The global financial crisis of 2007–08 triggered a plethora of regulatory reforms under the auspices of international bodies such as the G20 and Financial Stability Board. Yet the implementation of these reforms remains a task for individual countries.

This paper presents a risk-based framework for implementing international financial regulation within national economies, in particular in small states. It shows how these countries can navigate the standard setting processes used by the relevant international bodies. It includes case studies to illustrate how the framework can be integrated with standard setting processes to improve outcomes for small states.
Prioritising the Implementation of International Financial Regulation

Economic Paper 95

John Armour and Daniel Awrey
Contents

Foreword iv
Acknowledgements v
Abbreviations and acronyms vi
1 Why Implementing International Financial Regulation is a Priority 1
2 Overview of International Financial Regulatory Initiatives 3
  2.1 The surge in international financial regulation 3
  2.2 Small states and the agenda for international financial regulation 4
  2.3 Small states and the implementation of international financial regulation 6
3 Setting Priorities in Implementation of International Financial Regulation 13
  3.1 Domestic financial regulation 13
  3.2 International financial regulation 14
  3.3 Developing an implementation agenda for small states 15
4 From Setting Priorities to Implementing International Financial Regulation 18
  4.1 Which measures are concerned with mitigating systemic risk? 18
  4.2 Banking regulation 19
  4.3 Shadow banking 21
  4.4 Market regulation 21
  4.5 Insurance regulation 22
  4.6 Identifying systemically important institutions 22
  4.7 Macro-prudential oversight 22
  4.8 Summary 23
5 Systemic Risk and the Structure of the Financial System 25
  5.1 South Africa 25
  5.2 Trinidad and Tobago 26
  5.3 Botswana 27
  5.4 Solomon Islands and Seychelles 27
6 Which International Financial Regulations to Prioritise 29
Appendix I. Details of International Financial Regulatory Organisations 30
Appendix II. Systemic Risk Questionnaire 36
Foreword

Seven years after the onset of the 2007-08 global financial crisis, reform of the international financial architecture and strengthening financial regulation remain at the top of the global agenda, but the vast majority of developing countries, including small states, are still excluded from the process.

In the aftermath of the crisis there was widespread agreement that dramatic changes to financial regulatory regimes would be necessary. At the first G20 leaders’ summit in November 2008, politicians called for strong new measures as part of a wide and ambitious regulatory reform agenda.

Developing countries, including the many small states in the Commonwealth and elsewhere, are profoundly affected by new rules governing international finance, yet they have minimal say over the standards, codes and best practices with which they are expected to comply with at a national level. Many of these countries lack the human, financial and technical capacities to implement all of the proposed reforms within the relevant timeframes.

Little attention has been paid to how new global financial regulations will affect these states. How will new principles and standards affect financial flows to, and the growth of the financial system of, developing countries and small states? What are the potential risks of non-compliance? How can these countries economise on scarce resources to implement effective financial regulation?

There is an urgent need to understand these questions and ensure that countries at dramatically differing levels of financial development can select policies best suited to their needs.

In this paper, John Armour and Daniel Awrey address these concerns and advance a framework for prioritising the implementation of international financial regulation within national economies. The paper provides a preliminary roadmap for small states to better navigate new regulatory processes, evaluate the potential risks of non-compliance, and develop a set of recommendations to improve these processes. The authors emphasise the importance of prioritising financial stability, which is necessary both for the success of the domestic financial system, and to avoid future international financial crises.

We hope that this paper can provide guidance to capacity-constrained small states and developing countries, and stimulate international discussion on moving towards more inclusive and participatory international financial regulatory processes.

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Acknowledgements

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### Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AIG</td>
<td>American International Group</td>
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<tr>
<td>BCBS</td>
<td>Basel Committee on Banking Supervision</td>
</tr>
<tr>
<td>BCG</td>
<td>Basel Consultative Group</td>
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<tr>
<td>BIS</td>
<td>Bank for International Settlements</td>
</tr>
<tr>
<td>CPMI</td>
<td>Committee on Payment and Market Infrastructures</td>
</tr>
<tr>
<td>CPSS</td>
<td>Committee on Payment and Settlement Systems</td>
</tr>
<tr>
<td>FSAP</td>
<td>Financial Sector Assistance Program</td>
</tr>
<tr>
<td>FSB</td>
<td>Financial Stability Board</td>
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<tr>
<td>G20</td>
<td>group of 20 major economies</td>
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<tr>
<td>IADI</td>
<td>International Association of Deposit Insurers</td>
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<tr>
<td>IAIS</td>
<td>International Association of Insurance Supervisors</td>
</tr>
<tr>
<td>IASB</td>
<td>International Accounting Standards Board</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IOSCO</td>
<td>International Organisation of Securities Commissions</td>
</tr>
<tr>
<td>ISD</td>
<td>Integrated Surveillance Decision</td>
</tr>
<tr>
<td>RCAP</td>
<td>Regulatory Consistency Assessment Programme</td>
</tr>
<tr>
<td>ROSC</td>
<td>Report on Observance of Standards and Codes</td>
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</table>
Chapter 1

Why Implementing International Financial Regulation is a Priority

The financial crisis of 2007–08 triggered a plethora of regulatory reforms. The design of many of these reforms took place under the auspices of international bodies such as the group of 20 major economies (G20) and the Financial Stability Board (FSB). Yet their implementation remains a task for individual states. Whereas G20 member states have committed to comply with FSB standards, the FSB itself is committed to encouraging non-G20 states to comply too. Compliance by such states is pursued through co-operation with the World Bank, the International Monetary Fund (IMF) and various multilateral memoranda of understanding. States whose compliance is being encouraged by these means include many smaller states in the Commonwealth and elsewhere with little or no direct representation on these international bodies. Many of these states also lack the human and financial resources, technical capabilities and/or formal legal authority to implement all of the proposed reforms within the relevant timeframes. It is therefore desirable to identify a framework for prioritising the legal and operational implementation of these reforms, to economise on the scarce resources available for regulatory implementation.

Against this backdrop, this report seeks to articulate a framework for the most effective deployment of small states’ scarce regulatory resources. Ideally, this framework should reflect – and, ultimately, balance – both the important regulatory objectives which underpin these reforms and the specific risks, if any, which domestic financial systems pose to these objectives. We argue that priority should be given to the implementation of reforms seeking to promote financial stability. Financial stability is necessary both for the success of the domestic financial system and to avoid transmission of contagion through the international financial system. We identify which aspects of the major international regulatory reform initiatives are designed to reduce systemic risk, and outline how states might utilise a risk-based framework for determining which are most salient to their own situation, and hence should be implemented first. This takes into account both the probability that costs will materialise and the likely magnitude. In turn, it implies an in-depth exploration of the structure of the domestic financial system and its interconnections with markets and institutions in other jurisdictions. We illustrate how such a framework might be applied, using data drawn from five countries whose regulatory authorities volunteered to assist the Commonwealth Secretariat in the production of this report.

The rest of this report is structured as follows. Chapter 2 sets out the context, providing an overview of the many international financial initiatives that have been triggered by the financial crisis and the variety of channels through which small states are encouraged, and in some cases pressured, to implement these measures. Chapter 3 discusses the potential tension between domestic and international reform agendas,
and the particular problem this poses for small states with very limited regulatory resources. It identifies the preservation of financial stability – that is, mitigating systemic risk – as a goal that is important at both the domestic and international levels, and argues that its pursuit is consequently likely to be the best use of scarce resources. Chapter 4 shows how the goal of mitigating systemic risk can be used to set priorities in the implementation of international initiatives. It recognises that the appropriate measures will differ depending on the nature of the financial system in question, and proposes a risk-based framework for identifying those measures which are likely to be most useful. Chapter 5 illustrates how this framework might be applied using our five country case studies. Chapter 6 concludes.
Chapter 2
Overview of International Financial Regulatory Initiatives

In this chapter, we set out the context for our prioritisation exercise. The relevant context has three components. First, there has been a surge in the volume of international financial regulatory initiatives since the financial crisis. Second, the agenda-setting process for these initiatives has been driven by the large states most affected by the financial crisis. Third, small states are nevertheless exhorted to implement these initiatives domestically. Such states have very limited resources to devote to regulation, and feel swamped by the influx of initiatives. Hence the need for prioritisation.

