Working paper 406

Institutional Challenges for Effective Banking Regulation and Supervision in Sub-Saharan Africa

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Abstract

This paper discusses the challenges that SSA countries face in implementing financial regulation. It looks in particular at the issue of capacity (human, technical) for effective regulation and supervision. It argues that the benchmark for capacity assessment in the region is being set too high and inappropriately, and that SSA countries can settle on simpler rules in line with their specific needs. From this perspective, the analysis, based on a number of sources, is that SSA is making significant progress in acquiring capacity and resources, as well as gradually putting in place rules and tools for effective regulation and supervision, although challenges remain, for example regarding what capital adequacy framework to adopt and how to regulate foreign banks.

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1 Introduction

Financial systems in African low-income countries (LICs) are considered the least integrated into the global financial system, with relatively higher levels of integration found in most countries from all other (developed and developing) regions of the world. Their less integrated financial systems have been pointed out as a critical factor as to why the financial transmission channels were less important than the macroeconomic and trade channels in explaining the impacts of the 2007-2009 global financial crisis on the African continent, and why their financial systems escaped virtually unscathed from the crisis. However, Africa is not entirely insulated from financial globalisation, nor is it immune from its potentially destabilising effects, or from the challenges it creates for national financial regulatory authorities. In an increasingly financially globalised world, African LICs face at least three inter-connected challenges concerning their financial systems:

1. Whether and how to adopt complex regulatory approaches designed for developed financial systems;
2. How to address the challenges arising from the presence of foreign banks in their jurisdictions;
3. How best to manage risks from a more integrated financial system with the rest of the world, as a result of capital account liberalisation (CAL).

This paper maps the regulatory challenges and capacity constraints facing African LICs for effective financial regulation and supervision. It does not cover all challenges and constraints facing African LICs; it focuses on those relating to the three inter-connected issues enumerated above.The mapping exercise is based essentially on available material. The broader aim is to help "bridge on-going discussions on reforming financial regulation at the global level and measures needed to strengthen financial stability and growth in Africa".[1]

In addressing capacity issues, the paper asks capacity for what? Nowadays, developing country regulatory and supervisory capacities are being assessed in terms of their ability to implement and use with efficacy standards of international best practice, but, since the global financial crisis, a wave of criticism has emerged towards complex regulatory approaches for financial systems, and the need of simpler rules (see next section). Thus, in a sense, the benchmark for capacity assessment is being set too high and inappropriately. These countries can settle on simpler rules more in line with their specific needs, and it is in this light that capacity in developing countries should be discussed. Do they have regulatory and supervisory frameworks in place that meet their needs? The fact that African banking systems were not strongly affected by the global crisis supports the hypothesis that their regulatory and supervisory frameworks were working reasonably well, including in areas in which links exist between African and international financial systems.

[1] This quote is extracted from the ESRC project proposal under which this paper has been undertaken.

This paper in Section II discusses the implementation, in Africa, of complex regulatory approaches designed for developed financial systems, focusing on the question: how feasible or desirable is it to implement such approaches in African jurisdictions? Section III discusses the further regulatory challenges that foreign banks create for African regulators. Section IV analyses the risks that CAL creates, focusing in particular on currency mismatches, which may constitute an important threat to the stability of African financial systems. Section V summarises the main points and provides questions for further research.

2 Complex regulatory approaches designed for developed financial systems

International financial regulation by the Financial Stability Board (FSB) and the Basel Committee, which include quite complex rules, is designed having in mind developed and emerging countries.

Since the global financial crisis, the tide of opinion is growing against complex rules for financial regulation, and in particular capital rules in banking regulation. Haldane and Madouros (2012), Hoenig (2012) and others have forcefully made the point that complex rules are not only less effective but, in fact, they can be even detrimental. Proposals to revert financial regulation back towards simpler rules,[2] based more on "rules of thumb" and judgement and away from prescription, have sprung up. Even the Basel Committee has looked into this issue through the establishment of a Task Force on Complexity and Comparability.[3]

The criticisms revolve around two main issues: the effectiveness of complex rules in helping avoid bank failures and financial crises, and the sheer scale of resources they require, in terms of sophisticated risk assessment models, large databases and number of regulators in each jurisdiction. A McKinsey study on Basel III and the European banking system finds that, with the new capital adequacy framework, complexity rises in the areas of design, data quality and reporting, and operations, and that many banks have "vastly underestimated" the required efforts as well the financial costs for regulatory compliance (Harle et al., 2010). These criticisms and findings are relevant for developed countries and their financial systems, but even more so for developing and especially low-income countries, which lack financial, technical and human resources to adopt these rules.

Specifically in the area of capital rules for banks under the Basel II framework, the Basel Committee recognises that developing countries may have different needs and lack resources, and therefore offers alternative approaches, characterised by lower levels of complexity and for being less resource intensive. Thus, in this case, do complex rules matter to low-income countries? After all, these countries do not have the legal obligation to implement them. The Basel framework gives them the options of alternative approaches, which are much simpler than the more complex approaches for determining risk for different types of assets: the standardised and the simplified standardised approaches.[4] Neither of these latter approaches is based

[2] See, for example, Haldane and Madouros (2012).

[3] Cornford (2012) provides an excellent summary of these recent trends.

[4] The more complex approaches are foundation internal ratings based (F-IRB) and the advanced IRB (A-IRB) approaches.

on internal risk models. The standardised approach is reliant on external credit rating agencies, while the simplified approach is on pre-determined risk buckets, as in Basel I.

However, when Basel II was adopted as a new capital adequacy framework, it seemed that African LICs felt that adoption of the most complex rules, initially designed for developed countries, was a way to signal they were adopting standards of international best practice, even if they were not the most appropriate to meet their needs. There was a concern that, unless they adopted the most complex rules, their financial institutions could be penalised, for example in the form of higher international borrowing costs (Beck et al., 2011, chapter 5). Thus, complexity is a relevant issue for LICs, including – and as discussed further below, especially – when it relates to capital rules. A main challenge facing African regulators is their limited technical capacity to validate and monitor the more complex models that banks might choose for adoption; equally important, they lack sufficiently large and reliable databases to run the models. Investment in personnel to enhance their capacity to perform their regulatory/supervisory role adequately creates the risk of having them poached by the banks, since the pool of skilled workers at the country level often is limited.

African countries, facing these constraints, seem to be slowly recognising that their initial expectations about what is feasible or achievable were overly optimistic. Evidence of this is that, following the creation of the Basel II framework in 2004 and the Basel Committee guidelines, according to which implementation was expected to start from 2006-07, African countries are slowly tracking back on their initial plans to adopt the most complex approaches, or even to move from Basel I to Basel II, at least within the time frame that they were initially envisaging to accomplish this change. By comparing consecutive surveys of the Financial Stability Institute (FSI) conducted in 2006, 2008, 2010 and 2012, Table 1 shows that, between 2006 and 2008, the percentage of jurisdictions intending to adopt Basel II had increased slightly from 71 to 75 per cent of the total number of respondents, remained constant between 2008 and 2010, but then declined between 2010 and 2012 to 67 per cent (although this last statement is based on a sample size of only 12 countries against 16 and 20 in earlier years).

