurred. The aim was to create a regulatory agency that was capable of reviewing the activities of these groups in the same way as group management, without being constrained by legal form. Institutionally-based regulation was also seen as a constraint where a “blurring of boundaries” had occurred between different types of financial products, for example, the development of deposit products with returns linked to the performance of a stock index, or credit derivatives which have some insurance-like characteristics.

In both Australia and Britain, the position of the central bank was a key factor in the outcome of the debate on regulatory reform. Both were initially opposed to losing the responsibility for banking supervision. However, once the respective governments had made the decision to embark on regulatory reform, both central banks fell in line with it and made considerable efforts (such as the transfer of key staff members) to ensure that the new agencies could be fully effective. Their acceptance of the decision was in part due to the fact that in both countries it was made by a government with a strong and relatively recent electoral mandate, and followed an extensive public debate in which the central bank itself had been a participant.

B. The “Economies of Scale” Argument

A second strand of justification for the creation of unified regulatory agencies was what has been called the “economies of scale”—or “small country/financial system”—argument. This justification had a number of different dimensions. In the first place, it was argued that centralizing regulatory functions and activities could permit significant gains from economies of scale through the development of joint administrative, information technology (IT), and

⁷ After the FSA’s creation, there was a robust defense of the unified regulator model from within by Briault (1999) and by its first chairman, Sir Howard Davies, in numerous speeches.

⁸ For similar arguments, see Peek, Rosengren, and Tootell (1999).

⁹ The main academic contributors to the UK debate were Goodhart (1995), Taylor (1995, 1996), and Goodhart (1998b). Among the supporters of reform there was, however, an important difference between those who argued that all financial regulatory activities should be combined in a single agency, and those who argued in favor of an Australian-style “twin peaks” model that separated prudential from consumer protection regulation.

other support functions. In addition, it was also argued that it would assist in the recruitment and retention of suitably qualified regulatory personnel, who might perceive that the career opportunities available to them in a unified regulatory agency would be significantly greater than in a series of specialist agencies. Finally, it was also argued that it would permit the regulatory authority to achieve efficiencies in the deployment of staff with rare intellectual capital.¹⁰

This justification was most influential among the Scandinavian countries, since they needed to maximize their use of scarce human resources to ensure that regulatory functions were performed adequately (Taylor and Fleming, 1999). A single regulatory agency permitted scale economies to be attained with regard to the gathering and use of know-how in specialist areas, and in the development and improvement of supervisory methods, while also permitting the Scandinavian countries to participate fully in international regulatory forums.¹¹ Taylor and Fleming (1999) also noted that a unified regulatory authority was not the only possible response to the “economies-of-scale” argument. The Finnish model, for instance, in which the banking and securities regulator was a separate legal entity with its own board, but whose staff, IT, and administration services were provided by the central bank, was also designed to provide scale economies.¹²

Since then, several other countries have adopted innovative approaches to secure economies of scale in regulation, one notable example being the Central Bank and Financial Services Authority of Ireland (CBFSAI). A component part of the CBFSAI is known as the Financial Regulator, which was established as the single regulator for all financial services in Ireland. The Financial Regulator has its own separate board and acts independently of the central bank in the performance of its day-to-day functions, but there are a number of important connections between the agency and the central bank, in particular, in relation to financial stability issues and the provision of support services. In the latter regard, the regulatory agency is able to enjoy economies of scale both from being the single financial regulatory agency in Ireland and from sharing support services with the central bank.

¹⁰ Čihák and Podpiera (2006), however, do not find evidence that the adoption of a unified supervisory model thus far has been associated with significant and systematic reductions in supervisory staff in a sample of 61 countries. They note that the results could be due to the fact that the time since restructuring has not been long enough to lead to savings, or that the new agencies took on new responsibilities not covered by any of their predecessor agencies.

¹¹ In Britain, by contrast, the desire to achieve scale economies was not a significant factor, except in the special case of enabling more efficient use of staff with specialist skills, such as models experts.

¹² Financial conglomerates were not a major part of the Finnish financial system in the late 1990s, and, therefore, the regulation of insurance companies and mandatory pension schemes was in the hands of another agency, which lacked the banking regulator’s close association with the central bank.

C. The “Institutional Strengthening” Argument

The creation of a single regulatory agency can also be used as a mechanism for strengthening regulatory capacity and for improving the effectiveness of regulation. This argument, which appears to be particularly applicable to small, emerging economies, did not receive much attention in the early “unification” literature, although it was, perhaps, implicit in some cases. The creation of Sweden’s unified regulator, the Finans Inspektionen, took place in the aftermath of a banking crisis that had revealed the need to strengthen supervisory capacity. In Finland, by contrast, the response to a banking crisis was not to create a fully unified regulatory agency, but to strengthen the links between the bank regulator and the central bank. It should be noted, however, that the reforms in both countries mainly reorganized capacity but did not significantly add to it.

Since the turn of the present century, the argument that a unified regulatory agency can be used to build regulatory capacity has been heard more frequently, particularly in the aftermath of a financial crisis. The most prominent examples are the Republic of Korea and Indonesia.¹³ Among the factors that have been claimed to have contributed to weak supervision prior to the emergence of banking crises are (i) entrenched bureaucratic interests that prevent the emergence of independent and effective regulation (especially if this would mean interfering with other government policy objectives, such as directed lending); and (ii) regulatory capture by the industry, thus leading to inadequate enforcement of prudential regulations. Both can be seen as a consequence of inadequate agency independence (Quintyn and Taylor, 2003). Thus, the common thread in this line of argument is that for regulation to be effective it needs to be performed by an agency with a clear mandate and strong enforcement powers and which is insulated from both industry and political pressures. In consequence, it is argued, underfunded, understaffed, and politically compromised agencies need to be replaced by a strong and credible regulator with sufficient bureaucratic clout of its own to withstand vested interests.

The Republic of Korea provides an example of this motivation for establishing a unified regulatory agency. The Financial Supervisory Commission (FSC) was established in April 1998 and the Financial Supervisory Service (FSS) in January 1999. The former was created to act as an integrated supervisory agency for all types of financial institutions and markets, while the latter was established to function as its executive arm. Although they are formally separate, the two agencies are supposed and expected to operate as a single supervisory authority.¹⁴

¹³ In Indonesia, the government published plans to establish the Otoritas Jasa Keuangan (OJK), a single regulatory agency for the financial services sector. In the event, implementation had to be considerably delayed owing to the extensive legislative and administrative preparations that were needed. The wide disparity in terms of the level of regulatory capacity among the potential constituent agencies of the OJK was seen as particularly problematic.

¹⁴ Recent work by Kim and Lee (in 2004 and 2005) on the performance of the new Korean regulatory structure suggests that the actual results from these reforms have been somewhat disappointing. They claim that, due to the lack of complementary reforms to the institutional context in which regulation is situated, the new

(continued...)

Establishing a unified regulator is not the only way to deal with the issues of regulatory capacity, and it does not necessarily lead to a more independent agency. For example, the Japanese Financial Services Agency (JFSA) was created in the wake of the serious banking problems that emerged in Japan during the late 1980s and early 1990s, in part to provide more independent and effective regulation than had been possible under the Ministry of Finance (MoF). In consequence, the MoF's supervisory responsibilities were transferred to the JFSA.¹⁵ The JFSA's activities have been widely credited with leading to substantial improvement in the financial condition of the banking system during the present decade, but this has been the result of its greater political clout rather than greater independence (see Quintyn, Ramirez, and Taylor, 2006). The JFSA acquired greater political influence by being placed directly under the prime minister's office, while the chairmanship of the JFSA also became a high-profile political appointment.