2.1 The surge in international financial regulation

The global financial crisis has triggered a surge in the volume of international financial regulation. Many countries realised that their prior systems of financial regulation were sorely lacking when put to the test, and sought to implement wide-ranging reforms. The crisis was also a reminder of how financial globalisation can undermine the ability of individual states to control risks in the global financial system. While capital flows freely across borders, domestic regulators face jurisdictional constraints and are often hamstrung by both their incomplete access to information and finite resources (Jackson 2001; Choi and Guzman 1997). Together, these factors created a powerful impetus for new regulatory initiatives at the international level (Jackson 2001).

The lead in setting the agenda for new international financial regulatory initiatives has been taken by the G20 group of finance ministers and central bank governors, and its offshoot, established in April 2009, the Financial Stability Board (FSB).1 The G20 is a forum for the 20 largest economies – 19 states and the EU – to discuss and co-ordinate economic, financial and monetary policy.2 The FSB is specifically tasked with stimulating reform of international financial regulation.3 Its members consist of the G20, along with Hong Kong, the Netherlands, Singapore, Spain and Switzerland, and the other major international organisations involved in standard setting.4 Their principal output comprises public statements of ‘principles’, which set out common policy priorities, objectives and prescriptions.

There have also been numerous initiatives by international standard-setting bodies,5 such as the Basel Committee on Banking Supervision (BCBS), the International Organisation of Securities Commissions (IOSCO), the Committee on Payment and Market Infrastructures (CPMI)6 and the International Accounting Standards Board (IASB).7 These initiatives been supported by projects taken up by existing international financial institutions,8 such as the IMF, the World Bank and regional
development banks, and economic co-operation organisations. Details of the subject-matter jurisdiction, composition and enforcement mechanisms associated with these organisations are collated in Appendix I. Table 2.1 contains a list of the most important regulatory initiatives from these various international organisations since the financial crisis.

2.2 Small states and the agenda for international financial regulation

Unsurprisingly, the membership of the international organisations involved in producing international financial regulatory standards reflects those states with the largest financial systems, which have the most at stake. A corollary of this is that small states, which often have correspondingly smaller financial systems, are typically underrepresented in these organisations. The issue of representation surely affects the content of the initiatives; the list in Table 2.1 reflects issues of concern that arose amongst large states most affected by the financial crisis: the USA and EU Member States.

Table 2.2 shows the number of low-income, low- to middle-income and non-G20 Commonwealth countries (as proxies for ‘small’ states) represented in the membership of international financial standard setters. Although there is some variance in the level of representation of small states, small states are effectively without representation on the most influential and prolific institutions, the FSB and the BCBS. Moreover, even in the organisations with more inclusive membership, such as IOSCO, the International Association of Insurance Supervisors (IAIS) and the International Association of Deposit Insurers (IADI), the policy process is typically spearheaded by a subset of members working through committees such as the IOSCO Board and subject-matter committees, the IAIS technical committee and the IADI Research and Guidance Committee. The composition of these committees may not accurately reflect the composition of the broader membership or reflect the perspectives or interests of small states.

In principle, the lack of formal representation can be countered to some degree through due process mechanisms designed to ensure that the perspectives and interests of non-members are taken into consideration as part of the process of developing international financial standards. In this respect, the BCBS, IOSCO and other international standard setters have made significant strides in recent years: perhaps most notably in terms of their use of public consultations (see Barr and Miller 2006; Zaring 2005). Standard setters have also introduced institutional mechanisms specifically designed to enhance emerging markets’ participation in their policy processes (Brummer 2011), such as the FSB’s Regional Consultative Groups,9 the BCBS’s Basel Consultative Group (BCG)10 and IOSCO’s Growth and Emerging Markets Committee.11 However, there remains considerable variance in the operation and terms of these mechanisms.

To explore how these mechanisms operated in relation to small states, we considered the origination process of three major regulatory initiatives as case studies: the
Table 2.1 Key initiatives of international financial regulatory organisations since the financial crisis (2009–2014)

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Key outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSB</td>
<td>Key Attributes of Effective Resolution Regimes for Financial Institutions: Additional Guidance (October 2014)</td>
</tr>
<tr>
<td></td>
<td>Principles for an Effective Risk Appetite Framework (November 2013)</td>
</tr>
<tr>
<td></td>
<td>Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos (August 2013)</td>
</tr>
<tr>
<td></td>
<td>Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities (August 2013)</td>
</tr>
<tr>
<td></td>
<td>Principles for Financial Market Infrastructures (April 2012)</td>
</tr>
<tr>
<td></td>
<td>Principles for Sound Mortgage Underwriting Practices (April 2012)</td>
</tr>
<tr>
<td></td>
<td>Key Attributes of Effective Resolution Regimes for Financial Institutions (November 2011)</td>
</tr>
<tr>
<td></td>
<td>Principles for Sound Compensation Practices (April 2009)</td>
</tr>
<tr>
<td></td>
<td>Principles for Cross-Border Cooperation on Crisis Management (April 2009)</td>
</tr>
<tr>
<td>BCBS (Basel Committee on Banking Supervision)</td>
<td>Basel III: The Net Stable Funding Ratio (October 2014)</td>
</tr>
<tr>
<td></td>
<td>Principles for Effective Supervisory Colleges (June 2014)</td>
</tr>
<tr>
<td></td>
<td>Basel III: Liquidity (January 2013)</td>
</tr>
<tr>
<td></td>
<td>Core Principles for Effective Banking Supervision (September 2012)</td>
</tr>
<tr>
<td></td>
<td>Basel III Capital Accord (June 2011)</td>
</tr>
<tr>
<td></td>
<td>Principles for Enhancing Corporate Governance (October 2010)</td>
</tr>
<tr>
<td>IOSCO (International Organisation of Securities Commissions)</td>
<td>Objectives and Principles of Securities Regulation (June 2010)</td>
</tr>
<tr>
<td></td>
<td>Principles on Point of Sale Disclosure (November 2009)</td>
</tr>
<tr>
<td>CPMI (Committee on Payment and Market Infrastructures; was Committee on Payment and Settlement Systems, CPSS)</td>
<td>Recovery of Financial Market Infrastructures (October 2014)</td>
</tr>
<tr>
<td></td>
<td>Principles for Financial Market Infrastructures (April 2012)</td>
</tr>
<tr>
<td>IAIS (International Association of Insurance Supervisors)</td>
<td>Insurance Core Principles (November 2013)</td>
</tr>
<tr>
<td>IADI (International Association of Deposit Insurers)</td>
<td>Core Principles for Effective Deposit Insurance Systems (June 2009)</td>
</tr>
</tbody>
</table>

Note: Key initiatives are identified as being those which seek to articulate generally applicable principles. The list is not exhaustive and is intended simply to be representative of the most significant initiatives.
BCBS’s development of Basel III, the FSB’s Key Attributes of Effective Resolution Regimes for Financial Institutions and the CPMI’s (then Committee on Payment and Settlement Systems, CPSS) Principles for Financial Market Infrastructures. In each case, the relevant standard-setting organisation first established a working group, which produced a consultative document that was then published on the organisation’s website along with a call for engagement. Responses were received from a wide variety of constituencies, including financial institutions, central banks, regulatory authorities and financial industry trade associations. However, it is very difficult to ascertain to what extent, if at all, the perspectives and interests of small states in fact influence the process of policy formation through these mechanisms. The deliberations of the international standard setters we considered are not open to the public, nor is there a publicly available record. In some cases (such as, amongst our case studies, the BCBS’s development of Basel III), even the responses of consultees were not made public. Moreover, constraints on information, technical expertise and financial resources undermine the ability of small states to participate effectively in public consultations (Mattli and Woods 2009). Only two non-G20 Commonwealth states – South Africa and Mauritius – in fact submitted public comments in connection with our three case study initiatives.