Table 1: Number of African jurisdictions adopting (or intending to adopt) Basel II

FSI Surveys*	2006	2008	2010	2012**
No of survey respondents	17	16	20	12
Respondents intending to adopt Basel II	12	12	15	8
% in total	71	75	75	67

Source: based on the Financial Stability Institute (FSI) surveys carried out between 2006 and 2012.

** The FSI 2012 Survey comprises the following African jurisdictions: Botswana, Democratic Republic of Congo, Egypt, Gambia, Madagascar, Mauritius, Morocco, Mozambique, Namibia, Tanzania, Uganda and West African Economic and Monetary Union (WAEMU). The jurisdictions covered by the 2006-2010 FSI Surveys are not disclosed.*

** *Not perfectly comparable with previous years, since results were quantified by the author based on individual qualitative country information from the FSI Survey, and therefore subject to his own interpretation.*

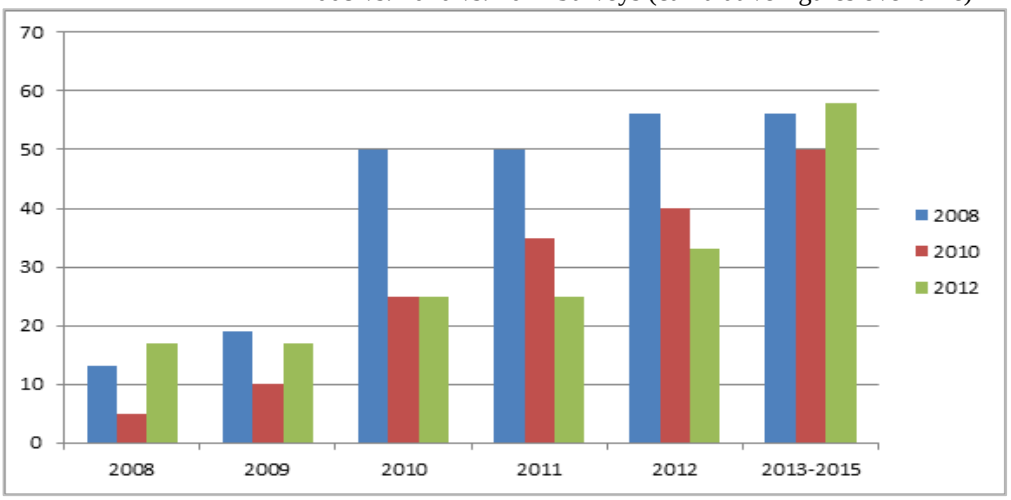
These results, at first view, are counter-intuitive since expectations are that, with time, countries would be able to understand the new rules better, invest in capacity building and gain confidence to adopt them. But what seems to have happened is the opposite. As time went by, countries seem to have realized that the rules were not appropriate to them, even though, as noted earlier, Basel II does provide for simpler alternatives, as well as the option of a flexible time frame for adoption.

Among countries still intending to adopt Basel II, responses of the 2008, 2010 and 2012 FSI Surveys show that those countries opting for the standardised approach for credit risk have gradually slowed down their plans for its adoption over the 2008-2015 time frame (Figure 1).

Figure 1: African Jurisdictions adopting Basel II Standardised Approach for Credit Risk

In percentage terms %

2008 vs. 2010 vs. 2012 Surveys (cumulative figures over time)



Source: Based on Financial Stability Institute (FSI) Surveys of 2008-2012.

In addition to this slowdown over time, the FSI Surveys also show that there has been a gradual withdrawal of countries' intentions to adopt the advanced IRB approach (Figure 2), which are those requiring the most sophisticated models to determine risk weights for different categories of assets.

Figure 2: African Jurisdictions adopting Basel II A-IRB Approach for Credit Risk

In percentage terms %

2008 vs. 2010 vs. 2012 Surveys (cumulative figures over time)

Source: Based on Financial Stability Institute (FSI) Surveys of 2008-2012

Table 2 summarises the number of African jurisdictions adopting the different Basel II credit risk approaches, showing, in 2012, the beginnings of a preference for the standardised approach.

Table 2: Table 2: Number of African jurisdictions adopting the different Basel II credit risk approaches over 2007-2015

	2007	2008	2009	2010	2011	2012-2015
Standardised	1	1		1		4
FIRB				1		1
AIRB				1		1

Source: Financial Stability Institute (FSI) Survey 2012.

Clearly, the FSI Surveys show that there has been some readjustment of expectations and about what is being set as feasible and achievable by African countries.

This paper explores next what specific capacity constraints African countries face, how common these constraints are across countries, what initiatives have been taken to overcome them, and how successful these initiatives have been. This analysis draws mainly on three sources: IMF and World Bank Financial Sector Assessment Programs (FSAPs) and their variants for 19 African countries, undertaken between 2002 and 2011;[5] the 2012 KPMG Africa Banking Survey based on 14 countries;[6] and the World Bank Survey on "Bank Regulation and

[5] In addition to the FSAP reports, information has been drawn from the FSAs (Financial Sector Assessments) and the FSSA (Financial System Stability Assessment), all available on the IMF and World Bank websites. Reports from the following jurisdictions were consulted: Botswana, Burundi, Cameroon, Central African Republic, CEMAC, Chad, Gabon, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Niger, Rwanda, Senegal, South Africa, Tanzania, and Uganda.

[6] The KPMG survey covers the following countries: Botswana, Ghana, Kenya, Mauritania, Mauritius, Morocco, Namibia, Nigeria, Senegal, South Africa, Tanzania, Uganda, Zambia and Zimbabwe.

Supervision", comprising 31 African countries.[7] In looking at capacity issues, the paper does not conflate the information from the three sources. Instead, it looks at these separately, and therefore takes into account possible biases from each source as well as both similar and contradictory information between them, which can provide important insights about where African countries stand on these issues.

IMF-World Bank FSAPs

Taking together the FSAP reports on the regulatory and supervisory frameworks for the financial sectors of different African jurisdictions, the non-compliance with a number of the 25 Basel Core Principles (BCPs) for banking regulation and supervision can be identified as a common thread. Non-full compliance with the BCPs might be a reason as to why countries seem to have slowed down on their plans to move from Basel I to Basel II capital frameworks. From a logical viewpoint and given their limited resources, they may have realised that it was important first to achieve full BCPs compliance, and only then make the transition from Basel I to Basel II and III implementation.

Critical capacity-related gaps identified in the various FSAP reports relate first to a low number of staff in the Central Banks and regulatory agencies and departments, which undermines their ability to conduct critical supervisory tasks such as on-site inspections; second, there is a general lack of staff that are well trained and experienced to perform their regulatory and supervisory powers satisfactorily. Specific gaps included skilled and trained accountants, actuaries and others with expertise in finance; IT capacity; analytical capacity to conduct supervisory tasks in risk evaluation; capacity for reviewing data, detecting data inconsistencies and conducting stress tests; capacity to monitor systemic financial stability, and training for Basel II implementation. These gaps are found in low-income countries such as Burundi, Madagascar, Rwanda and Tanzania, although these are also found in middle-income countries, such as Botswana, Namibia and Mauritius.