These examples suggest that while the process of institutional reform provides an opportunity to establish a stronger and more independent regulator, it does not inevitably lead to this result. Abrams and Taylor (2000) strongly argue that supervisory restructuring also needs to cover other aspects, including clear objectives; agency independence and accountability; adequate resources; effective enforcement powers; comprehensiveness (i.e., the avoidance of gaps in the jurisdiction of regulatory agencies); and cost effectiveness.¹⁶ These factors can be considered independently of the case for or against unification. In fact, the structure of supervision is only a means to an end, not an end in itself—or as Mwenza (2004) puts it, “a second order discussion.” In fact, focusing on issues of regulatory structure can often distract from the more essential, but less dramatic, business of improving the quality of supervision.

The key question for emerging markets is whether reform of regulatory structures can be used as an opportunity to build supervisory capacity. This consideration needs to be paramount in deciding to embark on regulatory reform. Thus, for an emerging market country, structural reform plans need to be combined with capacity-building measures. Without the latter, they will be merely cosmetic changes.

regulatory regime in effect turned into a hierarchical system headed by MOFE (Kim and others, 2002), among others, because the latter retained the sole power to initiate legislation.

¹⁵ It should be noted, however, that while the JFSA has taken over the responsibilities of the MoF for regulating banking, securities, and insurance, the Bank of Japan has significant regulatory and examination powers in respect of banks that were unaffected by these reforms.

¹⁶ In this regard, Quintyn, Ramirez, and Taylor (2006) review developments in independence and accountability arrangements of recently reformed regulators. They conclude that, despite progress, more needs to be done with respect to both areas, as well as with respect to the understanding of the virtuous dynamics between both for regulatory governance.

III. FINANCIAL SECTORS AND THEIR SUPERVISION IN SSA

In recent years, there has been a growing interest in reforming supervisory structures among the countries of SSA, especially those MICs with comparatively more developed financial systems. Some of them have already embarked on reforms. South Africa unified NBF supervision in the 1990s and now has a bi-polar supervisory system, with banking supervision housed in the Reserve Bank of South Africa. However, Bezuidenhout (2004) noted that the structure remains the subject of public debate and could be subject to revision at some point in the future. Mauritius established a unified NBF supervisor in 2000. Nigeria has had a bi-polar system for a number of years, with bank and pension fund supervision in the central bank, and insurance and securities supervision in a separate agency. Zambia regrouped supervision in three institutions—the central bank (responsible for banks, building societies, and bureaux de change); the Securities and Exchange Commission; and the Pension and Insurance Authority (established in 1997). Namibia is in the advanced stages of implementing a NBF regulator, and other countries are contemplating modifications to their supervisory structure (Botswana, Malawi, Rwanda, Swaziland, and Uganda).

In addition to the relatively more developed nature of the financial systems of many of the early reformers (such as Botswana, Mauritius, and Namibia), another common factor has been the association of several among them with SADC (Southern African Development Cooperation). SADC's goal of harmonizing cross-country financial sector legislation has prompted the individual members to focus on their supervisory structures.¹⁷

Thus far, no significant developments have taken place in central or western Africa. However, if current financial sector trends continue in low-income SSA, the search will intensify for an alignment of the structure with the country's needs and the MIC experiences could provide useful lessons. This section starts with an overview of the financial systems in SSA and of the present financial sector supervision structures. It concludes with some comments on how the arguments for supervisory alignment in Africa fit into the broader picture presented in the previous section.

A. Key Facts and Trends in Financial Sector Development

Sub-Saharan Africa and, in particular, its LICs, are home to some of the least developed financial systems in the world.¹⁸ The range of institutions is narrow, access to (even basic) financial services is still low and informal systems remain a major source of credit for large parts of the productive sector. The current decennium signals some positive developments, although at a slow pace. While some of the MICs show higher levels of development, they are still relatively less developed than their counterparts elsewhere in the world.

¹⁷ An important initiative in this regard is the establishment, within SADC, of the Committee for Insurance, Securities, and Nonbank Financial Authorities (CISNA), a forum for the exchange of views and experiences and training for the emerging supervisors in the region.

¹⁸ This section draws on Gulde, Pattillo, and Christensen (2006), and Honohan and Beck (2006).

Key features of financial sector development in SSA relevant to the purpose of this paper include:

- The level of financial development, which remains low, with M2/GDP at about 27 percent in LICs and just over 55 percent in MICs (including South Africa).¹⁹ On the positive side, these and other indicators have shown a marked increase since the 1990s.
- All systems are bank-dominated (Table 1). In most countries, banks cover close to 90 percent of financial system assets.²⁰ Insurance sectors are very small throughout and securities markets are nonexistent, or in their early infancy. NBFIs and microfinance are growth sectors, in particular in middle-income SSA, albeit from a low base.
- As a result of the opening up of domestic systems to foreign banks in the 1990s (for most countries), several banking systems now have a relatively strong foreign-bank presence. In the low-income group, their presence amounts to 40 percent of total bank assets and 60 percent in MICs.
- Partly mirroring the above development, the presence of state-owned banks has declined steadily during the past decade-and-a half. In low-income SSA, they do not represent more than 20 percent total bank assets and no more than 10 percent in middle-income countries.
- The sector of NBFIs contains a wide variety of institutions in English-speaking SSA (deposit-taking NBFIs, insurance companies, pension funds, finance and leasing companies, merchant banks, mortgage finance, and consumer credit companies). In general, these sectors are still small with a few exceptions. However, in several countries they have started to grow and show potential to raise the level of financial services.
- Among the NBFIs, the importance of deposit-taking NBFIs is on the rise. Microfinance is becoming a key vehicle to provide the poor and rural groups access to organized finance in several countries. Governments and NGOs alike are fostering this development. Some of the microfinance groups accept deposits and provide a range of financial services. Credit cooperatives are increasing their significance as

¹⁹ Middle-income countries include Angola, Botswana, Cape Verde, Equatorial Guinea, Gabon, Mauritius, Namibia, Seychelles, South Africa, and Swaziland. According to the World Bank rankings, low-income countries have a GNI per capita of US\$825 or less, and lower-income countries have a GNI per head between US\$826 and US\$3,255.

²⁰ In some countries, such as Angola, Chad, Congo DR, Equatorial Guinea, Eritrea, Guinea Bissau, Liberia, and Sao Tome and Principe, they cover 100 percent of the *officially registered* sector. These countries are not listed in Table 1. It should be noted that the registration of, for instance, microfinance institutions is just beginning in several countries.

providers of (basic) financial services in a number of countries. Both sectors are increasingly attracting deposits from the informal sectors.

Table 1. Sub-Saharan Africa: Relative Importance of Segments in the Financial Systems of Selected Countries

(In percent of total assets of the system, latest available data) 1/

Country	Commercial Banks	Other (Mainly Deposit-Taking Institutions)	Microfinance Institutions	Rural Banks	Insurance Companies	Pension Funds 2/	Other
Botswana	40.0	34.3			1.6	17.4	6.8 3/
Burundi							
Central African Republic	68.5		2.7		7.6	21.1	
Comoros	94.0		6.0				
Congo, Rep. of	89.8		7.0		3.2		
Ethiopia	88.4	3.0			3.0	3.0	5.0 4/
Gabon	83.6	4.8			7.8		5.0 5/
Gambia	97.0		1.0		2.0		
Ghana	50.9	6.0			2.0	15.1	
Guinea	98.2	1.8	1.8				
Kenya	60.4	15.0	0.5		8.2		
Lesotho	91.8				7.8		
Madagascar	97.8	0.6	1.6				
Malawi	70.9	17.5			29.1		
Mali	98.7						
Mauritius	94.8	4.4					
Mozambique	94.9	4.3	0.1				
Namibia	38.1				24.8		
Niger	61.9	1.1	1.7		7.6		
Nigeria	90.5	8.1		0.7	2.1	0.6	
Rwanda	53.0	2.6	4.5		4.3	20.6	
Senegal			2.6				
Seychelles	87.1	6.0			2.1	5.0	
South Africa	25.3				14.6		
Swaziland							
Tanzania	78.0				4.0	13.0	
Uganda							
Zambia	59.6	23.0	0.2		3.8	16.7	
Zimbabwe	76.6	10.2	0.1		3.0	2.0	

Source: International Monetary Fund, African Department, "Country Profiles Database" and authors' calculations

1/ Numbers do not always add up to 100 percent.