2.3 Small states and the implementation of international financial regulation

Whereas the initiatives we have described are originated by international standard-setting organisations, their implementation is a matter for national governments and their regulatory authorities. Small states have only small budgets for regulatory implementation. This creates a need for careful prioritisation of objectives. In

### Table 2.2 Representation of small states at international financial regulatory organisations

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Total membership</th>
<th>Low-income countries (%)</th>
<th>Low-to middle-income countries (%)</th>
<th>Non-G20 Commonwealth countries (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSB</td>
<td>25</td>
<td>0 (0)</td>
<td>2 (8)</td>
<td>1 (4)</td>
</tr>
<tr>
<td>BCBS</td>
<td>26</td>
<td>0 (0)</td>
<td>2 (8)</td>
<td>1 (4)</td>
</tr>
<tr>
<td>IOSCO</td>
<td>124</td>
<td>5 (4)</td>
<td>18 (15)</td>
<td>19 (16)</td>
</tr>
<tr>
<td>CPMI (was CPSS)</td>
<td>24</td>
<td>0 (0)</td>
<td>1 (4)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>I AIS</td>
<td>195</td>
<td>8 (4)</td>
<td>27 (14)</td>
<td>28 (14)</td>
</tr>
<tr>
<td>IADI</td>
<td>73</td>
<td>5 (7)</td>
<td>13 (18)</td>
<td>10 (14)</td>
</tr>
</tbody>
</table>

Notes: Each percentage is of the total number of member countries. Lists of member countries are taken from the constitutional documents of each of the institutions. ‘Low-income’ and ‘low- to middle-income’ countries are as defined on the basis of World Bank classifications (see http://data.worldbank.org/about/country-and-lending-groups). G20 countries are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, the Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the UK and the USA. Commonwealth countries are listed at the Commonwealth website (http://thecommonwealth.org/member-countries).
Seychelles, for example, the regulatory authorities responsible for regulating the entire financial system (banks, financial markets and insurance companies) employed a total of only 26 people in early 2014 (up from 10 in 2008). Moreover, most of these employees are young professionals recently graduated from university and with limited financial market experience. In 2014, these authorities’ combined budget for education and training amounted to just US$77,000. This is perhaps an extreme example, given that Seychelles is a very small country, even by the standards of non-G20 Commonwealth members, but the point may be generalised: with limited resources, there is simply no capacity to implement new initiatives at the same time as continuing to provide supervision of existing measures.

Bearing this point in mind, it is worth reflecting briefly on why small states feel an impetus to implement international financial regulatory measures. A distinguishing characteristic of the international initiatives we have described in section 2.1 is that they are ‘soft law’: that is, they are informal, non-binding mechanisms, which rely on non-legal processes for enforcement, such as peer review, disclosure and reputation (Brummer 2011). Soft law, rather than formal treaties, is often chosen as a means of making progress in international initiatives where the subject-matter is fast developing. It permits delegation of rule production to a specialist organisation, facilitating greater responsiveness than would be feasible if a treaty had to be renegotiated (Guzman and Meyer 2010, pp. 197–201).

Thus, for example, the FSB has no formal enforcement powers, other than the theoretical possibility that a member could be ejected for repeated failure to take action regarding the FSB’s initiatives. Yet FSB member states agree to submit themselves to periodic peer reviews, which are evaluations by technocrats from peer jurisdictions, who consequently do not have a political stake in the outcome. These reports are generally published. Similarly, although the BCBS expects full implementation of its standards by BCBS members and their internationally active banks, this is enforced primarily through peer review. For Basel III, this takes the form of the Regulatory Consistency Assessment Programme (RCAP), launched in April 2012 (see BCBS 2012a).

One might infer from the foregoing that there is no incentive for small states to implement these international financial regulatory initiatives. As small states are typically not members of the relevant organisations, the mechanisms we have described do not ex facie extend to such states. However, there are a number of reasons why such states nevertheless feel it is appropriate to comply. On the one hand, some of the measures are likely to assist small states in building domestic financial capacity, and consequently it is in these states’ interests to adopt them voluntarily. Here, the international standards serve a communicative function, conveying guidance about best practices to states around the world. (This is discussed more fully in section 3.2.) On the other hand, there are also reputational incentives to implement international standards. As domestic policy-makers may be unsure of the relative usefulness of the international standards in relation to their domestic agendas, these two rationales for compliance may be hard to disentangle in many cases.

We note three particular channels through which small states’ attention is brought to focus on international financial regulatory standards. First, some of the international
standard-setting organisations seek to achieve implementation not just by their members, but by the wider international community. This is clear, for example, from the FSB’s primary goal of co-ordinating ‘global’ stability, and its agenda setting regarding non-member emerging markets and developing countries through ‘outreach activities’ via its regional consultative groups. More specifically, the FSB has, since 2010, pursued an initiative on co-operation and information exchange which has encompassed, in addition to the 24 member countries, 36 non-member jurisdictions that rank highly in financial importance (FSB n.d.). This focuses on measures relating to international co-operation and information exchange, drawn from three ‘core’ sets of international financial regulatory principles: the BCBS’s *Core Principles for Effective Banking Supervision*, the IAIS’s *Insurance Core Principles* and IOSCO’s *Objectives and Principles of Securities Regulation*. The FSB has conducted an evaluation of states in question and in December 2013 published the results: 45 jurisdictions were found to be compliant, 14 to be ‘taking actions’ but not yet having demonstrated sufficiently strong compliance, and one (Venezuela) was characterised as ‘non-co-operative’ for failure to engage in dialogue (FSB 2013a).

The publication, after an impartial assessment, of a state’s compliance – or lack thereof – with international financial regulatory initiatives will have reputational consequences for the state. This can mean an impact on the state’s reputation with other governments, or with market actors, or both. On learning of a state’s non-compliance, these actors adjust their expectations downwards regarding the benefits of, respectively, co-operating with, or investing in, that state (Alexander et al. 2006, p. 147). This may in turn affect other states’ willingness to co-operate or investors’ willingness to put funds into the country. In both cases, actors are most likely to respond according to their own interests. Thus we may expect the response from market actors to be most severe in relation to matters that touch on their interests, such as product quality (for consumers) or accounting quality (for investors) (Armour et al. 2010). Conversely, we may expect the response from other states to be most pronounced in relation to negative externalities that impinge upon their affairs. Public disclosure of non-compliance has a negative impact on a state’s reputation, because it makes it easy for other actors to see that a state has failed to perform in this respect.

Second, compliance with international financial regulatory norms may be incorporated into the terms of membership of other international organisations to which states belong, or as conditions attached to financing. Non-compliance can then trigger direct financial consequences. The most obvious example of this type of incentive is in the work of the IMF, which, although it does not itself produce any international financial regulatory norms, conducts assessments of member states’ compliance in various guises. Under Article IV of the IMF’s articles of agreement, each member state undertakes to collaborate so as to assure orderly exchange arrangements and promote stable exchange rates. To survey progress, the IMF undertakes regular ‘Article IV consultations’, which involve technical experts visiting a member state to evaluate economic and financial developments. The focus of this surveillance has evolved to include emphasis on both member states’ financial policies and the threat of negative externalities.
Failure to comply with obligations under the IMF’s articles – including Article IV – can in principle result in a member state being subjected to escalating denial of the benefits of membership, first ineligibility to use the fund’s resources, then denial of voting rights and finally – in the most extreme case – removal of membership entirely. Although no enforcement action has ever been brought under the IMF’s articles, compliance with international financial standards may also be incorporated as conditions into the terms of IMF loans. In this context, IMF surveillance effectively doubles as a form of creditor monitoring. Where borrowers fail to meet these standards, the consequences will be those attached to a breach of condition stipulated in the relevant loan documentation.

Small states may also be members of other international organisations which link the implementation of international financial regulatory norms to membership conditions. For example, in their response to our request for assistance with case studies, the regulatory authorities in Seychelles explained that their country’s membership of the Southern African Development Community had required them to implement Basel II by 2014 (see Southern African Development Community 2006, Art. 18 and Annex 8, referring to supervisory strategy ‘based on international standards’).

Third, IMF surveillance also takes place under the auspices of the Financial Sector Assistance Program (FSAP), jointly administered with the World Bank. FSAP assessments seek to identify the developmental and technical assistance needs of member states, evaluate risks to financial stability and co-ordinate policy development with domestic regulators. At the request of member states, FSAP assessments include Reports on Observance of Standards and Codes (ROSCs). ROSCs evaluate member states’ progress towards the implementation of international standards in areas such as banking supervision, securities regulation, accounting, corporate governance, insolvency and creditor rights, money laundering and terrorist financing. For the present purposes, the most relevant standards covered by the ROSC process are the BCBS Core Principles for Effective Banking Supervision, the IOSCO Objectives and Principles of Securities Regulation, the IASB International Accounting Standards, the CPSS Core Principles for Systemically Important Payment Systems and the IAIS Insurance Supervisory Principles. Importantly, ROSCs are published only with the consent of the member state. Historically, approximately 75 per cent of ROSCs have been published (Lombardi and Woods 2008, p. 727).