Specifically in relation to the Basel capital adequacy framework, critical issues include lack of sufficient supervisory capacity in risk based approach, and to carry out stress testing to assess whether levels of capital requirements are sufficient. A further Basel related issue is lack of large and/or reliable data bases, better methods of retrieval, processing and storage of data, and capacity to review and detect data inconsistencies, which are expertises needed in risk assessment. Countries that have foreign banks lack interaction with the home supervisors to identify and assess home country risks and how the home supervisor practises consolidated supervision. The need to interact with home country supervisors partly arises from the fact that, in highly dollarized countries, foreign banks have high levels of concentration of deposits in parent banks, implying portfolio concentration and country risks.

Regional regulatory bodies seem to face similar capacity issues, despite the fact that, in principle, these bodies should be less resource constrained due to a pooling of resources from the member countries. The Central African Banking Commission (COBAC), which is the regulatory body for the Economic and Monetary Community of Central Africa (CEMAC), suffers from acute shortage of staff, which limits considerably its ability to conduct its functions in the countries under its supervision, for example in implementation of new prudential regulation and on-

[7] The World Bank Survey covers the following African countries: Angola, Benin, Botswana, Burkina Faso, Burundi, Egypt, Ethiopia, Gambia, Ghana, Guinea-Bissau, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Senegal, Seychelles, Sierra Leone, South Africa, Swaziland, Tanzania, Togo, Tunisia, Uganda and Zimbabwe.

site supervisions.[8] In the Central African Republic, Chad and Gabon, FSAP country reports have highlighted inadequate supervisory capacity by COBAC to carry out both off-site and on-site inspections, in addition to data collection and analysis to support off-site supervision. COBAC is clearly under-resourced, despite the fact that, of the six CEMAC member countries, two are middle-income countries and one is upper-income, according to the World Bank classification.[9] CEMAC's shortage of staff seems to reflect a tension between the resources that the regional regulatory body needs to operate with effectiveness and the need to maintain the limited resources available at the country level.

The FSAP report on Senegal, however, indicates that the Central Bank of West African States (BCEAO), which is the regional banking regulator for the West African Economic and Monetary Union (WAEMU), has been historically better equipped and staffed, with a developed supervisory infrastructure in place, to carry out its supervisory duties.[10] The differences between WAEMU and CEMAC seem, in part, to do with the fact that BCEAO is better resourced than COBAC, possibly because of having a clearly established authority as the regional regulator in the region, whereas in the case of COBAC it seems that a significant part of the regulatory role is still in the hands of national authorities, thereby weakening COBAC independence and depriving it of the critical resources it needs to perform its supervisory role adequately. Moreover, BCEAO seems to have benefited significantly from cooperation with France's regulatory authorities. This might be missing in the case of COBAC.

The FSAP reports this paper draws on cover the 2002-2011 period. On the one hand, this creates the problem that some of the information provided may be outdated. On the other hand, this relatively long time span permits identification of actions that have been undertaken over the period to remedy problems, and of how much has been achieved. In the period covered by the FSAP reports, it is possible to notice that, in a number of countries, significant progress has been made on BCP compliance, and on putting in place much needed regulatory and supervisory infrastructure. However, in areas such as numbers of supervisors and training to enhance staff's technical capacity, progress has been uneven and, on the whole, largely insufficient. Where staff has been adequately trained, a partial staff loss to the private sector has occurred - for example, in Uganda. Of course, the loss of staff to the private sector is not limited to bank supervision; rather, it is a generalised problem affecting other areas of the public sector as well.

What can be said, as a way of preliminary assessment, is that technical capacity gaps exist in different areas, ranging from IT to data reviews and systemic risk evaluation. These gaps are common across countries of different income categories, although more prevalent among low-income countries and CEMAC member countries. Initiatives have been undertaken to fill these gaps, such as strengthening regulation and supervisory guidelines, expanding staff skills and risk management capacity. However, progress has been partial and uneven, with larger gaps remaining among low-income countries.

This assessment, based solely on the FSAPs, should be interpreted cautiously. While evidence on shortage of supervisory staff and training are important gaps, the IMF and the World Bank place considerable emphasis on capacity about managing

[8] CEMAC member countries are: Cameroon, Central African Republic, Chad, Equatorial Guinea, Gabon and Republic of Congo.

[9] Based on the World Bank classification of July 2012, which was the latest available on-line at the time of writing this paper.

[10] The WAEMU member countries are: Benin, Burkina Faso, Cote d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo.

tasks such as using risk assessment models and conducting complex model-based stress tests that may not be the most suitable or pertinent for LICs.

The KPMG Survey

The paper turns next to the KPMG Africa Banking Survey. The survey covers 14 African countries and is intended to provide basic information on Africa for those considering investing in the continent, particularly in the banking sector. It is structured around a set of questions ranging from a country's regulatory regime to its legal and tax environment, banking environment, skills availability, physical environment and governance and reporting issues.

The analysis that follows groups the countries in the surveys according to their income levels.

Looking at what regulatory approach countries adopt, the picture that emerges is that, first, the institutional approach, in which financial firms are regulated according to their legal status rather than what functions they perform, is dominant among low-income countries. Diversity is found to a greater extent across low-middle income and upper-middle income countries. In these groupings, the functional, hybrid and twin peaks approaches are commonly adopted, together with the institutional approach. The dominance of the institutional approach among low-income countries might be associated with their possibly less developed financial systems, in which financial activities are more clearly segmented among financial firms.

Second, all countries are in the process of adopting Basel II, albeit at different speeds, with upper-middle income countries more advanced, having in virtually all cases reached full implementation. Some countries are also working on implementing Basel III, such as Tanzania, Nigeria, South Africa and Zimbabwe.

To some extent, this positive outlook regarding adoption of Basel II diverges from the findings of the FSI Survey of 2012, which overlaps in the countries it covers and which was published at around the same time. According to the FSI Survey, some low-income countries of Africa, such as Gambia, the Democratic Republic of Congo, Tanzania and Uganda are still working on the BCP and moving only very slowly towards Basel II implementation. The divergence between the two surveys may be explained by how responses are provided to different questionnaire formats. At the same time, it may as well be indicating that reporting countries to the KPMG survey attempt to portrait a more positive outlook having in mind potential private investors to their economies. If this is the case, then a further reason for countries opting for standards of best practice is to attract or at least not to discourage FDI. The KPMG survey shows that in almost all cases, countries' regulation on FDI has very low restrictions or none at all.

Third, in terms of skills availability, taking the country as a whole, the survey shows that the countries harbour highly skilled labour force, and have training courses available in banking. Thus, skills shortage is not emphasised by the countries, except in a few cases: Zimbabwe highlights limited knowledge available in derivative instruments, Nigeria points to limited depth of skills, and Botswana and Namibia stress critical shortage of professionals. These reported results contrast strongly with the IMF FSAPs and academic surveys conducted in the past (see Gottschalk and Griffith-Jones, 2010).

Fourth, most countries have stock exchanges where shares and bonds are traded, but only South Africa has active derivatives markets, while Kenya is planning to introduce exchanges of derivatives; the regional stock market of the WAEMU has

bonds as the main exchange in the region. Although the survey lacks detail, overall the capital markets are under-developed and therefore opportunities for banks to trade with securities other than government bonds are limited. The main risks the Survey brings to the fore relate to exchange rate risks, due to a combination of dollarization and high level of foreign bank ownership across countries. Other risks are those associated with concentration of assets in a few banks: in Uganda, the top four have 70 per cent of market share; foreign banks in Ghana hold 51 per cent of bank assets; the top four in Nigeria hold 44 per cent of total assets; and a few "old players" in Senegal 75 per cent of market share.