2/ In most countries, state pension fund.

3/ Capital investment funds.

4/ Development bank.

5/ Development bank.

B. Overview of Financial Sector Supervision

Many sources—among them the joint World Bank-IMF Financial Sector Assessment Programs (FSAPs)—concur that supervisory capacity remains limited in most of SSA. Many supervisory agencies or departments are understaffed and lack essential skills. Compliance with the Basel Core Principles for Effective Banking Supervision (BCP) is low and supervisory enforcement is also often very low.²¹ Supervision of nonbank sectors is even weaker—or nonexistent. However, in recent years, several countries have embarked on major reform programs (often following FSAPs) to upgrade their regulatory frameworks and banking supervisory skills.

A detailed overview of supervisory structures is provided in Table 2, with a summary overview in Table 3. The following are some key observations:

- Central banks are the dominant supervisors for banks in SSA. The legacy of the colonial powers is visible: countries with a British tradition typically house bank supervision in the central bank, while most former French colonies established bank supervision in a separate agency.²²
- Central banks are also often called upon to organize supervision for deposit-taking NBFIs as a natural extension of their bank supervisory responsibility. In more than half of the countries in the sample, the central bank has some responsibility in supervising this group of institutions. As a logical consequence, the same is happening with respect to microfinance. Some countries are well advanced in supervising these institutions, while in others, central banks have been recently assigned the regulatory and supervisory responsibility over microfinance institutions, and are trying to develop capacity in this area (taking stock of the sector, defining the institutions that should be supervised and establishing the regulatory and supervisory framework).

In several cases, the supervisory responsibility of the central banks goes further than banks and other deposit-taking institutions, making the central bank the dominant supervisor. For instance, in Nigeria and Uganda (recently, and meant to be temporarily) the central bank is also the pension fund supervisor; in Mozambique, the stock exchange supervisor; and in Swaziland the insurance supervisor.²³ More generally, in a number of cases the central banks seem to be the supervisor-by-default, given the lack of capacity outside the central bank. In 10 countries, the

²¹ Evidence from BCPs (to be completed).

²² In the Economic and Monetary Community of Central Africa (CEMAC) and the West African Monetary Union (WAMU), banking supervision is established at the regional level.

²³ The solution in Swaziland is also supposed to be temporary until capacity has been built to establish a separate NBFI regulator.

central bank supervises each sector that is in existence, or that is considered important enough to be regulated; and

Table 2. Sub-Saharan Countries: Financial Sector Supervisory Structures in Selected Countries 1/

Country	Banks	Microfinance Institutions	Other			Pension Funds
			Deposit-Taking Institutions	Insurance	Securities	
Angola	CB			MOF		
BCEAO-WAMU	B (regional)			I (regional)		
BEAC	B (regional)			I (regional)		
Botswana	CB		CB	M	M	M
Burundi	CB	CB				
Cape Verde	CB	CB	CB	CB		
Comoros	CB					
Congo DR	CB					
Eritrea	CB					
Ethiopia	CB	CB		CB		
Gambia	CB	CB	CB	CB		
Ghana	CB	CB	CB	I	S	
Kenya	CB		CB		S	
Lesotho	CB			CB	CB	
Madagascar	B	B	B			
Malawi	CB	CB	CB	CB		
Mauritius	CB		CB	M	M	
Mozambique	CB	CB	CB	I	CB	
Namibia	CB	M	M	M	M	
Nigeria	CB		CB		S	P
Rwanda	CB	CB	CB			
São Tome and Príncipe	CB	CB	CB	CB		
Seychelles	CB		CB		CB	
Sierra Leone	CB		CB	CB		
South Africa	CB		M	M	M	M
Swaziland	CB		O	CB		
Tanzania	CB		CB	I	S	
Uganda	CB		CB	I	S	CB
Zambia	CB	CB	CB	M	S	M
Zimbabwe	CB	CB	CB	I	S	

Source: Courtis (2005) and national sources.

Legend: CB: central bank; B: separate banking supervisor; O: separate supervisor for other financial institutions; I: separate insurance supervisor; M: multi-sector regulator (but not for all sectors, which would be U); S: separate securities supervisor; P: separate pension fund supervisor; and U: unified supervisor (i.e. supervisor of all segments).

1/ In many cases, the listed supervisor for other deposit-taking institutions, insurance companies, and pension funds is often just a registrar without supervisory functions. Blanks mean no supervisory functions.

- Table 2 also shows that there are an impressive number of unregulated sectors. In most cases, this situation reflects the fact that these sectors are either nonexistent, or have only a marginal presence. Pension funds remain typically unregulated. Securities markets have a (separate) regulator in seven countries and fall under a multi-sector regulator in three cases. The insurance sector falls under some form of supervision in a broad number of countries (the central bank, a separate insurance supervisor, or the ministry of finance). Very often, when the central bank is not involved in these sectors, regulation and supervision remain limited to licensing by a registrar (located in a ministry) with a light regulatory framework and without any further supervisory oversight (this is also true for several deposit-taking NBFIs in a large number of countries).

Table 3. Supervisory Models in SSA—Overview

Supervisory Model	Number of Countries	Countries
Central bank for banks, one multi-sector agency for others	4	Botswana 1/, Mauritius, Namibia, South Africa
Central bank for banks (and some other sectors), one or more separate agencies for other sectors	7	Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda 1/, Zambia 1/
Separate agency for banks, others separate or not regulated	3	BEAC, BCEAO, Madagascar
Central bank for every sector that is in existence	6	Ethiopia, Gambia, Lesotho, Malawi 1/, Seychelles, Sierra Leone
Central bank for banks, rest unregulated	5	Angola, Burundi, Rwanda1/, Swaziland 1/, and Zimbabwe

1/ Currently under reform.

C. How Does the Emerging SSA Debate Fit into the Broader Debate?

The weaknesses in regulation and supervision, and in the supervisory structures in SSA, in combination with the growth of financial systems, make a strong case for reforming regulatory structures. The need to address the shortcomings is particularly pressing in light of the argument made by Goodhart (1998a) that, among all groups of countries, developing countries are most in need of effective (banking) supervision, given several specific issues that make them prone to financial instability, such as weak legal systems, lack of accounting standards and practices, and a lack of financial instruments and markets to hedge financial risks.

The starting point for reform of supervisory structures in SSA countries is very different from that of the advanced economies, or most other MICs. Not only do countries of SSA have comparatively weak regulation of the dominant banking sector, but regulation and supervision of several nonbank sectors that are gaining significance is even weaker or nonexistent. Some of these sectors may soon assume a systemic importance, and, hence, will need regulatory attention. Therefore, rather than aligning existing supervisory structures with new needs, the debate in the SSA needs to be about how to start a supervisory structure from scratch for some sectors, and how to prioritize the extension of regulation to these sectors, given limited resources.