Participation in the ROSC evaluation process is voluntary. However, states have a powerful incentive to do so as a means of credibly demonstrating that their standards meet international best practice, and thereby enhancing their reputation with market actors and with other states. We can think of this as a ‘positive’ version of the role of reputation: the state’s reputation is enhanced by compliance with international best practice guidance that is equivalent to or better than what it has been asked to do through any of the mechanisms considered above.

The picture emerging from this discussion has some stark contours. One the one hand, small states are subject to a variety of ‘encouragements’ to implement various international financial regulatory initiatives. These come via a variety of different
channels: some direct, such as the FSB’s ‘outreach’ work; some circuitous, such as making implementation of international standards part of a framework agreement for international co-operation or for receipt of a loan. They come with a range of consequences threatened for non-compliance: from inability to draw down lending to ‘naming and shaming’. And they emphasise different pieces of the regulatory standards. The multitude of initiatives regarding the origination of regulatory initiatives we reviewed in section 2.1 is complemented by a multitude of different channels through which states are encouraged to implement them. The result, for small states with limited financial regulatory resources, is surely overload. Against this background, there is a need for a principled assessment of priorities for implementation.

Notes

1 On the role of these organisations as agenda-setters, see Brummer (2011).
2 The G20 member states are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, the Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the UK and the USA, besides the EU. Senior members of both the IMF and World Bank also participate ex officio.
3 The FSB’s mandate includes (1) assessing vulnerabilities affecting the global financial system and reviewing the regulatory, supervisory and other actions needed to address them; (2) promoting co-ordination and information exchange among authorities responsible for financial stability; (3) monitoring and advising on market developments and their implications for regulatory policy; (4) co-ordinating the policy development work of international standard setters; and (5) promoting member states’ implementation of agreed-upon commitments, standards and policy recommendations through monitoring, peer review and disclosure. See Art. 2(1) of the FSB Charter (FSB 2012a).
4 These are the IMF, the World Bank, the Bank for International Settlements (BIS) and the Organisation for Economic Co-operation and Development, as well as the Basel Committee on Banking Supervision (BCBS), the International Organisation of Securities Commissions (IOSCO), the Committee on Payment and Market Infrastructures (CPMI), the International Accounting Standards Board (IASB) and the International Association of Insurance Supervisors (IAIS).
5 These are institutions designed to facilitate information sharing amongst domestic regulators, co-ordinate the design and implementation of common policy approaches and articulate international financial standards (see Evans 2000).
6 Known until 1 September 2014 as the Committee on Payment and Settlement Systems (CPSS).
7 Other international standard setters include the IAIS and the International Association of Deposit Insurers (IADI).
8 International financial institutions are the only players in the global regulatory architecture whose founding documents are formally recognised under international law. While not expressly charged with responsibility for financial regulation or standard setting, the mandates of these institutions – and of the IMF in particular – have evolved over time to encompass monitoring compliance with various international financial standards. This monitoring takes place under the auspices of both the policy co-ordination and lending functions of these institutions (see Brummer 2011).
9 The FSB convenes a series of Regional Consultative Groups (RCGs), one each for the Americas, for Asia, for the Commonwealth of Independent States, for the Middle East and North Africa, and for sub-Saharan Africa. These groups are designed to facilitate interaction between FSB members and non-members regarding proposed and current FSB initiatives. In many cases, these groups include officials representing the finance ministries, central banks and regulatory authorities of small Commonwealth states (see www.financialstabilityboard.org/about/pac.htm).
10 The BCG is designed to promote dialogue with non-BCBS member states and their regulatory authorities about new BCBS initiatives: Art. 15(1) of BCBS Charter (BCBS, 2013a). Current members of the BCG which are not members of the BCBS include Austria, Bulgaria, Chile, China,
Côte d’Ivoire, the Czech Republic, Hungary, the Isle of Man, Malaysia, New Zealand, Norway, the Philippines, Poland, Qatar, Thailand and Tunisia.

11 The Growth and Emerging Markets Committee is the largest committee within IOSCO, representing 90 member states (IOSCO Fact Sheet, available at www.iosco.org/about/). Its mandate is to promote the development and greater efficiency of emerging securities and futures markets by establishing principles and minimum standards, providing training programmes and technical assistance for members, and facilitating the exchange of information, technology and expertise.

12 This was true of each of our three case studies, and is generally true also of the longer list of international financial regulatory organisations set out in Table 2.1. Of these, only the IASB makes its deliberations public.

13 Country Case Study Questionnaire, Seychelles (June 2014). In the course of preparing this research, the Commonwealth Secretariat issued a call for assistance to member countries, asking for information about regulatory budgets and experiences with the implementation of international financial regulation. It is perhaps a reflection of the extent to which national authorities are overstretched with their current implementation tasks that only one response was received, from Seychelles.

14 Ibid.

15 The eligibility of members must be reviewed periodically by the plenary board in the light of the FSB’s objectives (FSB Charter, Art. 5).

16 These are conducted in accordance with the FSB’s Framework for Strengthening Adherence to International Standards (see FSB 2011a) and Handbook for Peer Reviews (see FSB 2015).

17 Highly sensitive information may be deleted from the report before publication. See FSB (2015, p.13).

18 BCBS Charter, Art. 12. The committee expects standards to be incorporated into local legal frameworks through each jurisdiction’s domestic rule-making process within the timeframe established by the Committee.

19 The RCAP was updated in October 2013 (see BCBS 2013).

20 These included several Commonwealth member countries.

21 For an evaluation of the effectiveness of IMF monitoring, see Lombardi and Woods (2008) and Bossone (2008).

22 In July 2012, for example, the Executive Board adopted a new decision on bilateral and multilateral surveillance, known as the Integrated Surveillance Decision (ISD). The ISD’s objective is to enable the IMF to integrate better its state-level and multilateral surveillance, thereby putting itself in a position to more effectively identify and respond to the effects of any negative externalities generated by a member state’s financial policies. While the ISD does not impose an obligation on member states to change their policies so long as they continue to promote domestic stability, it is hoped that this initiative will encourage member states to be more mindful of the impact of their policies on other states (see IMF 2013).


24 Country Case Study Questionnaire, Seychelles.

25 FSAP assessments thus feed into the IMF’s Article IV consultations. For an overview, see Clark and Drage (2000).

26 Small states may seek a ROSC evaluation as part of the process of establishing some other credentials. For example, ROSC reports may be used as part of the FSB’s evaluation of progress under their international co-operation and information exchange initiative; see above.

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Chapter 3

Setting Priorities in Implementation of International Financial Regulation

To articulate priorities for implementation of financial regulation, it is necessary first to assess what is at stake. For this reason, we review in this chapter the goals of financial regulation. A well-functioning financial system facilitates payments, mobilises savings from individual investors, and selects and monitors investment projects which will yield good returns (Merton and Bodie 1995). These functions are, in turn, of vital importance to the functioning of the real economy. Well-functioning financial systems help to facilitate economic growth by, amongst other things, supplying funds for investment and making effective selection of good projects.\(^1\) The converse is also true: failures in the financial system can retard the real economy. The early work of Ben Bernanke, latterly Chairman of the US Federal Reserve Board of Governors, as an academic economist identified the channels through which banking collapse in the USA during the Great Depression of the 1930s led to economic contraction (Bernanke 1983; see also Friedman and Schwartz 1963). Similarly, there were contractions in investment and growth in Asian countries following the Asian financial crisis in the late 1990s (see, for example, Barro 2002), and in the USA and EU following the financial crisis of 2007–08 (see Campello et al. 2010; Becker and Ivashina 2014; Kahle and Stulz 2013). The effects of banking crises in particular are especially strong on developing countries, which typically rely more heavily on bank, rather than market, finance (Dell’Ariccia et al. 2008).

Regulatory intervention can in principle assist in the improvement of outcomes in markets and institutions such as those comprising the financial system (see generally Llewellyn 1999; Herring and Santomero 2000). A range of ‘market failures’ – or real-world deviations from perfection – in the marketplace introduce costs which prevent parties from realising otherwise efficient outcomes. Market failures typically thought to justify intervention in financial markets include the presence of asymmetric information, public goods (such as the provision of information), imperfect competition and negative externalities. We can distinguish the goals which financial regulation can pursue at the domestic and international levels.