Table 3 summarises information on countries' regulatory framework, intentions regarding Basel II and III adoption, level of FDI restrictions, skills availability, active exchanges in operation and banking structure.

Table 3: Banking structure, regulation, foreign capital and skills availability in Africa[1]

		Regulatory approach[2]	Basel Capital Accord	FDI restrictions	Skills availability	Relevant active exchanges in operation	Overview of the Banking sector
Low Income	Kenya	Institutional	In the process of formulating a policy position on Basel II implementation"	FDI on banking and insurance sectors subject to specific requirements on % ownership; At least 25% of shares of companies listed on NSE should be held by Kenyans	Highly skilled labor force; banks' staff with relevant training; returning professionals with internet experience	Nairobi Stock Exchange; instruments: shares and bonds; plans to introduce derivatives	Diverse banking sector, with foreign players such as Barclays, Standard Chartered and Pan-African banks, alongside with Kenyan banks
	Mauritania	Institutional	Transition to Basel II under way and completion planned for 2012.	None	Few managers fluent in English	No stock or bond markets; treasury bills are the main exchanges	12 banks with low penetration
	Tanzania	Hybrid	Basel I and II implemented and Basel III in the pipeline	Some restrictions where registration needed under the Tanzanian Investment Authority	Information not provided	Dar es Salaam Stock Exchange	Trend towards establisment of more community banks outside of Dar es Salaam
	Uganda	Institutional	Implementing the three pillars of Basel II in a phased approach	None	Generally no major skills gaps for low- and mid-entry points	Government securities and corporate bonds	23 banks in the market, with top four with 70% of market share; market dominated by foreign banks

	Zimbabwe	Bank of Zimbabwe	Basel II implementation in progress, using the simplified standardized approach, with full compliance expected by end-Dec 2012; Basel III implementation in progress	Indigenization required	Limited knowledge in derivative instruments	Zimbabwe Stock Exchange	Approximately 180 financial institutions
Low-middle income	Ghana	Institutional	Final stages of implementation, for introduction in June 2012.	US$50 thousand as minimum required for whole foreign investment; proposal to increase to US$1million	Highly educated people in the job market; banks provide appropriate training on a regular basis	The Ghana Stock Exchange; instruments: shares/stocks of companies	Dominated by foreign-owned banks, with market share of 51% of bank assets
	Morocco	Functional	Basel II completely adopted by 2012	None	Many training courses in banking available	Casablanca stock exchange and other markets including bond markets	84 credit institutions, of which 19 banks
	Nigeria	Hybrid	In process of adopting Basel II and III	None	Key skills/knowledge gaps/limited depth of skills	Nigeria Stock Exchange	20 local banks and foreign bank, with top four accounting for 44% of total assets. Hindrances: poor risk management, lack of credit information and lack of accessible consolidated financial sector data
	Senegal	Twin Peaks	Second pillar of Basel II under implementation	Not for banking	Good training provided	Regional stock market; bonds the main exchange in the region	19 banks with old few players with 75% of market share
	Zambia	Bank of Zambia	Currently operating Basel I, with plans to upgrade to Basel II and III in the near future	None	Skills available	Government bonds, treasury bills and stocks traded on the Lusaka Stock Exchange	18 banks in total
Upp	Botswana	Institutional	Implementing Basel II	None	General skills	Botswana stock	Existing banks

		with Dec 2012 as deadline; no officially announced plans for Basel III		shortage leading to high staff turnover between banks, especially when there is a new bank entering the market	exchange	increasing their footprints through expansion of branch network and more ATMs; technology leading to introduction of new products
Mauritius	Bank of Mauritius; Financial Services Commission	Basel II is already being adopted by banks.	None	Highly skilled	Stocks and bonds traded on the stock exchange; government bills and bonds also traded	20 licensed commercial banks
Namibia	Central Bank of Namibia	Basel II adopted since January 2010, with impacts under review	None	Critical shortage of professionals with degrees, with possibility of situation worsening in the coming years	Bonds, treasury bills and equities traded in the Namibian Stock Exchange	In the hands of foreign-owned banks
South Africa	Moving from Institutional towards Twin Peaks	Basel II compliant and moving to Basel III framework	Very few restrictions	Reasonable base of skills and experience in banking. Challenges: develop skills base representative of country's demographics; retaining existing skills and preventing skills flight.	Equities, bonds and derivatives (incl. commodities) through the Johannesburg Stock Exchange	Well developed and sophisticated banking sector dominated by 4 large banks

Source: 2012 KPMG Africa Banking Survey. [1] The survey was published in May 2012.

[2] The regulatory approach can be one of the following: Institutional approach; Functional approach; Single-regulator (or integrated) approach; Twin Peaks approach; Hybrid approach.

The World Bank Survey

The paper next turns to the World Bank Survey on Bank Regulation and Supervision conducted in 2011 with results made available in 2012 - the WB 2012 Survey henceforth.[11] The WB 2012 Survey covers 31 African countries, as mentioned earlier. It is very comprehensive, providing information on a wide range of aspects of banking regulation and supervision. The topics (general and specific)

[11] Previous World Bank Surveys on Bank Regulation and Supervision were made available in 2001, 2003 and 2007.

covered by the survey which are relevant to this paper and which it therefore discusses are: number of supervisors, years of experience, qualifications and hours of training; and number of onsite supervisions by bank, to capture information on availability of resources and therefore complement and/or contrast with FSAP information; plans to adopt Basel II and what approach is being considered for adoption, to complement information from the FSI (which captures changes in intentions over time but is not sufficiently detailed) and KPMG; and asset diversification requirements to capture concentration risks, which links up to macro-prudential regulation discussed below in the context of Basel III.

Table 4: Resource Availability in African Countries[1, 2]

	Number of bank supervisors	Number of Supervisors with more than 10 years of experience	Percentage of supervisors with postgraduate degree %	Number of onsite supervision by bank in the last 5 years
Burundi	26	4	8	2
Ethiopia	27	4	4	3
Gambia	20	5	60	4
Kenya	60	30	80	-
Madagascar	19	12	-	-
Malawi	25	11	50	5
Mozambique	-	-	-	7
Sierra Leone	34	15	70	5
Tanzania	52	19	90	5
Uganda	79	29	38	5
Zimbabwe	45	8	50	2
WAEMU	46	-	80	-
Low-income countries*	26	14	25	4
Low-middle income countries	157 (34)	109(23)	32	3
Upper-middle income countries	39	13	32	4

Source: World Bank 2012 Bank Regulation and Supervision Survey database.

*[1] All individual countries reported in the Table are low-income. For the country groupings, the figures are simple averages from the countries covered in the survey and for which information is available. * Without WAEMU. ( ) Without Egypt and Nigeria.*

2 (-) means no information is available.