It follows from the above observations that any institutional reform will need to be part of a broader package of measures designed to build effective regulatory capacity. Institutional change should support the foundations upon which regulatory and supervisory capacity can be built and flourish. In addition, given the current state of development of SSA financial sectors, any new supervisory structure needs to be built in a forward-looking manner, i.e., be flexible to adapt to new needs and developments and to provide the basis for the regulation of new financial sectors and sub-sectors as and when they become significant.

These considerations imply that the “institutional strengthening” argument for regulatory reform is particularly relevant to the countries of SSA. This argument goes hand in hand with the “economies of scale/small country” argument. Most, if not all, SSA countries have small financial sectors and cope with a lack of skilled professionals in the sector, including in oversight functions. Hence, the argument to pool scarce supervisory resources in one or a limited number of agencies comes to the fore as a very strong one.

By contrast, the “industry structure” argument does not apply under the current circumstances in any of the SSA countries.²⁴ Financial systems in SSA are likely to remain bank-dominated for the foreseeable future. In addition, as Llewellyn (2006) points out, in most sub-sectors the core business is expected to dominate the institutions’ activities for a long time, and these lines of business are expected to continue to differ sufficiently, so that the “blurring boundaries” argument in favor of a unified supervisor remains weak.

In sum, the economies-of-scale argument in the case of SSA seems to argue in favor of a structure that allows for synergies and flexibility to take into account the scarce resources/limited capacity problems. However, it does not necessarily follow that the fully unified regulator-model, separate from the central bank, represents the most appropriate way of achieving the objectives. The absence of financial conglomerate groups suggests that a single regulator is not necessarily the best or only response. Some creativity in institutional design will be needed and the next section tries to provide inputs into this process.

²⁴ Even in South Africa, the argument was not considered strong enough to move to a unified supervisor. Bezuidenhout (2004) argues that there is (still) a lack of true integration in financial groups.

IV. AN ANALYTICAL FRAMEWORK FOR SHAPING SSA'S SUPERVISORY STRUCTURES

Chandler's statement that "Structure follows strategy" is particularly applicable to the design of financial sector supervision in SSA—or LICs more generally—in which the first step needs to be the development of a "regulatory strategy" to prioritize sectors that need a supervisory framework and to determine the intensity with which these sectors should be supervised. Regulatory structures, in turn, need to follow this strategy in a way that will allow a flexible response to future developments in the financial systems. Such a strategy also needs to take into account the ubiquitous issue of capacity constraints, which, in many ways, is the crux of the regulatory problem in the SSA. Any strategy should also take into account the need to keep the central banks involved in the supervisory process for reasons that we will examine shortly.

A. Capacity Constraints

Capacity constraints are major hurdles for any reform in SSA. Supervisory agencies in most SSA countries lack skilled and trained staff, as well as the equipment and infrastructure to conduct on-site inspections and off-site supervision. Salary scales are typically low, making staff retention a major challenge because, once trained and proficient, staff is easily lured away by higher paying commercial banks or other financial institutions.

In addition, supervisory skills must continuously evolve in response to industry trends. In recent years, the widespread adoption of risk-based supervision, combined with ever more complex banking regulations and supervision (including the emerging Basel II framework) has placed a premium on the constant upgrading of supervisory skills. Thus, countries that are unable to provide the right incentives to attract and retain suitably qualified supervisory staff run the risk of falling ever further behind supervisory practices in the rest of the world.

The design of supervisory structures will have to take into account these capacity constraints for the foreseeable future. Capacity constraints clearly argue against setting up (new) separate agencies for each segment of the system, as this would result in a spreading of resources too thinly across several different regulatory bodies. It also calls into question plans that would merely "upgrade" or strengthen existing separate agencies. Faced with capacity constraints it is crucial to pursue economies of scale.

The issue of institutional design has also implications for the ability of the regulatory agency or agencies to attract and retain suitably qualified staff (for example, by providing them with a career ladder) and the incentive structures faced by regulatory personnel. Finally, capacity constraints also argue for retaining a role for the central bank in the supervisory process as one of the better-resourced institutions in most countries.

B. The Role of the Central Bank

In the specific case of SSA, there are some strong arguments for central banks to remain involved in financial sector supervision. These arguments tend to outweigh the standard arguments in favor of the separation of monetary policy and supervision, at least at the

current stage of development in SSA. In line with Goodhart (2002),²⁵ we see three major arguments for keeping the central bank involved in the regulatory process.

First, it can reasonably be expected that the banking sectors will remain the dominant segment in the financial systems in the foreseeable future. Moreover, as Table 2 shows, the central banks are currently responsible for banking supervision in a large number of countries. This role is partly the result of historical factors, but also reflects the synergies between banking supervision and monetary policy, which are particularly important in bank-dominated financial systems. There are also important informational advantages in keeping banking supervision and monetary policy in the same institution, as the information collected for the two functions overlaps to a great extent. Hence, the combination of the synergies between monetary policy and banking supervision, and the expectation that banks will remain dominant justifies a continued supervisory role for the central banks.

Second, developing economies are more prone than advanced countries to periods of financial instability or even financial crises. This places a particularly high premium on the strength and effectiveness of crisis management arrangements. The central bank is an indispensable part of these arrangements, both because of its traditional lender-of-last-resort function and also because it often possesses the greatest expertise in the financial sector. Most ministries of finance lack the skilled and experienced staff needed to take on a lead role in crisis management. By contrast, there is a greater likelihood that, if these resources are to be found anywhere, they are to be found in the central bank. Thus, keeping a meaningful role for the central bank facilitates coordination at times of crises—including an easier collection and exchange of information—and increases the likelihood that high-quality staff can be hired and trained.

The third, and arguably the strongest, reason is that in many developing countries, central banks are often one of the few reputable institutions with a reasonable degree of independence from the political process and also from commercial interests. Several advantages come with this reputation and independence.

- Typically, only the central bank has the financial resources and budgetary independence to ensure that regulation is adequately funded. The alternative is to have the regulatory agency funded by an appropriation from general government revenue, an approach that is almost universally a recipe for ensuring that the regulator lacks the resources necessary to perform its tasks with appropriate independence and professionalism. The approach used in several advanced markets in which the regulator is funded by a levy on the regulated industry remains impractical for many small, developing economies. Their financial sectors often lack the profitability to be able to support a direct levy of this type and, in many cases, it would risk leaving the regulator dependent on a handful of large and politically influential institutions for its main revenue source.

²⁵ See also Llewellyn (2006, pp. 128–132) for a review of these arguments.

- Their status allows them to attract and retain the best staff, and pay salaries at close to market levels, which creates a virtuous cycle with higher-quality staff leading to higher credibility for the institution, which in turn strengthens its independence. Despite lingering problems with independence and staff quality in some countries, the central bank is very often the only agency in a country that brings these qualities together. So, establishing a new agency that is properly funded and has the same quality of staff, and enjoys credibility and independence, will, in most cases, be a very challenging undertaking. Mwenda's (2004) analysis of the new supervisory agency in Zambia clearly attests to these problems. Among the main problems, he cites the fact that the Pension and Insurance Authority has no political or budgetary autonomy and that its staff has no legal immunity. These features put the agency in a weak starting position and will make it very hard to bring its regulation and supervision to the level exercised by the central bank.
- If banking supervision remains a central bank responsibility for the above reasons, the central bank can also reap some scale-and-scope economies if some other sectors with bank-like features are also brought under its supervisory umbrella.
- From a practical point of view, few developing countries can afford the creation of another agency with the same quality level and independence as the central bank, or more broadly, cannot afford a complex and costly regulatory system.²⁶ Hence, there are few realistic alternatives to providing the central bank with a role in banking supervision in many developing countries, and its role may need to be extended to cover other sectors and sub-sectors, if other credible regulators are difficult to create.