3.1 Domestic financial regulation

At the domestic level, the challenge for policy-makers in designing financial regulation is to ensure that their national financial system functions as effectively as possible. Optimising its functioning through regulation involves trade-offs, so attention must be paid to the aggregate outcome of all regulatory interventions (see Armour et al. 2015, ch. 3). For example, there may be a trade-off between the promotion of competition in the financial sector and the control of externalities imposed in the form of threats to financial stability (see Allen and Gale 2004). Competition squeezes
profits and may push firms to take greater risks, which can be harmful for stability. Measures taken to protect consumers of financial products may also conflict with financial stability. Restricting the range of products which may be sold to consumers tends to reduce diversity in the financial system, which can have adverse consequences for stability (see Armour et al. 2015, ch. 23).

Moreover, in developing countries, there is likely to be an overarching trade-off between growing the size of the financial system and improving its functioning through regulation. Many regulatory initiatives impose costs on participants in the financial system. Although these costs may be justified in terms of the benefits they generate for a given financial system, greater costs are likely to act as a disincentive to growth within the financial system. In particular, poorly designed regulatory intervention can easily generate costs that outweigh its usefulness (Barth et al. 2006).

Domestic policy-makers must try to balance these trade-offs. The right balance will generally depend on the nature of the domestic financial system and the domestic political agenda. However, a failure to secure financial stability will result in greatly impaired functioning of the system, harm to the real economy and loss of confidence going forwards (see first paragraph of this chapter). Consequently, within the range of domestic financial goals, financial stability is often likely to be the most important.

3.2 International financial regulation

International regulatory initiatives have at least two types of purpose. The first – and traditionally most prominent – is a communicative function. This involves transmitting information about best practice to other states. It is a way of helping states to learn from successes and failures in others’ regulatory efforts. This is intended to lower the costs for small or developing states in developing regulatory technology. It is an exercise in guidance, not in seeking compliance. Norms propounded in this spirit should be understood as a menu from which domestic policy-makers can select those items most appropriate for their domestic growth agendas. States then choose to subscribe to such principles in order to facilitate the growth of their domestic system. They may, as we have seen, choose to volunteer to certify their compliance through evaluations by international organisations in order to publicise their progress and thereby stimulate market confidence (see end of section 2.3 above).

The second purpose of international financial regulation, which has become far more pronounced since the 2007–08 financial crisis, is concerned with encouraging states to rein in international externalities that might be created by actors in their financial systems (Eatwell and Taylor 2000, pp. 17–18). The traditional focus of this type of initiative was financial crime. A significant part of the prohibition of financial crime can be understood in terms of seeking to control negative externalities. Most obvious are measures prohibiting the use of the financial system in support of ends which are socially harmful, such as terrorism and organised crime. More subtly, money laundering can distort project choice and competition in the economy, as funds are routed to opportunities because of their lack of transparency rather than because of their business merits (MacDowell and Novis 2001). Although it is notoriously difficult to quantify the social costs of financial crime (see, for example, Tsingou
international financial regulation in this sector has been coupled with relatively effective monitoring by the Financial Action Task Force and ‘naming and shaming’ of states whose implementation is deemed inadequate (see, for example, Financial Action Task Force 2014, pp. 21–5).

The control of externalities has become a much more pronounced concern across financial regulation generally since the financial crisis because of concerns about systemic risk. Systemic risks are those which can lead to a sudden contraction in the financial system with harmful consequences for the real economy. These harms are typically triggered by failures in the financial sector leading to wide-scale disruption in the supply of finance to the real economy. For example, the market capitalisation of Lehman Bros, Inc., peaked on 29 January 2007 at approximately US$60 billion, a large sum by any measure, yet the fallout from the crisis was much larger (Armour and Gordon 2014, p. 43). The USA suffered net fiscal outlays of 3.6 per cent of gross domestic product (GDP), or $5 trillion during the period 2008–09. Moreover, despite these efforts, the US economy contracted by 3.5 per cent in the immediately following year 2009, down from a positive growth rate of 2.8 per cent in 2007 – a fall equivalent to approximately $9 trillion. These US measures of course do not count the costs incurred elsewhere around the world, which were triggered by contagion to the financial systems of other countries.

It is precisely this sort of transmission of contagion across borders that has engendered interest in international initiatives to curb global systemic risk. The costs of the financial crisis stimulated the G20 to establish the FSB in 2009 (see section 2.1 above). States face pressure to comply with measures targeting externalities because these potentially impose costs on other states. Initiatives that evaluate compliance and publicise the results can affect a state’s international reputation, which gives its policy-makers an incentive to comply. We can expect to see a ramping up of compliance exhortations in relation to international measures targeting systemic risk. Issues of externalities have already started to be taken more seriously by the IMF under its Article IV surveillance (see above). The intensity of such pressure may be expected to be a function of the size of the costs which might otherwise be imposed on other states.

### 3.3 Developing an implementation agenda for small states

The challenge for domestic policy-makers in small states, when considering the implementation of international financial regulation, is multifaceted. First, policy-makers want to promote domestic goals of ensuring a deep and stable financial system. As we have seen, the effective design of domestic financial regulation to this end involves a careful balancing of measures.

Second, policy-makers face encouragement, and in some cases pressure, to implement international financial regulatory initiatives. This raises a question of fit between the international initiatives and the domestic agenda. In some cases, these initiatives may be congruent with their domestic goals; for example, best-practice initiatives that are appropriate for improving the operation of their national financial system. In other cases, however, the international initiatives may be inappropriate for their
system; if, for example, they relate to concerns which are exclusively issues for larger financial systems. In the case of international initiatives designed to curb cross-border externalities, implementation may yield benefits primarily for other countries, but nevertheless be worth implementing because of concern about reputational consequences.

Third, the resources available in the national budget of small states for oversight and implementation of financial regulation are very limited. Prioritisation is therefore a decision about where best to invest the scarce regulatory resources available. A rational goal would be to prioritise those measures which yield the greatest benefits to the country, taking into account their combined effects on the domestic financial system and the country’s international reputation. A further problem, however, is that many domestic policy-makers may lack the resources even to assess the likely impact of implementation of various best-practice initiatives.

In our view, this framework tends to suggest that measures targeting systemic risk should be prioritised. This is because they are uniquely important both to the domestic financial system and to the international community. Measures targeting domestic systemic risks are an important condition for the delivery of effective regulation of the national financial system. At the same time, measures targeting global systemic risks are important for the control of international externalities. As the 2007–08 financial crisis illustrated only too graphically, the externalities associated with systemic risk are capable of dwarfing other concerns. Consequently, we suggest that measures targeting systemic risk are likely to yield the best return on the investment of scarce resources, facilitating the development of the domestic financial system and avoiding reputational harm.

Notes

1 See, for example, Levine (1997, pp. 688–703). It is less, clear, however, whether or not the international openness of a developing state’s financial system stimulates growth (see Prasad et al. 2003).

2 Matters are different if the nation is part of a free trade zone within which financial products may be ‘passported’ across borders simply by compliance with the regulation in one member state. Such regimes require an alignment, or harmonisation, of regulatory standards across participant nations. The best-known example of this approach is perhaps the EU, which has introduced a plethora of international financial regulation binding Member States to agree on harmonised standards which then form the basis for pan-EU products originated in one Member State and offered to investors across the Union. Similarly, a recent initiative in the Association of Southeast Asian Nations has seen the launch of a ‘passport’ scheme for collective investment funds.

3 We are not concerned here with instances (of which there are many) where criminal liability is imposed to enhance compliance with regulation concerned with market failures other than externalities.

4 We can identify several sources of loss to the economy. First, the failure of banks means that new funds cannot be allocated to promising business projects, with a resulting loss of valuable future returns. Second, the financial sector performs an important screening and monitoring function in relation to new projects. Third, the payments system, operated through the financial sector, is of crucial importance to the functioning of the economy.