Table 4, which summarises information on resource availability, shows that the number of supervisors among low-income African countries range from 19 to 79, with no clear evidence as to what stands behind the differences in numbers across countries, apart from the possible fact that countries with larger numbers have invested more in expanding resources and capacity due to their more diverse and complex supervisory needs. For example, Kenya, with 60 and Uganda with 79 supervisors notably are two African countries with financial systems facing higher levels of international integration. Income per capita levels may also explain differences, since the average number of supervisors goes up from low-income to low-middle and to upper-middle income countries. Population size also matters: Egypt and Nigeria, two populous countries, have far higher numbers of supervisors than all the other African countries. No discernible pattern can be found in number of supervisors with more than ten years of experience or the percentage with postgraduate degrees. At one extreme, Ethiopia has very few experienced supervisors – four in total and the percentage with postgraduate degrees is only four per cent. At the other extreme, in Tanzania, nearly two-fifths of its supervisors have more than ten years of experience, and the percentage of supervisors with postgraduate degrees is 90 per cent. Number of onsite supervision per bank in the last five years varies across countries between two and seven, with just a very weak link between these numbers and total number of supervisors per country: when countries of all income categories are pooled together, the correlation index between these two variables is just 0.17.

Resource availability across countries, therefore, seems to vary significantly depending on how it is measured, with no clear correlation patterns across different measures. The explanatory factors probably are varied too, but it is fair to conjecture that countries with more available resources are those with higher absolute and per capita income levels, and those which have prioritised enhancing their regulatory and supervisory capacities.

Table 5: Regulatory Capital Adequacy Regime[1]

	Regulatory capital regime (end of 2010)	Timetable for Basel II implementation	Basel II approach for credit risk
Burundi	Basel I	2012	Simplified standardized
Ethiopia	Basel I	-	Simplified standardized
Gambia	Basel I	2014	-
Kenya	Basel I	-	-
Madagascar	Basel I	-	-
Malawi	Basel I	2014	-
Mozambique	Basel I	2014	-
Sierra Leone	Basel I	2014	-
Tanzania	Basel I	-	-
Uganda	Basel I	-	-

Zimbabwe	Basel II for market risk	2012	Standardized
WAEMU	Basel I	2015	-
Low-income countries	One country adopting Basel II		One country adopting standardized
Low-middle income countries	One country adopting Basel II	2012-2015	One country adopting standardized
Upper-middle income countries	50% of countries adopting Basel II	2008-2012	Standardized; one country adopting IRB and A-IRB

Source: World Bank 2012 Bank Regulation and Supervision Survey database.
[1] All individual countries reported in the Table are low-income. For the country groupings, the figures are simple averages from the countries covered in the survey and for which information is available.

Table 5, on regulatory capital adequacy regime, shows that most low- and lower-middle income African countries were still adherent to Basel I regulatory capital regime in 2010, with plans to move to Basel II only in 2014-15, or even after, and indicating their preferences for either the simplified standardized or the standardized approaches. Among upper-middle income African countries, 50 per cent responded to be already under Basel II, or planning to have it adopted by the end of 2012, with just one country adopting the IRB and the A-IRB approaches. These survey responses confirm what have been unveiled by the other sources: a slowdown in intentions to move from Basel I to Basel II, and an overwhelming preference for the simpler approaches, especially among the poorer countries.

Challenges in relation to adoption of Basel III

Basel III, under discussion since the global financial crisis of 2007-2009, has brought macro-prudential regulation to the forefront of discussions on regulatory reforms. A major challenge for LICs is how to implement an effective macro-prudential regulation to address the risks arising from the link between financial systems and the macro-economy. The risks they face often are different in nature from those faced by developed countries. Important macro risks developed countries face arise from the use of complex financial instruments and the close inter-connectedness among banks. African LICs face macro risks arising from external shocks that may affect macro-economically important sectors with large banking liabilities. LICs therefore need a macro-prudential framework that is adapted to their specific needs, for example by including in their framework a set of monitoring indicators that are relevant to them (Bagyenda et al, 2011). However, financial regulation experts claim that up to now the emphasis in African LICs has been on micro-prudential regulation and that in most countries a macro-prudential framework is lacking, partly because they lack the resources and technical capacity to develop such a framework. Thus, according to this assessment, there is a need to develop technical capacity so that regulators have the ability to detect risks developing from macro-financial links. Moreover, it is also seen as necessary to develop the ability to translate macro-prudential analysis into macro-prudential policy making (Dijkman, 2012).

In view of this assessment, the question is: how fast have they been or far have they gone in transitioning from micro-prudential towards macro-prudential regulation? At the same time, going back to the debate between complex rules which are hard to adopt versus simpler rules better aligned with needs, the questions might well be re-cast as: how much do they have in place and is what they already have sufficient to meet their needs?

African regulators make the important point that, like Basel I and II, reforms under Basel III maintain a focus on capital adequacy requirements, which may not be as relevant for Africa as it may be for developed countries. A reason is that, in Africa, banking systems already hold capital in excess of the minimum regulatory requirements, so the proposed reforms on raising both relative and absolute capital ratios (the latter through introducing leverage ratios) will have little effect in Africa. In their view, what is necessary in Africa is to address the higher degree of volatility in the value of their banks' assets, by imposing quantitative restrictions on the risk exposures of banks' asset portfolios, an approach which has not been favoured by the Basel Committee in the past many years. Still in their view, what Africa needs is a broad range of restrictions which, according to them, Africa has retained, despite the change in focus of international regulation from quantitative restrictions to capital adequacy regulation (Bagyenda et al, 2011).

As pointed out above, macro-prudential regulation in Africa should address macro risks arising from external shocks, such as commodity price shocks and natural disasters. Bagyenda et al (2011) also stress external capital flows and their sudden reversibility as an important source of external shocks. Unlike more traditional commodity price shocks that tend to operate through their impacts on sectors with large bank liabilities, thus implying a credit risk for banks, shocks from capital flows impose risks through the liability side of a bank's balance sheet. This is the case when such flows are sources of non-core funding, with the latter accounting for a significant share of the total liabilities of banks.[12] Despite the differences, all these sources and types of external shocks share in common the fact that they can cause a large exchange rate adjustment and destabilise the whole financial system. This can happen when currency mismatches are large within banks or within companies to which banks have loaned.

Table 6, which summarises guidelines, actions and indicators regarding systemic risks, provides a general idea of the extent to which African countries are, or not, addressing systemic risks, and whether the tools they have in place are the most appropriate to meet their needs, given their specific economic characteristics.

Table 6 shows, first, that virtually all African countries do have rules in place to limit banks' ability to lend to a single borrower or to a group of inter-related borrowers. This limitation is a critical macro-prudential rule because banks may be overly exposed to a dominant sector of the economy – say coffee producers in Uganda, which when affected by a shock can cause great distress to the entire banking system and the economy more broadly. Table 6 also shows that nearly 50 per cent of African jurisdictions have guidelines to address asset diversification, which is a tool that can be very relevant, especially when specified to encourage asset diversification across different economic sectors facing different risks. Next, the Table shows that, in responding whether countries use tools to capture systemic risk, it can be seen that many countries use a wide range of tools, including bank capital ratios, bank profitability ratios, growth in bank credit, sectorial composition

[12] To address this less stable source of funding and therefore reduce liquidity risks facing banks, Basel III proposes the introduction of a liquidity coverage ratio (LCR), which means a minimum level of highly liquid asssets that banks should hold to be able to meet their obligations.

of bank loan portfolios, and foreign exchange position of banks.[13] Specifically in relation to liquidity risks, the WB survey shows (though it is not in Table 6) that African countries also have regulation in place on liquidity requirements.