In the case of SSA, these arguments for keeping the central bank in the supervisory process seem to outweigh the often-cited drawbacks of keeping monetary policy and supervision under one roof. Even in advanced economies, the arguments for and against separation are finely balanced (see, among others, Goodhart and Schoemaker (1995) for a summary of the main arguments for and against), but the additional factors in the SSA are sufficient to tip the balance in favor of the central bank taking on responsibility not only for banking supervision, but perhaps for (at least) a number of other sectors as well.

C. Regulatory Strategy: Scope and Intensity

A response to the capacity-constraint problem is to prioritize the need for regulation of the various segments in the financial sector. For example, if a segment is small, undeveloped, and showing little sign of growth, it may be a more efficient use of scarce resources to first regulate other segments that are more significant for financial system stability. The process of prioritization requires an analytical framework, which we refer to as a "regulatory strategy." In effect, a regulatory strategy is analogous to a risk-based approach to supervision, in which attention and resources are focused on those individual institutions considered to represent the highest risk. In the case of a regulatory strategy, the focus is on

²⁶ This argument has been used for small economies more generally—see McDowell (2001).

segments of the financial system rather than individual institutions, but the basic principle is the same.

In developing a regulatory strategy, two issues need to be considered, which are (i) at which point in time during its development should a segment of the financial system be regulated and, thus, be brought into the supervisory net. This is the issue of **scope**; and (ii) once a segment has been identified as needing supervision, what type of regulatory and supervisory regime should be imposed. This is the issue of **intensity**. Such a regulatory strategy will need to be regularly updated to stay abreast of market developments and contain, monitor, or control emerging risks, particularly in an environment where public confidence in financial systems is fragile and could be undermined easily by a crisis. The primary purpose of developing a regulatory strategy is to allow strategy and structure to be considered together. The agreed-upon structure should be such that it serves the strategy by allowing for scale economies and building capacity.

Regulatory scope

From the point of view of LICs, the reference point for determining regulatory scope needs to be the potential social costs of institution failure. Determining the scope requires a two-step process. First, following Carmichael and Pomerleano (2002), one has to rank the nature of the particular financial promises being made by given groups of financial institutions.²⁷ Financial promises can be distinguished according to three characteristics, which are (i) the inherent difficulty of honoring the promise; (ii) the difficulty faced by the consumer in assessing the creditworthiness of the promisor; and (iii) the adversity caused by promissory breach. If one is to rank the types of financial institutions in order of decreasing promissory intensity, banks would most likely be ranked first, followed by other deposit-taking institutions (credit cooperatives, credit unions, or microfinance organizations that take deposits), insurance companies, defined benefit pension funds, and securities companies. Such a ranking may differ slightly for country-specific reasons, but would be fairly generally applicable.

Once such a ranking has been established, in a second step, the relative size of a particular group of institutions, and possibly other considerations²⁸ enter the picture as a proxy for the systemic risk that this particular segment of the system would pose. So, once a sector that has been identified as “risky” in the first step has passed a certain threshold in terms of share in the financial system, the regulatory and supervisory net should be expanded to include this sector. This step also implies that, up to a certain point of development of a segment, it might be put on a lower priority in terms of supervision.

²⁷ See also FIRST Initiative (2004).

²⁸ For instance, if in a country insurance companies typically belong to the same group as a bank, there are reasons to extend the “prudential regulatory net” to insurance companies, perhaps before any other segment.

Applying this two-step framework can assist governments in determining whether, and at what point in time, a specific sector should fall under the supervisory umbrella. For instance, it would indicate that if two segments of the system are of the same relative size, priority should be given to that segment which, if it were to encounter problems, would give rise to the greatest loss of economic output and/or would require substantial public funds to resolve. Adopting this framework can also be of great help in avoiding regulatory gaps in the system.

Based on this framework, credit cooperatives, credit unions, and deposit-taking microfinance institutions should probably (already) be regulated in a number of SSA countries. In the same vein, the insurance sector and securities business should already be supervised in some other countries. In this framework, the limited capacity issue is addressed by allowing governments to “grow into the regulatory supervisory business” instead of having to do everything at once and at the same intensity.

Decisions as to when a financial sector segment is “ripe” for supervision require judgment and knowledge of the local circumstances that go beyond the sheer interpretation of numbers. For instance, the size of the microfinance sector may just be at, say, 4 percent of the total financial sector, but even at that size a possible crisis in this segment (because it is not supervised properly), could spill over into the banking system, because in the eyes of the (not well-informed) population, the borderline between these two types of institutions could be vague.

Regulatory intensity

Once it has been decided that a sector needs to be regulated because of the (systemic) risks it poses, regulatory intensity comes into play: the authorities need to decide on the desired and desirable regulatory and supervisory intensity.

Regulatory intensity refers to (i) the nature and the number of prudential rules and regulations;²⁹ (ii) the reporting requirements for off-site monitoring; and (iii) the on-site inspection framework that should be imposed on a certain category of institutions.³⁰ Public oversight of a particular segment of the system might begin with a basic licensing regime, be extended to requiring occasional reports to be filed with the regulator, and, at its most intensive stage, and apply a specific set of prudential requirements with on-site and off-site monitoring. For example, applying an extensive set of prudential requirements to

²⁹ The literature makes a distinction between three types of regulations: *economic regulations* encompassing rules regarding pricing, profits, entry and exit; *information regulations* governing information that needs to be provided to the supervisors and the public at large; and *prudential regulations*, which govern the stability of the business and its activities.

³⁰ For instance, there is a broad consensus by now that deposit-taking institutions, other than banks, should have a lighter regulatory regime than banks (e.g., lower minimum capital, perhaps lower capital requirements), should have lower-frequency reporting requirements and longer cycles of on-site inspections (if at all necessary). On the regulation of credit cooperatives, see for instance, Cuevas and Fischer (2006). On microfinance institutions, see Hardy, Holden, and Prokopenko (2002), Christen, Lyman, and Rosenberg. (2003), and Gulde, Wajid, and Vasquez (2005).

microfinance institutions might not be appropriate, but it would be appropriate to require them to be licensed and to file an annual or semi-annual return with their regulator. This reporting would provide indications regarding the growth of the sector and individual companies within it. Once the reported activities pass a certain threshold, which makes them systemically more important, the regulatory and/or supervisory regime could be intensified, either for some individual institutions or for the segment as a whole.³¹

Decisions on regulatory intensity are important because they allow scarce supervisory resources to be allocated to the areas of highest risk to the system. Low regulatory intensity requires relatively few resources, since both off-site monitoring and on-site inspections need to be less intense for smaller, less-risk-prone sectors. Such “supervision-light” approach should result in less pressure on staff, and, therefore, alleviate the capacity constraints somewhat.

The cost of regulation

When adopting a regulatory strategy, it is important to bear in mind that regulatory scope and intensity have a direct bearing on the costs of regulation. Following Goodhart (1988), we identify direct and indirect costs.³² The direct costs are mainly the resource costs (staff, equipment, buildings), and one purpose of supervisory restructuring is to contain them through achieving scale economies. However, in the context of SSA developments, the indirect costs are also extremely relevant: excessive regulation, or regulation introduced at too early a stage in the development of a particular segment, could reduce competition and stifle innovation. In Africa’s fledgling financial systems, regulatory intensity should be such that it does not kill new avenues to finance. The fact of being unregulated has certainly led some sectors in some countries to a certain degree of success in that it has provided access to finance for social groups that have no access to the regulated system. In bringing them under the regulatory umbrella, a balance needs to be struck between containing the risks that a sector poses and allowing it to grow and bring competition and innovation.³³ These considerations suggest that the primary focus of regulation should be on the risks to financial stability presented by a particular segment, and that the regulatory burden on other segments should be kept as light as possible to allow the process of financial deepening to progress.