References

Chapter 4
From Setting Priorities to Implementing International Financial Regulation

The analysis in Chapter 3 suggests that, apart from needed best practices, priority should be given to the implementation of measures tackling systemic risk. However, the list of international initiatives directed (at least in part) towards the control of systemic risk is long and complex. Consequently, simply designating ‘financial stability’ as the priority is unlikely to be sufficient to guide states in the allocation of scarce regulatory resources. What is needed is a framework for identifying the most important measures within this set. A risk-based framework provides a useful analytical tool for these purposes. This encourages policy-makers to deploy regulatory resources in a way that is proportionate to the risks involved, thus maximising their effectiveness. The extent to which systemic risk arises in small states – both domestically and for the international financial system – is likely to be different from in more complex financial systems. Consequently, small states should not feel compelled to implement measures targeting systemic risk in a standardised or ‘check-box’ fashion, but rather can usefully focus their energies on controlling the systemic risks which are in fact generated in their financial systems. This yields a two-fold aspect to prioritisation: (1) measures targeting systemic risk which are (2) relevant to the financial system in question. This is illustrated graphically in Figure 4.1: priority should be given to implementation of measures targeting the top-left quadrant; that is, targeting systemic risk in a way that is relevant to the jurisdiction in question.

4.1 Which measures are concerned with mitigating systemic risk?

By ‘systemic risk’ we mean risk to the stability of the financial system. An important lesson from the financial crisis of 2007–08 has been a reframing of the way in which we understand the relationship between prudential regulation and financial stability (see, for example, Hanson et al. 2011). Prudential regulation of financial institutions was until recently thought to achieve two overlapping goals: that of protecting investors (depositors) in the institution from losses associated with its failure, and that of mitigating contagion to other institutions – and consequent systemic risk – through a ‘domino effect’. Prudential rules which restrict risk-taking by institutions – such as the Basel capital adequacy rules – were the primary regulatory instrument deployed. It was thought that the safety of the system was the sum of the safety of the various institutions. That is, provided individual institutions were safe (and their depositors protected), the system as a whole would also be safe.

The financial crisis has undermined confidence in such thinking. Prudential regulation of institutions – now referred to as ‘micro-prudential regulation’ – is not a sufficient condition to ensure systemic stability. Regulating large institutions does not mitigate
systemic risks which build up because of exposures outside the regulated sector. What is worse, uncritical application of micro-prudential regulation may actually exacerbate risks to the system as a whole. For example, regulated institutions are encouraged by micro-prudential guidelines to pursue an investment strategy which is individually prudent. However, if all institutions pursue the same, or similar, strategies as a result, this can make the system imbalanced and consequently give rise to systemic risk. What is needed rather is ‘macro-prudential oversight’. This involves monitoring the financial system and its interaction with the economy as a whole, and co-ordinating the application of micro-prudential regulatory measures to ensure the appropriate targeting of systemic risk (see, for example, Tucker et al. 2013).

We now identify which of the large number of recent international financial regulatory initiatives are relevant to the mitigation of systemic risk. Some of these initiatives are framed in traditional sectoral categories of financial regulation: banking, insurance, markets, etc. In these cases it is necessary to specify which part of the sectoral initiatives relate to systemic risk, and the economic conditions under which implementation of particular measures will be a priority. Other measures, of a type innovated since the crisis, relate directly to systemic risk. These include measures targeting systemically important institutions and macro-prudential oversight.

4.2 Banking regulation

Banking regulation traditionally encompasses authorisation requirements for credit institutions, prudential regulation and supervision of their operations, and deposit insurance schemes designed to protect depositors in the event of their failure. These aspects have usually been thought of as being prudential in their orientation. However, since the financial crisis, much of the scope and content of banking regulation has been reconsidered in light of concerns about systemic risk. A large number of new regulatory initiatives have been aimed at the banking sector. These include (1) bank capital adequacy and liquidity rules; (2) rules for corporate governance and risk management in banks; (3) rules prescribing mechanisms for bank resolution; and (4) rules regarding deposit insurance funds. Not all of these are equally relevant for systemic risk.
**Capital adequacy and liquidity rules.** These are largely micro-prudential tools, intended to ensure the safety and soundness of individual institutions (BCBS, Basel III 2010, 2011; and BCBS, Basel III 2013). They are of systemic relevance only in so far as the institutions to which they are applied are systemically important; that is, their failure would trigger contagion to other parts of the financial system or harm to the functioning of the payments system. The implementation of these measures should be prioritised in relation to systemically important institutions.

**Corporate governance and executive compensation in banks** (FSB 2009a; BCBS 2010, 2012b; FSB 2013). These regulatory initiatives are devised with a view to reducing incentives for ‘excessive’ risk-taking by those charged with managing banks and other financial institutions. They focus on three key dimensions: (1) compensation practices, (2) board structure and (3) risk management. As with capital adequacy, these are inherently micro-prudential measures, because they focus on individual institutions. The implementation of these measures should consequently also be prioritised in relation to systemically important institutions.

**Bank resolution procedures** (FSB 2011, 2013b). The failure of a large bank is liable to trigger a systemic shock, causing losses for other institutions throughout the financial system. Bank resolution mechanisms are intended to permit such firms to fail without triggering such consequences. The key goal is to ensure a rapid resolution, so that short-term creditors are assured that the institution, or its successor, is placed on a stable financial footing, thereby mitigating the risk that these creditors will start a ‘run’ on the institution.

As with the other measures considered so far, resolution is applied on an institution-by-institution basis. Consequently it is most important that it be targeted at systemically important institutions, some of which may not be banks. To the extent that domestic institutions are systemically important, establishing an effective resolution capability will require a relatively high investment of resources. It will require (1) the creation of new legislative powers to facilitate resolution, (2) the development of regulatory expertise and (3) investment in oversight to ensure that ‘living wills’ – plans detailing how a financial institution is to be resolved should it get into difficulty – are successfully created. Effective resolution mechanisms are an important priority as respects systemically important institutions. These require a significant investment in new infrastructure: not just legal powers, but continued dialogue with systemic institutions leading to credible living wills. This is likely to be a major priority for many states.

**Deposit insurance** (IADI 2009). Deposit insurance regimes protect depositors. They may also assist in mitigating systemic risk, but the evidence here is more mixed. Effective deposit insurance mitigates the risk of bank runs by depositors ex post, but at the same time, can increase moral hazard ex ante unless the insurance is priced according to the riskiness of insured firms’ activities. Evidence based on experience with deposit insurance schemes around the world over the past 30 years suggests that appropriate ‘pricing’ of insurance to mitigate moral hazard is very hard to achieve (Barth et al. 2006). Deposit insurance should be treated as a lesser priority than the foregoing measures.
4.3 Shadow banking

To the extent that they sidestep the footprint of ordinary banking regulation, shadow banks may give rise to additional systemic risk. A number of recent international regulatory initiatives are directed at the shadow banking sector (IOSCO 2012a; FSB 2013c,d). These relate largely to shadow banks acting as lenders and (in effect) deposit-takers. Because of the particular relationship between regulatory arbitrage and shadow banking, there are unlikely to be large shadow lending and deposit-taking sectors in economies that do not have tightly regulated banks. Consequently, for small states which have not yet fully implemented core banking regulation, implementation of these initiatives relating to shadow banking is unlikely to be relevant. The issue can rather be treated as one aspect of macro-prudential oversight: the identification and monitoring of any risks arising outside the traditional banking sector.

An important exception is payment systems. In some developing countries, non-bank payment systems – particularly those operated by mobile telephone companies – have become very significant. The failure of such a system could have very harmful consequences for the economy. However, none of the international regulatory measures targeting shadow banking addresses non-bank payment systems. This is a potentially important lacuna. It is desirable for countries where such payment systems operate to treat them as systemically important financial institutions and regulate them accordingly.

4.4 Market regulation

Financial market regulation is generally concerned not with systemic risk but with the promotion of more informed security prices. Consequently, many of the new regulatory initiatives in relation to financial market regulation focus on ensuring truthful and extensive disclosure by issuers, and appropriate conduct by market participants. However, there are three emerging categories of market regulation which do have implications for systemic risk (FSB 2009b; CPSS 2010; FSB 2010; CPSS and IOSCO 2012; IOSCO 2012b; FSB 2013e):

- Financial market infrastructure: systems and firms which are critical to the continued operation of the market. Relevant regulatory initiatives include prudential measures relating to market makers and central clearing houses.

- Rules mandating routing of certain types of derivatives transactions through centralised clearing houses rather than ‘over the counter’ markets.

- Regulation of market participants whose positions or trading strategies are such as to engender systemic risk.