The responses summarised in Table 6 do seem to confirm Bagyenda et al (2011) claim that African countries have retained quantitative restrictions on banks' asset portfolios, and it does seem that they do monitor their developments over time, although further investigation is needed to assess how effective and enforceable these rules are and how effective monitoring is.

The other indicators in Table 6 have more to do with tools and regulations that Basel III has highlighted as important to address systemic risk, such as stress tests, tools to restrict large or inter-connected institutions, and counter-cyclical regulation to influence cycles of credit flows. African countries seem to have stress tests, but in most cases these are used at the bank level rather than at a system-wide level. Few countries have tools to restrict large or inter-connected institutions and only a few countries have counter-cyclical tools in place to address risks associated with credit booms. Other constraints that financial sector regulation experts have stressed as critical for Africa include data availability needed for measurement (Dijkman, op. cit.).

In the 2000s, a number of African countries witnessed a very rapid increase in credit as a proportion of GDP – in Benin and Swaziland, it almost doubled; in Malawi, Mali, Tanzania and Sierra Leone, it increased by three fold or more (Griffith-Jones and Karwowski, 2013, Table 4). These developments, of course, should be closely monitored by the banks' supervisory authorities, and, if Basel III is correct, counter-cyclical tools, such as capital buffers (i.e., higher capital ratios on the upside of the credit cycle), should be adopted to moderate credit growth when the economy is booming, and encourage it when the economy is in a downturn. However, Nigam (2013) questions the possible efficacy of counter-cyclical buffers for Africa. First, because, according to the author's own data analysis for Kenya, Tanzania and Uganda, it is hard to find a strong, positive correlation between credit patterns and real GDP growth in these countries. Lack of synchronisation between these two variables would imply that a capital increase triggered by, say, a gap between credit to GDP ratio and its long-term trend crossing a pre-determined threshold, may not necessarily happen when the economy is booming. Second, the role of a credit boom in overheating an economy in Africa tends to be rather small, given their low credit-to-GDP ratio relative to developed economies; third, increases in the minimum regulatory capital in Africa probably will not be binding, given Africa's capital levels already well beyond regulatory minimum.

Thus, the picture that emerges on macro-prudential regulation to address systemic risks is that Africa may not yet be up to scratch, if assessment is undertaken using Basel metrics, such as stress tests. Nevertheless, the region seems to be doing rather well – though further assessment is warranted – if one takes into account the sort of rules and tools that African countries have in place to address their specific needs.

[13] Table 8 further below shows, nevertheless, that foreign exchange position of banks is an indicator used only by some countries.

Table 6: Addressing Systemic Risks [1]

	Banks limited in their lending to a single (or group of inter-related) borrowers	Guidelines on asset diversification	Indicators/tools used to capture systemic risk[2]	Stress test for assessing systemic stability[3]	Tools to restrict large or inter-connected institutions	Counter-cyclical regulation for credit flows
Burundi	Yes	No	Wide range	-	No	No
Ethiopia	Yes	Yes	Wide range	Yes (B/S)	Yes	No
Gambia	Yes	Yes	Bank liquidity ratio	Yes (S)	No	Yes
Kenya	Yes	Yes	Sectoral composition of bank loan portfolios	Yes (B)	No	No
Madagascar	Yes	No	Bank capital ratio	No	No	No
Malawi	Yes	Yes	Wide range	Yes	No	No
Mozambique	Yes	No	Sectoral composition of bank loan portfolios	No	No	Yes
Sierra Leone	Yes	No	Bank liquidity ratio	Yes (B)	No	No
Tanzania	Yes	Yes	Wide range	Yes (B)	No	No
Uganda	Yes	No	Sectoral composition of bank loan portfolios	Yes (B)	Yes	Yes
Zimbabwe	Yes	Yes	Wide range	Yes	No	No
WAEMU	Yes	Yes		Yes (B)	Yes	No
Low-income countries	Yes			Yes		
Low-middle income countries	Yes	3 of 7 Yes	Wide range except Zwaziland	Yes	2 of 7 Yes	1 of 7 Yes
Upper-middle income countries	Yes	2 of 7 Yes	Wide range except Angola	Yes, except Botswana and Namibia	3 of 7 Yes	4 of 7 Yes

Source: World Bank 2012 Bank Regulation and Supervision Survey database.

[1] All individual countries reported in the Table are low-income. For the country groupings, the figures are simple averages from the countries covered in the survey and for which information is available.

[2] The tools considered are: bank capital ratios; bank leverage ratios; bank profitability ratios; bank liquidity ratios; growth in bank credit; sectoral composition of bank loan portfolios; FX position of banks; bank non-performing loan ratios; bank provisioning ratios; stock market prices; housing prices.

[3] B stands for stress test at the bank level, and S at system-wide level.

3 Presence of foreign banks

African countries are known for having banking systems with high levels of concentration, in terms of asset holdings, liabilities or market shares (Beck et al., 2011; Table 7). In addition, many African LICs have foreign banks in their jurisdictions. This often means that the banking system in Africa is not only concentrated, but in many cases, foreign banks dominate the system. According to Table 7, over 50 per cent (and in a few cases, over 70 per cent) of total bank assets are held by foreign-owned banks. In principle, national regulators have the power to impose their choice of regulatory regimes on banks operating within their jurisdictions. In countries where technical capacity is limited or the financial system is still under-developed, regulators may have as their preferred choice simple regulatory rules, deemed as sufficient to address the country needs. However, foreign banks may challenge these rules, opting instead for more complex regulatory approaches. In light of this, national regulators have to invest in building technical capacity to validate and monitor the use of the models foreign banks wish to adopt. In case national regulators do recommend the adoption of a simpler regulatory approach, their challenge is to have it accepted by the foreign banks. As Y. V. Reddy, ex-Governor of the Reserve Bank of India (RBI), puts it "international banks enjoy significant influence over the political economy in several countries". Although his assertion relates to international banks operating mainly in developed country markets, it applies well to African countries, where these banks probable are "too powerful to regulate" (Reddy, 2012).

The emphasis on macro-prudential regulation since the global crisis has brought to the spotlight the need for greater cooperation between host and home regulators in Africa. Cooperation would permit host regulators to follow and be updated on how supervision of subsidiaries is done by home supervisors, and to have access to data. However, IMF FSAPs indicate that cooperation is limited, possibly with the exception of the WAEMU BACEAO regulator, which has historically maintained close links with French regulators. This lack of cooperation is problematic. It leaves host regulators powerless and creates serious systemic risks to the host country, since host regulators do not know whether banks' headquarters are sufficiently solid or even what their policy is in case their subsidiaries come to face acute funding needs; and there is no guarantee that home supervisors pay attention or are aware of the situation of their banks in specific locations around the world.

Countries that have liberalised their capital accounts and therefore are open to foreign capital, including bank lending and portfolio flows, face the further risk that foreign banks are more apt to raise funds abroad for on-lending operations in the host country, therefore helping amplify risks associated the currency mismatches. This issue is further discussed in the next section.

Past surveys (see, for example Gottschalk and Griffith-Jones, 2010) have found that host regulators saw cooperation with regulators from developed countries as an opportunity to improve their technical expertise, especially for dealing with new

international regulatory demands. The lack of cooperation, therefore, also is a missed opportunity for capacity building. Colleges of supervisors, which have been created in Africa for those countries with cross-border banking, have become important, but it is still to be seen whether these colleges are effective forums for exchange of information and cooperation between home and host supervisors.