³¹ This strategy should, of course, ensure that the playing field for several groups of institutions with similar activities remains level.

³² On the costs of regulation, see also Goodhart (1999) and, in the context of institutional restructuring, Llewellyn (2006).

³³ Llewellyn (2006) notes that these indirect costs—which are difficult to measure—could rise even if the direct costs are reduced. Admittedly, this can happen in any supervisory structure, i.e., with or without separate regulators.

V. A TYPOLOGY OF POSSIBLE MODELS

This section identifies five possible models of supervisory structure that might be relevant to countries of SSA—four with central bank involvement and one without (Table 4). The weighting in favor of models with central bank involvement is deliberate, as it follows from one of the conclusions of the previous section—that there should be a role for the central bank in the supervisory process, and, certainly, in those countries where central banks already have a supervisory role.

The pros and cons of each of the models are reviewed in the light of the regulatory strategy presented in the previous section. One model would be unification of all supervision within the central bank (also called the Singapore model). The second one represents a structure whereby the supervisory agency has logistical and budgetary links to the central bank, but from a governance point of view, it could operate at arm's length from the central bank. Several variations of this model exist, but we have called it the Irish model. Models three and four are bi-polar with the central bank retaining or acquiring supervision over some sectors and another multi-sectoral agency taking the other ones. The fifth model is the “FSA model” with a unified supervisor outside the central bank.

Model 1—The Singapore model

The unification of all supervisory functions inside the central bank has several advantages. New supervisory activities could benefit from the existing ones (scope and scale economies), there would be no regulatory gaps and regulatory scope, and intensity could be built up smoothly—contentious inter-agency issues could be avoided. In addition, supervision could benefit from the central bank's infrastructure, budget, and expertise, and also from its prestige and, potentially, independence. Crisis management would be facilitated as well.

On the downside, the country would be faced with an extremely powerful institution. Some scholars see this as a potential drawback, although solid accountability arrangements should be able to keep this institution “in check” (Hüpkes, Quintyn and Taylor, 2005). In addition, the commonly cited disadvantages of combining banking supervision and monetary policy (conflicts of interest, moral hazard) would apply in a particularly pronounced form. Moral hazard would be a particular concern if it led the customers of NBFIs to believe that they enjoyed the same level of protection as bank depositors. However, in the circumstances of SSA, the advantages of this model may be sufficient to outweigh these drawbacks, especially given the relative smallness of the NBFIs sector.

Table 4. Overview of Advantages and Disadvantages of Selected Supervisory Structures

Structure	Advantages	Disadvantages
Unified inside the central bank (Singapore model)	No regulatory gaps; not contentious (no turf battles between agencies; central bank logistical support; supervisory function benefits from central bank independence, prestige, budget, expertise; financial stability responsibility is solely for central bank; economies of scale; crisis management unified.	Moral hazard (LLR, etc). All responsibility is on the central bank; central bank is very powerful; and central banks are typically small, hence, potential capacity limitations.
Separate agency sharing infrastructure of central bank (Irish model)	Agency enjoys central bank logistical and budgetary support; benefits from central bank expertise; indirectly benefits from central bank prestige; economies of scale; financial stability; close to, but not in central bank, therefore no moral hazard, no institution that is too powerful (unless perceived as such); no regulatory gaps; and crisis management unified.	Will require expansion of central bank staff/budget.
Partially unified A (only bank supervision in central bank)	Central bank responsible for banks (financial stability, monetary policy argument); central bank not too involved in all sectors (remains small and not too powerful); burden on central bank limited. Limits contentious issues (with MOF for instance).	Possibility for regulatory gaps remains; start-up problems for other agency (see above); crisis management coordination needed; transfer of responsibilities is needed when deposit-taking NBFIs become banks.
Partially unified B (all deposit-taking NBFIs supervised by central bank)	No regulatory gaps in most important segments from financial stability point of view; no moral hazard issues; banks and other deposit-taking institutions in continuum, no regulatory gaps, level playing field can be better guaranteed; limits contentious games; financial stability argument (key sectors supervised by central bank); and central bank not too powerful.	Start-up problems for new agency (capacity, prestige); possibility of regulatory gaps remains but is more limited; and crisis management coordination needed.
Unified outside central bank (U.K.-FSA model)	Central bank is not too powerful; no moral hazard issues; economies of scale; and no regulatory gaps.	No tradition—has to start from scratch; capacity building needed; and coordination of crisis management with central bank still needed.

Model 2—The Irish model

The Irish model has most of the advantages of Model 1, but few of its drawbacks and therefore seems to be a model worth studying in developing countries.³⁴ Under this model, the supervisory function is closely linked to the central bank and yet remains at arm's length. The supervisory agency is legally separate from the central bank, is established under its own statute, and has its own governing board separate from that of the central bank (although there may be some overlap in the membership of the two boards).^{35 36} However, the regulatory agency shares the infrastructure of the central bank (premises, IT systems, data collection), and its staff are employees of the central bank on the same terms and conditions as other central bank staff. This construction has the advantage that supervision can benefit from the central bank's logistical and budgetary support (scale economies with the central bank and scale economies as a unified supervisor). Since it is assimilated with the central bank, it can even benefit from the central bank's prestige and independence. On the other hand, because there is a distance with the central bank, the construction escapes the often-listed conflict of interest and moral hazard issues of supervision being too close to monetary policy.

As a unified supervisor, it can plan a strategy for regulatory scope and intensity, while avoiding any regulatory gaps. Crisis management should be easy to arrange, given the proximity of the central bank. Several variations on this model can be found, for example, in Finland and France, and (until recently) in Poland. Although South Africa provides an example of model 3, with banking supervision housed in the central bank, it also has some similarities with this model, as the governance structure for the banking supervision function is different from the one for the monetary policy function.

Model 3—Bi-polar with banking supervision in the central bank

The third model is a bi-polar or partially unified model. It leaves banking supervision with the central bank and regroups supervision of all other segments in a separate agency—often to be newly established. The main advantages of this model are that the central bank remains involved in the key sector—banking. Crisis management (at least for banking problems) and coordination with financial stability remain guaranteed and bank supervision can benefit from the central bank's infrastructure, independence, and prestige. Moreover, being in the central bank brings guarantees of reasonable salaries and high-quality staff.

³⁴ Implementation of this model may require legal changes, which are not always easy to make. In Swaziland, for instance, this model was considered seriously, but the legal framework prevents the central bank from establishing subsidiaries, and changing the legal framework was considered too difficult (FIRST Initiative (2004)).

³⁵ For example, the governor or deputy governor of the central bank might serve on the board of the regulator in an ex officio capacity.

³⁶ Quintyn, Ramirez, and Taylor (2006) point out that in the Irish case, lines of accountability exist from the supervisory agency to the central bank governor, making, in fact, the supervisory function subordinate to the central bank. For countries studying this model, such lines of accountability can be modified as necessary, because they are not inherent to the model presented here.