The relevance of these rules to small states depends on the extent to which the matters they cover in fact pose a threat to financial stability. For states with thinly capitalised capital markets, such matters are unlikely to pose an overall systemic risk.
4.5 Insurance regulation

The principal goal of the prudential regulation of insurers is to ensure that such firms remain adequately funded against their actuarial liabilities. This raises issues of consumer protection, but does not generally pose concerns about systemic risk. Insurance firms generally do not have fragile capital structures, as their obligations are long term and many of their assets are highly liquid. There is consequently no maturity mismatch giving rise to the possibility of a ‘run’ by investors – in contrast to the position of a bank. One exception to the foregoing is where the assureds are themselves fragile and interconnected with the financial system. In this case, the failure of the insurance company to meet its obligations might have systemic consequences, if it triggered the failure of one or more assureds. Initiatives relating to insurance regulation generally need not be prioritised from the standpoint of mitigating systemic risk, unless insurance institutions are so large and interconnected that their failure could have systemic consequences.

4.6 Identifying systemically important institutions

We have qualified the systemic relevance of various measures by reference to their application to ‘systemically important’ institutions. This presupposes the identification, and special treatment of, such institutions. In keeping with this, a new category of regulatory initiatives specifically concerns the identification of systemic firms, whether banks, traders, shadow banks, market infrastructure providers or any other type of institution (FSB 2009b; BCBS 2011; IOSCO 2012b; BCBS 2012c). States should treat as a priority the implementation of guidance regarding the identification of the systemic importance of domestic institutions.

4.7 Macro-prudential oversight

A central lesson of the financial crisis has been that a sectoral focus within financial regulation is no longer sufficient to respond to systemic risk. As a consequence, a new category of so-called ‘macro-prudential’ regulatory intervention has since been emphasised (FSB et al. 2011). The concept is still evolving, so perspectives differ on what is involved, but two broad components can be distinguished. The first comprises aspects of the financial system which render it fragile, or lacking in resilience, should a significant shock occur. Almost all of the measures targeting systemic risk discussed in this chapter are concerned with minimising such fragility.

The second dimension relates to what Claudio Borio (2003) has termed the ‘cyclical’ aspect of risk in the financial system: how patterns of activity can lead to a build-up in risk within the system, which increases both the likelihood and the likely size of a shock. Controlling the build-up of financial risk in the economy as a whole is not only a difficult, indeed experimental, process, but also highly politically charged.

Consequently, emerging best practice encourages the establishment of ‘macro-prudential oversight’ bodies, which sit at the apex of the financial regulatory architecture, and whose mandate it is to synthesise information about the build-up of risk in the economy at large and to co-ordinate with those setting monetary...

Prioritising the Implementation of International Financial Regulation
policy (central bankers and/or politicians). The establishment of a macro-prudential oversight committee, probably as an organ of the central bank, is a desirable priority. This committee's role would be to reflect on the incidence of systemic risk within the financial sector, and to advise on the systemic risk implications of monetary policy and to act as an agenda-setter for the articulation of domestic priorities for the implementation of international financial regulation.

4.8 Summary

From the mass of recent initiatives in international financial regulation initiatives, we suggest that, apart from needed best practices, those which should be prioritised by small states are those targeting the mitigation of systemic risk. The most important general priorities are likely to be:

- establishment of a macro-prudential oversight body as part of the central bank;
- identification of institutions and linkages in the domestic financial system giving rise to concerns about systemic risk (e.g. systemically important institutions);
- enactment of bank resolution powers and initiation of regulatory dialogue concerning resolution plans for systemically important banks;
- implementation of prudential standards as regards systemically important banks: Basel capital adequacy and liquidity frameworks, and guidelines concerning risk management;
- implementation of prudential standards and resolution frameworks as regards systemically important non-bank institutions, as appropriate, including market makers, central clearing houses, insurance companies and payment system operators.

Note

1 This was the problem in relation to American International Group (AIG) during the financial crisis. AIG had effectively reinsured a large proportion of the credit default risk assumed by US banks on subprime debt by selling them credit derivatives under which AIG would pay out if the underlying debtors defaulted. The downgrading of the underlying subprime mortgage-backed bonds increased AIG’s expected exposure to the point where its ability to pay out – without a bailout from the US government – was doubtful. A default by AIG on these obligations would in turn have triggered difficulties for the structurally fragile institutions which had relied on it for credit default protection.

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Chapter 5

Systemic Risk and the Structure of the Financial System

The setting of priorities as regards measures to control systemic risk depends on the structure of the domestic financial system and the nature of the systemic risks (if any) it implies. We suggest that this process of identification of sources of domestic systemic risk should be a first step in the setting of priorities for implementation. Such an assessment necessitates an examination of several factors:

- The size of the domestic financial system relative to (1) the domestic economy and (2) the financial systems of other states.\(^1\)
- The structure of the domestic financial system. A highly concentrated financial services sector, or one which engages in highly correlated business lines or activities, or does business with similar counterparties, will be more fragile – and thus more susceptible to systemic risk – than one which is more diffused and diversified.
- The linkages between the domestic financial system and the financial systems and real economies of other states.

We developed a questionnaire, set out in Appendix II, which is intended to assist domestic policy-makers in assessing these issues. We stress that this is provided as a guide to the sorts of questions that are relevant, as opposed to a definitive statement.

To test its utility and provide some insight into its application, the Commonwealth Secretariat asked participating member countries to complete the questionnaire and return the results to us. Five countries returned completed questionnaires. A comparison of the answers reveals a range of different types of financial system, giving rise to different priorities with respect to systemic risk. We discuss these in turn below to exemplify the application of our approach. Data cited draw on the responses received to the questionnaire, and currencies have been converted into US dollar equivalents.

5.1 South Africa

It would be a misnomer to describe South Africa as a ‘small state’. It has by far the largest economy amongst our respondents, with a GDP of $322 billion a year.\(^2\) It is also a member of the G20 and the recently expanded BRICS group (Brazil, Russia, India, China and South Africa). South Africa is a financial powerhouse for sub-Saharan Africa. It also has a large banking sector, both in absolute terms – with total bank assets of $467 billion – and relative to the size of its economy, with bank assets 1.48 times the size of GDP. The three largest financial institutions, Standard Bank Group, Barclays Africa Group and Firstrand, have assets of $166 billion, $93 billion...
South Africa’s banking system consequently has the potential to generate significant systemic risk. This is particularly so given the size of the largest institutions relative to the domestic economy, which makes it more difficult for domestic policy-makers to bail them out should they encounter financial distress. They are a fortiori of systemic importance within the South African economy. As a result, South Africa could usefully prioritise the implementation of the prudential regulatory measures discussed in section 4.2 – in particular, the Basel principles relating to capital and liquidity, and international guidance as regards risk management practices – in relation to the three largest South African banks. It should at the same time prioritise the development of ‘living wills’ for these institutions, in conjunction with the enactment of a bank resolution regime.

South Africa also has an extremely well-capitalised stock market, with a market capitalisation in 2014 of $1,104 billion, 3.43 times GDP. The importance of markets to the South African financial system is reflected in the high levels of assets under management by institutional investors such as broker-dealers ($597 billion), collective investment schemes ($172 billion), pension funds ($153 billion) and insurance companies ($229 billion). This in turn implies that regulation targeting systemic risk in market infrastructure is also relevant to South Africa, in particular to market makers and clearing houses. However, there does not appear at present to be a large shadow banking sector; mortgage finance firms account for only $19.4 billion of assets under management. This suggests that regulatory initiatives applicable to shadow banking could safely be deprioritised.3

The combination of both systemically important banks and deep and liquid capital markets suggests that South African policy-makers would be well advised to treat as a first priority the implementation of best practice regarding macro-prudential oversight, as this provides a means to monitor developments in the financial system as a whole. They should also prioritise the implementation of the measures targeting systemic risk in banking institutions, focusing in particular on the three largest, as well as the measures targeting market infrastructure institutions discussed in section 4.4.

5.2 Trinidad and Tobago

Trinidad and Tobago has a GDP of $25.9 billion a year. It does not have a large banking sector in absolute terms; its total bank assets of $21.1 billion represent 82 per cent of GDP. Nor is its stock market deeply capitalised; market capitalisation is $17.6 billion, 68 per cent of GDP. These data suggest that there is little likelihood of transmission of systemic risk to the international financial system from Trinidad and Tobago.