Table 7: Banking Concentration and Presence of Foreign Banks [1]

	Of commercial banks, % of total assets held by five largest banks (2010)	% of banking system's assets in hands of foreign-controlled banks (own 50% or more of equity) (2010)
Burundi	87	16
Ethiopia	84	0
Gambia	72	80
Kenya	50	37
Madagascar	82	100
Malawi	83	29
Mozambique	92	92
Sierra Leone	74	62
Tanzania	64	49
Uganda	61	75
Zimbabwe	54	46
WAEMU	21	73
Low-income countries	55	60
Low-middle income countries	53	62
Upper-middle income countries	87	67

Source: World Bank 2012 Bank Regulation and Supervision Survey database.

[1] *All individual countries reported in the Table are low-income. For the country groupings, the figures are simple averages from the countries covered in the survey and for which information is available.*

4 Risks associated with capital account liberalisation

Increased capital account liberalisation may result in inflows of foreign bank lending and portfolio capital, which in turn have the potential to create serious currency mismatches in banks' balance sheets. Moreover and as hinted earlier, foreign banks may magnify the risks, given the ease with which they can tap into foreign sources of funding for their lending and other activities in the host country. It is thus necessary that countries have in place a supervisory framework for monitoring adequately the size of these mismatches and how they evolve over time. These mismatches imply serious exchange rate risks, which materialise very quickly and strongly when a country faces a sudden and sharp exchange rate adjustment as a result of external shocks. Supervisors have to look at mismatches within banks' and within firms to which banks lend, and have real time based surveillance and be alert to sudden changes to minimize risks. A further issue is that capital account liberalisation may lead to adoption of new financial instruments and higher levels of inter-connectedness within national financial systems as well as internationally. These developments can be quick, requiring ability to understand and detect the new risks that arise, and the resources to monitor them closely. However, although important, close monitoring is not sufficient; it is important to have rules that prevent mismatches going out of control, and restrictions on financial innovation.[14]

African countries are aware of these risks, and some have home-grown measures to address some of these, which can be applied by other countries, too. In 2005, the Central Bank of Mozambique adopted the so-called Aviso No 5, according to which banks lending in dollars to non-exporting firms have to make provisioning corresponding to 50 per cent of the total loan value (see Box 1). [15]

The Purpose of Mozambique's Aviso No 5

Aviso No 5's main objective was to avoid an undesirable increase in currency mismatches between assets and liabilities of bank borrowers, which could increase the banking system's vulnerability to an abrupt exchange rate adjustment. The measure targeted dollar loans to non-exporting firms because, in the event of major currency devaluation, these firms could face serious

[14] Concerns with currency mismatches in the economy more broadly rather than just within the banking sector gained prominence already with the East Asian crisis in the late 1990s. Following the crisis, the emphasis by the then Financial Stability Forum (FSF) was on monitoring, control and reporting systems. That is, banks were advised to monitor carefully the foreign currency exposures of their borrowers, the extent to which they have access to foreign exchange to service their debts, and whether they have hedged against foreign exchange risks (FSF, 2000, p. 29).

[15] See Aviso No 5, Banco de Mocambique website.

difficulties in meeting their debt obligations. This would be due to the fact that whilst their dollar-denominated debt obligations would increase with devaluation, the revenues they generate would not, as these are not in dollars, but in meticais, Mozambique's domestic currency. The measure thus had a clear macro-prudential purpose. It was aimed at protecting the banking system through reducing the borrower-credit risk generated by dollar denominated loans. The business community protested vigorously. However, despite such protests, the measure was maintained.

Aviso 5 drew on lessons learned from the various emerging market (EM) financial crises of the late 1990s. These crises started with major currency devaluation caused by the sudden reversal of private capital flows. The sharp devaluation weakened the position of banks that were facing large currency mismatches between their assets and liabilities, and also of banks whose clients had borrowed in dollars and no longer could meet their loan obligations.

Mozambique's capital account is fairly restricted, especially regarding short-term private capital flows, which are not permitted.[16] Thus, unlike many emerging market economies, the country's banking system does not face the risk of liquidity shortages caused by sudden reversal of capital flows (though it may face it due to a commodity price shock). However, Mozambique receives a lot of aid flows, and permits dollar-denominated bank accounts. The counterpart of these deposit liabilities is that banks tend to lend in dollars to avoid currency mismatch. This implies that the vulnerability of Mozambique's domestic banking system to exchange rate adjustments exists in the same way that it does for the emerging market economies that attract short-term private capital flows. Thus, Mozambique shares in some measure similar problems to those facing emerging market economies.

Source: Gottschalk (2005)

As for stronger restrictions to reduce exchange rate risks, African countries such as Ethiopia, Cameroon and Tanzania, have fairly restricted capital accounts of their balance of payments, although for debt inflows liberalisation may rather be the case. Restrictions on the capital account probably are a most effective way to prevent currency mismatches in the domestic economy, although the downside is lack of access to external funding by banks. Countries that have liberalised their capital accounts (e.g., Uganda, Zambia), while facing risks, still may be able to manage their capital accounts using tools such as unremunerated reserve requirements (URR) "a la Chile" which, while allowing external capital in the economy, serve to both moderate the volume of flows and their length of stay in the country, and have a counter-cyclical role by having levels of restrictions (in terms of percentage of capital inflows subjected to URR) that vary with the cycle of the flows.

The risks that international capital flows create may already be significant for Africa. According to the IMF, net capital inflows to selected SSA countries - the so-called frontier markets - reached on average two and 2.2 per cent of their GDPs over the periods 2000-2007 and 2010-2012, respectively.[17] For individual countries, the figures for 2010-2012 are significantly higher - 7.3 per cent in Ghana, 8.2 per cent in Kenya, 23.8 per cent in Mozambique, 4.3 in Senegal, 6.9 per cent in Tanzania and 7.2 per cent in Uganda (IMF, 2014, Table 1). Although most of these

[16] See IMF Exchange Arrangements (2004), pp. 649-654.

[17] The selected countries are: Ghana, Kenya, Mauritius, Mozambique, Nigeria, Senegal, Tanzania, Uganda and Zambia.

are FDI flows, in a few cases portfolio and other flows account for a significant share as well.

Table 8: Foreign Assets and Liabilities in the Banking Sector[1]

	% of assets from commercial banks denominated in foreign currency (2010)	% of liabilities of commercial banks denominated in foreign currency (2010)	Regulators' monitoring of forex position of banks to assess systemic risk
Burundi	20	18	
Ethiopia	-	-	Yes
Gambia	34	34	
Kenya	-	-	
Madagascar	21	19	
Malawi	10	12	Yes
Mozambique	17	29	
Sierra Leone	22	31	
Tanzania	31	33	Yes
Uganda	25	30	
Zimbabwe	100	100	Yes
WAEMU	7	6	
Low-income countries	21	23	
Low-middle income countries	8	7	4 of 7 Yes
Upper-middle income countries	27	29	5 of 7 Yes

Source: World Bank 2012 Bank Regulation and Supervision Survey database.

[1] All individual countries reported in the Table are low-income. For the country groupings, the figures are simple averages from the countries covered in the survey and for which information is available.