Success of this model depends largely on the way the other supervisory agency is set up and how it operates. Usually, the institution has to be built up from the ground and needs to be endowed with an appropriate governance structure and budgetary autonomy in order to be an independent and effective supervisor. In many developing countries, it has proven extremely difficult to establish new agencies without political interference and to staff them with competent people. As indicated above, Mwenda (2004) observes that the Pension and Insurance Authority in Zambia lacks many features that could make it an independent and, therefore, effective supervisor, such as the fact that the registrar is nominated by the minister of finance, has reporting lines to the permanent secretary—who also has budgetary control—and that staff has no judicial immunity.

This model has other drawbacks as well, which are (i) some deposit-taking institutions or bank-like entities will be outside the scope of the central bank's supervision, and yet they might be significant from a financial stability perspective; (ii) scope economies are hard to realize because the segments with a potential for scope economies—banks and deposit-taking NBFIs—are supervised by separate agencies; and (iii) the stand-alone agency may lack adequate funding and resources, especially if it has to rely on appropriations from the general government budget. On the positive side, the agency can gradually widen its regulatory scope and vary regulatory intensity, since it is responsible for all sectors excepting the banking sector.

Model 4—Bi-polar with supervision of all deposit-taking institutions in the central bank

This model differs from the previous one in that all deposit-taking activities (including, for example, credit cooperatives and microfinance institutions) are supervised by the central bank and all other financial sectors by a newly established agency. In addition to the advantages listed for model 3, this model has the added advantage that the central bank supervises all those institutions that are most likely to be significant from a system-stability perspective. It can therefore decide on the regulatory scope and on the regulatory intensity (and aim for a level playing field) for these sectors, and, hence, benefit from scale-and-scope economies in its operations. Transitions among deposit-taking institutions are also facilitated, e.g., if a credit cooperative or a microfinance institution “graduates” to become a bank. Also, regulatory gaps in the deposit-taking business are eliminated in this model.

The issues discussed above for model 3 with respect to the establishment of a separate agency from scratch are the same in this case. However, the advantage of this model is that it brings the supervision of all banks and bank-like entities together under one roof in the central bank. The new agency has a wide(r) variety of types of institutions in its supervisory net, but scale economies can be reaped nonetheless.

Model 5—The U.K.-FSA model

A unified regulator outside the central bank seems the least desirable for developing countries. As discussed earlier, the conglomerates-argument and the blurring-of-boundaries argument are not applicable in largely bank-dominated financial systems. Moreover, not involving the central bank in the supervisory process and instead starting a new institution

from scratch will be very demanding in terms of institution and capacity building. In the absence of the need to supervise financial conglomerate groups, the only advantages with this model are that (i) economies of scale can be realized—although it may take some time for them to become apparent, given the extent of institution building that is required; (ii) there will be no regulatory gaps; and (iii) the central bank will not be too powerful and there will be no moral hazard problems in the central bank.

Synthesis

On balance, the two models that seem to have the most to recommend them in the circumstances of SSA are Models 2 and 4:

- Both models take advantage of the central bank's prestige and capacity, which makes capacity building (and retention) easier and faster. As discussed earlier, it is easier for a central bank with an established reputation to attract new staff;
- Both keep the systemically most significant financial activities (as defined above) within the central bank. With this, it allows the central bank to work out a supervisory strategy around regulatory scope and intensity and, at the same time, to enjoy scale-and-scope economies;
- Both allow for crisis management coordination and for coordination with financial stability policies within the central bank;
- Model 4 allows the agency responsible for nondeposit-taking institutions to build up capacity smoothly (the to-be-supervised sectors are typically still small) and establish its own supervisory culture. Transfer of personnel from the central bank to the new agency can be minimal, so the cultural adjustment will be minimal, too; and
- Regulatory gaps can be completely avoided in Model 2 and are very unlikely in Model 4, because there is a relatively clear boundary between the types of activities supervised by both institutions.

As indicated, country-specific circumstance may always justify the selection of another model, either one of those discussed above, or another country-specific one. This paper only intended to guide the debate somewhat by presenting an analytical framework that sheds light on the most critical issues in the selection process and by highlighting pros and cons of potential models that fit the strategy.

VI. CONCLUSIONS

Financial sector development in SSA has entered a new stage. In the wake of numerous banking crises in the 1980s and 1990s, renewed efforts to build more sound financial systems and to address the issues of access to financial services are beginning to bear fruit. In several countries of SSA, financial sector development is accelerating. New types of financial intermediaries are surfacing and, slowly, becoming systemically significant.

However, the success of efforts to bring about financial deepening also requires the parallel development of supervision and regulation. Indeed, lack of regulation and supervision could lead to new crises that might quickly erode the achieved results of the past decade. However, as this paper has shown, supervisory structures in SSA—perhaps with the exception of bank supervision—are underdeveloped or even nonexistent.

The past decade and a half have seen increased recognition of the importance of the issue of the institutional structure of regulation for the efficiency and effectiveness of regulation, leading many countries to revisit their institutional arrangements. Their experiences provide a body of knowledge on which SSA (and LICs more broadly) can draw. However, it is equally important to bear in mind that the institutional structure is only one element of an overall regulatory reform package. In particular, in the SSA case, the effort to (re)build the institutional structure needs to be accompanied by measures to strengthen regulatory frameworks and supervisory capacity.

This paper's contribution to the debate has consisted of presenting an analytical framework that allows individual countries to make decisions about the most desirable and effective institutional structure in an evolutionary manner. The two most important factors to be taken into account in this framework are the countries' capacity constraints and the need to keep a role for the central bank in the supervisory process.

Our response to these issues is to recommend that countries develop what we have called a "regulatory strategy." This should be built around two types of decisions to develop regulatory capacity: (i) at which point in time in its development should a segment of the financial system be regulated and, thus, be brought into the supervisory net? This is the issue of regulatory scope; and (ii) once a segment has been identified as needing supervision, what type of regulatory and supervisory regime should be imposed? This is the issue of regulatory intensity. Following Chandler's remarks on strategy and structure, we have suggested that the institutional structure of regulation should be designed in light of a country's regulatory strategy.

Finally, we have reviewed some possible supervisory models for SSA in light of this framework. Out of the five models discussed, two seem to have the most to recommend them in the circumstances of SSA. The first one has the (unified) supervisory entity linked to the central bank (in terms of infrastructure and logistics), but with a separate governance structure. The second one is a bi-polar model with supervision of all deposit-taking institutions housed in the central bank and supervision of all other NBFIs in a separate agency. Both models preserve an important role in supervision for the central bank, which is deemed important under the current circumstances. They also allow the supervisory agency—in varying degrees, however—to benefit from the central bank's prestige and capacity, minimizing the possibility of regulatory gaps.

REFERENCES

- Abrams, Richard, and Michael Taylor, 2000, "Issues in the Unification of Financial Sector Supervision," IMF Working Paper 00/213 (Washington: International Monetary Fund).
- Basel Committee on Banking Supervision, 1997, "Core Principles for Effective Banking Supervision" (Basel: Bank for International Settlements).
- Basu, Anupam, Rodolphe Blavy, and Murat Yulek, 2004, "Microfinance in Africa: Experience and Lessons from Selected African Countries," IMF Working Paper 04/174 (Washington: International Monetary Fund).
- Bezuidenhout, Andre, 2004, "The South African Case," in *Aligning Financial Supervisory Structures with Country Needs*, ed. by Jeffrey Carmichael, Alexander Fleming, and David Llewellyn (Washington: World Bank Institute).
- Blair, Michael, and others, 2001, *Blackstone's Guide to the Financial Services and Markets Act 2000* (London: Blackstone Press).
- Briault, Clive, 1999, *The Rationale for a Single National Financial Services Regulator*, FSA Occasional Papers in Financial Regulation No. 2 (London: Financial Services Authority)
- Carmichael, Jeffrey, and Michael Pomerleano, 2002, *The Development and Regulation of Non-Bank Financial Institutions* (Washington: World Bank).
- Carmichael, Jeffrey, Alexander Fleming, and David Llewellyn, 2004, *Aligning Financial Supervisory Structures with Country Needs* (Washington: World Bank Institute).
- Christen, Robert, Timothy Lyman, and Richard Rosenberg, 2003, *Microfinance Consensus Guidelines: Guiding Principles on Regulation and Supervision of Microfinance* (Washington: World Bank).
- Čihák, Martin, and Richard Podpiera, "Is One Watchdog Better than Three? International Experience with Integrated Financial Sector Supervision," IMF Working Paper 06/57 (Washington: International Monetary Fund).
- Commonwealth of Australia, 1996, "Financial System Inquiry Interim Report" (Wallis Commission) (Canberra: Australian Government Publishing Service).
- Courtis, Neil, ed., 2005, *How Countries Supervise Their Banks, Insurers, and Securities Markets* (London: Central Banking Publications).
- Cuevas, Carlos, and Klaus Fischer, 2006, "Cooperative Financial Institutions: Issues in Governance, Regulation and Supervision," World Bank Working Paper No. 82 (Washington: World Bank).

- De Luna Martinez, Jose, and Thomas Rose, 2003, "International Survey of Integrated Supervision," in *Financial Regulation: A Guide to Structural Reform*, ed. by Douglas Arner and Jan-juy Lin (Hong Kong: Sweet and Maxwell Asia).
- FIRST Initiative, 2004a, Swaziland: Supervision of Nonbank Financial Institutions – An Initial Assessment and Proposed Strategy (Carmichael Consulting Pty Limited).
- _____, 2004b, Botswana: Nonbank Financial Institutions – Supervision and Strategy (Carmichael Consulting Pty Limited).
- Fleming, Alexander, and Silvina Vatnick, 2006, "Updated International Survey of Integrated Financial Supervisors," paper presented at World Bank-IMF conference on Aligning Financial Supervisory Structures with Country Needs, Washington, June.
- Goodhart, Charles, 1988, "The Cost of Regulation," in *Financial Regulation – Or Over-Regulation?*, ed. by Arthur Seldon (London: Institute of Economic Affairs).
- _____, 1995, "Some Regulatory Concerns," Financial Market Group Special Paper No. 79 (December) (London: London School of Economics).
- _____, 1998a, "Regulation in Developing Countries," in *Financial Regulation – Why, How and Where Now?*, ed. by Goodhart and others (London and New York: Routledge).
- _____, 1998b, *The Emerging Framework of Financial Regulation*, a collection of papers compiled by the Financial Markets Group of the London School of Economics (London: Central Banking Publications Ltd.).
- _____, 2002, "The Organization Structure of Banking Supervision," *Economic Notes by Banca Monte dei Paschi di Siena*, Vol. 31, No. 1, pp. 1–32.
- _____, and Dirk Schoenmaker, 1995, "Institutional Separation between Supervisory and Monetary Agencies," in *The Central Bank and the Financial System*, ed. by Goodhart (Cambridge, Massachusetts: MIT Press).
- Gulde, Anne-Marie, Kal Wajid, and Francisco Vasquez, 2005, "Microfinance: A View from the Fund" (unpublished; Washington: International Monetary Fund).
- Gulde, Anne-Marie, Catherine Pattillo, and Jakob Christensen, 2006, *Sub-Saharan Africa. Financial Sector Challenges* (Washington: International Monetary Fund).
- Hardy, Daniel, Paul Holden, and Vassili Prokopenko, 2002, "Microfinance Institutions and Public Policy," IMF Working Paper 02/159 (Washington: International Monetary Fund).

- Hawkesby, Christian, 2000, "The Institutional Structure of Financial Supervision: A Cost-Benefit Approach," *The Journal of International Banking Regulation*, Vol. 2 (July), pp. 236–54.
- Honohan, Patrick, and Thorsten Beck, forthcoming, "Making Finance Work for Africa" (Washington: World Bank).
- Hüpkes, Eva, Marc Quintyn, and Michael Taylor, 2005, "The Accountability of Financial Sector Supervisors: Theory and Practice," *European Business Law Review*, Vol. 16, No. 6, pp. 1575–1620.
- International Monetary Fund, 2006, *Regional Economic Outlook: Sub-Saharan Africa, May 2006*, World Economic and Financial Surveys (Washington).
- Kim, Daesik, and others, 2002, "Suggestions to Improve the Deposit Insurance System in Korea" (December) (unpublished; Korea Money and Finance Association).
- Kim, Hong-Bum, and Chung Lee, 2004, "Financial Reform and Supervisory Failure: A Critical Appraisal of Post-Crisis Reform in Korea," Working Paper 2004-02, Korea Development Institute.
- _____, 2005, "Financial Reform, Institutional Interdependence and Supervisory Failure in the Post-Crisis Korea," paper presented at the 2005 KDI/KAFA Conference on Korea's Corporate Environment and Sustainable Development Strategy, Seoul, July.
- Llewellyn, David, 2006, "Integrated Agencies and the Role of Central Banks," in *Handbook of Central Banking and Financial Authorities in Europe*, ed. by Donato Masciandaro (Northampton, UK: Edward Elgar).
- Masciandaro, Donato, 2004, "Unification in Financial Sector Supervision: The Trade-off Between Central Bank and Single Authority," *Journal of Financial Regulation and Compliance*, Vol. 12, No. 2, pp. 151–69.
- _____, 2006a, "E Pluribus Unum? Authorities' Design in Financial Supervision: Trends and Determinants," *Open Economies Review*, Vol. 17 (January), pp. 73-102.
- _____, 2006b, "Central Banks and Single Financial Authorities: Economics, Politics and Law," in *Handbook of Central Banking and Financial Authorities in Europe*, ed. by Donato Masciandaro (Northampton, UK: Edward Elgar).
- _____, forthcoming, "Divide et Impera: Financial Supervision Unification and Central Bank Fragmentation Effect," *European Journal of Political Economy*.
- Mwenda, Kenneth, 2004, "Unified Financial Services Supervision in Zambia: The Legal and Institutional Frameworks," *Zambia Law Journal*, Vol. 36, pp. 67–109.

- Organization for Economic Cooperation and Development, 2005, "Designing Independent and Accountable Regulatory Agencies for High Quality Regulation," proceedings of an Expert Meeting in London, January (Paris).
- Peek, Joe, Eric Rosengren, and Geoffrey Tootell, 1999, "Is Bank Supervision Central to Central Banking?" *The Quarterly Journal of Economics*, Vol. 114 (May), pp. 629–53.
- Quintyn, Marc, and Michael Taylor, 2003, "Regulatory and Supervisory Independence and Financial Stability," *CEsifo Economic Studies*, Vol. 49, No. 2, pp. 259–94.
- Quintyn, Marc, Silvia Ramirez, and Michael Taylor, forthcoming, "Fear of Freedom. Politicians and Independence and Accountability for Financial Supervisors," IMF Working Papers (Washington: International Monetary Fund).
- Taylor, Michael, 1995, *Twin Peaks: A Regulatory Structure for the New Century* (London: Centre for the Study of Financial Innovation).
- _____, 1996, *Peak Practice* (London: Centre for the Study of Financial Innovation).
- _____, and Alex Fleming, 1999, "Integrated Financial Supervision. Lessons from Northern European Experience," Policy Research Working Paper No. 2223 (Washington: World Bank).