Restrictions on external capital do not, however, entirely eliminate the risk of currency mismatches in Africa. A main reason is that many African economies are dollarized, due to aid flows. So, even countries that have fairly closed capital accounts for external private capital, still they can have large currency mismatches in their banking systems and in the economy at large and therefore face significant exchange rate risks. The motivation for Mozambique's Act No 5 was not that the economy was attracting large volumes of external private capital, but that its banks

had large foreign currency denominated liabilities, in the form of dollar bank deposits, associated with foreign aid (see Box 1).

Table 8 shows that, in Mozambique in 2010, 29 per cent of the total liabilities of commercial banks were denominated in foreign currency. Gambia, Sierra Leone, Tanzania and Uganda had even higher percentages in that year. While these percentages are high, it is important to see to what extent the liabilities denominated in foreign currency match with banks' assets in foreign currencies. Still according to Table 8, the percentages of assets and liabilities in foreign currency roughly match in a number of countries, such as Burundi, Gambia, and Tanzania. However, in a few countries, such as Mozambique and Sierra Leone, the gap is over 10 percentage points, implying important risks, especially because the higher percentage is on the liability rather than assets' side, making sudden and sharp currency devaluations particularly dangerous. Despite these mismatches, only a few countries in their responses to the WB 2012 Survey indicate that they monitor the foreign exchange position of banks as part of their assessment of systemic risk (see final column of Table 8). This seems to be a clear supervisory gap in the region.

Of course, elimination of mismatches in the banking sector alone does not totally eliminate risks. If banks offer loans denominated in foreign currency to companies whose markets are domestic and therefore do not generate revenues in foreign currency, still banks will be bound to face a credit risk, which may materialize in the event of a sudden and large exchange rate devaluation, because it would affect companies' ability to honour their commitments in foreign currency. In this respect, Mozambique's Act No 5 mentioned earlier is particularly well designed, since it precisely targets banks' loans to companies whose earnings are not in foreign, but in domestic currency.

The problem with these measures is that, given banks' liabilities in dollars, the latter still need to find ways to have assets in the same currency to avoid currency mismatches. Given this basic problem, risks are not eliminated, but just transferred to other agents or transfigured into another type of risk. Having liabilities in dollars, but facing restrictions to lend in the same currency, banks are left with the alternative of having assets denominated in foreign currency, for example in the form of bank deposits in their parent banks abroad. In this case, risks probably are smaller, but they still exist, to the extent that this alternative creates asset portfolio concentration risks. This is a further reason as to why cooperation between home and host regulators is so important.

The above discussion shows that there is not an easy, short-term solution to risks associated with currency mismatch. The issue requires a medium- to long-term strategy, for instance in the form of attempts to steer the financial sector development towards de-dollarization. It would be a wise way forward that can increase monetary policy effectiveness and contribute to the development of more robust financial systems in Africa.

5 Final Considerations

This paper raises the general point that regulatory challenges and capacity limitations facing Africa should be examined and judged with caution. This is partly because the African region includes countries of different levels of development, with challenges and needs in the area of banking regulation and supervision varying considerably across countries. And partly because, recently, international regulation designed by committees and forums dominated by developed and emerging economies, have been challenged both from within (i.e. regulators from developed countries) and outside (i.e. regulators from African LICs). These challenges raise question marks about standards of international best practice, and therefore making it more difficult to make judgements about what African countries already have in place for effective banking regulation and supervision, and what is still missing.

A further issue, particular to this paper, is that much of the assessment it conducts draws on surveys that are based on multiple choice questions or that require binary answers, therefore lacking depth.

Having these caveats in mind, the mapping exercise in this paper shows that African countries, and African LICs in particular, face significant regulatory challenges, for example regarding what capital adequacy framework to adopt and how to regulate foreign banks, which in a number of cases have a dominant presence. They also face important regulatory and supervisory gaps – two examples that came up in the paper are lack of counter-cyclical tools to address systemic risks (though the usefulness of this tool in the African context has been questioned by African regulators) and insufficient assessment of foreign exchange position of banks, needed to guard against risks associated with currency mismatches; and capacity limitations, for example in terms of human resources available for effective regulation and supervision of their banking systems.

In addition to this general, initial assessment, the paper makes evident that, most of all, further investigation is needed to understand what the key issues and challenges are in the opinion of African regulators, and what, in their views, are the necessary actions to improve banking regulation and supervision in their countries to ensure their banks are robust and ready to fulfil their primary role, which is supporting inclusive and sustainable growth.

References

Bagyenda, J., Brownbridge, M. and Kasekende, L. (2011) "Basel III and the global reform of financial regulation: how should Africa respond? A bank regulator's perspective". Paper prepared for AERC input to Connect-USA project on global financial reform, February, Bank of Uganda.

Beck, T., Maimbo, S., Faye, I. and Triki, T. (2011) "Financing Africa: Through The Crisis and Beyond", the World Bank.

Cornford, A. (2012) "Of Dogs, Frisbees and the Complexity of Capital Requirements", SUNS-South-North Development Monitor, 19th November.

Dijkman, M. (2012) "Making Macro-Prudential Supervision Work for Africa", Africa Finance Forum, 04 June.

Financial Stability Institute (Various Years) "Implementation of the new capital adequacy framework in non-Basel Committee member countries: Summary of Responses to Basel II Implementation Survey", Bank for International Settlements.

Gottschalk, R. and Griffith-Jones, S. (2010) "Basel II Implementation in Low-Income Countries: Challenges and Effects on SME Development". In: Gottschalk, R. (ed) The Basel Capital Accords in Developing Countries: Challenges for Development Finance, Palgrave Macmillan.

Gottschalk, R. (2005) "Aviso No 5", Note prepared for the Ministry of Planning and Development, Government of Mozambique.

Griffith-Jones, S. and Karwowski, E. (2013) "Finance and Growth in Sub-Saharan Africa: Policy and Research Challenges". Paper prepared for IPD TICAD V Meeting, April.

Haldane, A. and Madouros, V. (2012) "The dog and the Frisbee". Speech at the Federal Reserve Bank of Kansas City's 366th economic policy symposium, "The changing policy landscape", Jackson Hole, Wyoming, 31st August.

Harle, P., Luders, E., Peparides, T., Pfetsch, S., Pappensieker, T. and Stegemann, V. (2010) "Basel III and European banking: Its impact, how banks might respond, and the challenges of implementation", McKinsey Working Papers on Risk, No 26. McKinsey & Company, November.

Hoenig, T. (2012) "Back to Basics: A Better Alternative to Basel Capital Rules", address to the American Banker Regulatory Symposium, Washington DC, 14th September.

IMF (2014). "Managing Volatile Capital Flows: Experiences and Lessons for Sub-Saharan African Frontier Markets", IMF African Department, 14/01.

IMF-World Bank FSAPs, various reports.

KPMG (2012) "African Banking Survey", KPMG, May.

Nigam, P. K. (2013) "Procyclicality of Credit and the Counter-Cyclical Capital Buffer: A Critical Analysis for East Africa", Working Paper Draft, Bank of Uganda.

Reddy, Y. V. (2012) "Society, Economic Policies, and The Financial Sector", The Per Jacobsson Foundation Lecture 2012, Basel, Switzerland, 24th June.

World Bank (2012) "Bank Regulation and Supervision Survey", World Bank.

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