There are two potential exceptions. The first concerns the insurance sector. The data received from Trinidad and Tobago show the insurance sector to be insolvent, with assets valued at –$7 billion. Linkages between these firms and other financial
institutions might well have an adverse impact on regional financial stability. Consequently, initiatives focusing on the prudential regulation of the insurance sector can usefully be prioritised.

The second exception concerns bank resolution. To the extent that banks in Trinidad and Tobago form part of international groups, resolution of such a group may require co-operation with authorities in that country. Consequently, domestic policymakers would be well advised to treat the implementation of international financial regulatory measures relating to bank resolution as a priority.

5.3 Botswana

Botswana has a GDP of $13.7 billion a year. The total assets of its banking sector are $7.2 billion, or 52 per cent of GDP. There are 14 banks, of which the largest three by asset value constitute a little less than 60 per cent of the total sector. Although the failure of one of these institutions would undoubtedly cause problems domestically, there is little likelihood that it would pose a risk of international contagion. Complementing Botswana’s modestly sized banking sector is a relatively high number of payment systems. A total of seven different retail and wholesale payment systems are reported, a much larger number than in any of the other countries for which returns were received; the median number was two. Notably, several of these payment systems are delivered by non-bank operators, in particular mobile phone providers (so-called ‘mobile money’ firms). This reflects a pattern, increasingly common in sub-Saharan Africa, of mobile money substituting for many of the services traditionally provided by banks. This raises concerns that unforeseen challenges may emerge; for example problems with technology, security or the protection of ‘depositors’ upon the failure of a mobile money firm. Where such payment systems have substituted for the payment services traditionally provided by banks, their failure would have the potential to engender systemic consequences for the domestic economy, and possibly regionally. However, none of the international regulatory measures we discussed in Chapter 4 relates to mobile money or alternative payment systems. This probably reflects the genesis of these regulatory initiatives as responses to problems encountered in G20 financial systems. It gives rise to the inverse of the typical mismatch problem identified in much of this paper between international financial regulation and the needs of small states. The typical concern is that the regulation addresses concerns not relevant to small states. In contrast, the case of mobile money payment systems suggests an instance where the concerns of small states are not met in the regulatory initiatives. Regulators in Botswana might usefully seek to implement measures analogous to those developed in relation to market infrastructure institutions (section 4.4) in relation to payment system providers deemed systemically important.

5.4 Solomon Islands and Seychelles

These two small states are discussed together because they present very similar pictures of their financial systems through their returns and so can usefully be
analysed together. Both are very small economies: Solomon Islands has an annual GDP of $1.4 billion and Seychelles has an annual GDP of $0.9 billion. Unsurprisingly, they each have a very small banking sector, and no, or practically no, stock market capitalisation. Both countries’ financial systems are indeed almost entirely composed of a small number of banking institutions, all of which are entirely, or almost entirely, foreign owned. These generally operate as branches, rather than subsidiaries, in the local economy. The provision of financial services in this way by foreign firms means that local infrastructure does not need to be developed, for which economies of scale would be lacking. However, it does make the soundness of the domestic financial system dependent on the successful regulation of these banking firms in their home countries. For countries such as Solomon Islands and Seychelles, the domestic implementation of international financial regulation geared towards systemic risk would appear to be almost entirely unnecessary (with the possible exception of bank resolution measures, if there are domestic assets associated with large foreign financial institutions). However, policy-makers in these countries should be concerned with the extent to which the home states of the financial institutions operating domestically through branches have adopted measures relating to systemic risk in their banking sectors. Failure to manage such risks in the home state would create obvious adverse consequences for host states reliant on them.

Notes

1 All other things being equal, there are reasons to think that systemic risk might increase with the size of the economy owing to, for example, interaction effects between financial markets and institutions. At the same time, there might be economies of scale in the design, monitoring and enforcement of financial regulation, in turn implying that larger states would deploy relatively more effort and other resources toward combating systemic risk. See Mulligan and Shleifer (2005).

2 To aid comparability, all currency figures in this chapter are expressed in US dollars.

3 To assess the role of shadow banking within the South African financial system more comprehensively, it would be necessary to engage in a more in-depth examination of the characteristics of both the structure and holdings of institutional investors and the means by which conventional banks raise short-term capital (e.g. by deposits or wholesale funding markets).

4 Data on the extent of foreign ownership of the banking sector were not available.

References


FSB (2012), Update of Group of Global Systemically Important Banks (G-SIFIs), 1 November.
Chapter 6

Which International Financial Regulations to Prioritise

The financial crisis has been followed by an unprecedented wave of regulatory reforms. Many smaller states lack the human and financial resources, technical capabilities and/or formal legal authority to implement all of the proposed reforms within the relevant timeframes. This paper has sought to articulate and illustrate the application of a framework for prioritising such implementation.

We argue that priority should be accorded to measures targeting systemic risk, because it is harmful for both the international community and domestic financial stability. Targeting systemic risk requires a holistic assessment of the functioning of the domestic financial system. In Chapter 4, we saw that this implies the establishment of some sort of macro-prudential oversight body, probably as part of the central bank; the establishment of a framework for resolution of systemically important institutions; and the prioritisation of the implementation of micro-prudential measures in relation to institutions which are of systemic importance.

Such prioritisation in turn requires a survey of the nature and extent of systemic risks within the domestic financial system. We have offered a preliminary methodology for doing this through the questionnaire in Appendix II, and presented examples of how the results can be used in a diagnostic way in Chapter 5. These results suggest that the priorities are likely to differ depending on the domestic context. For South Africa, the focus should probably be on implementation of prudential measures in relation to its largest banks. For Trinidad and Tobago, the first priority should probably be the insurance sector. For Botswana, the biggest systemic risk is likely to be associated with non-bank payment systems, not currently the subject of any international financial regulatory initiatives. For very small jurisdictions such as Seychelles and Solomon Islands, the focus should probably be on monitoring the implementation of financial regulations in the home states of their major banking organisations.
Appendix I

Details of International Financial Regulatory Organisations
<table>
<thead>
<tr>
<th>Institution</th>
<th>Representation and governance</th>
<th>Policy process</th>
<th>Monitoring</th>
<th>Enforcement</th>
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</table>
| IMF         | • 188 member states  
   • All members represented on Board of Governors, with voting power linked to contribution to global economic activity  
   • Day-to-day activities overseen by Executive Board composed of Managing Director and 24 other members  
   • Executive Board either appointed or elected by members or groups of members | Not applicable | • Takes place in the context of Article IV consultations (mandatory), FSAPs (mandatory) and ROSCs (voluntary)  
   • May also take place as part of creditor monitoring of compliance with loan conditions  
   • Results of these exercises published only with permission of member state | • Formal: escalating sanctions for failure to comply with Article IV  
   • Contractual: compliance with international standards may be incorporated into loan documentation  
   • Informal: potential intergovernmental and market-based reputational sanctions |
| FSB         | • G20 plus Hong Kong, the Netherlands, Singapore, Spain and Switzerland.  
   • All decisions adopted by the Plenary Board  
   • Seats on Plenary Board intended to reflect size of member's economy, financial market activity and stability arrangements  
   • Decisions of Plenary Board taken on the basis of consensus  
   • Convenes regional consultative groups for the Americas, Asia, the Commonwealth of Independent States, the Middle East and North Africa, and sub-Saharan Africa | • Process typically commences with establishment of working group  
   • Working group will generally prepare a consultative document setting out preliminary analysis and recommendations and soliciting public comments  
   • Deliberations of working groups not open to the public. No publicly available record | • Members must submit to periodic peer review  
   • Generally expected that results of peer reviews will be published  
   • However, members may request that highly sensitive information be redacted | • Formal: not applicable  
   • Contractual: not applicable  
   • Informal: potential intergovernmental and market-based reputational sanctions |
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<th>Policy process</th>
<th>Monitoring</th>
<th>Enforcement</th>
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| BCBS        | • G20 plus Belgium, Hong Kong, the Netherlands, Singapore, Spain and Switzerland  
• Decisions taken on the basis of consensus | • Responsibility divided between series of groups, working groups and task forces  
• Generally composed of BCBS personnel and technical experts from member states  
• Typically includes public consultation process (mandatory for new standards)  
• Consultation periods typically 90 days, but can be lengthened or shortened at discretion of the committee  
• Select non-members may also participate via the BCG  
• Deliberations not open to the public. No publicly available record | • Compliance with Core Principles of Effective Banking Supervision incorporated in IMF/World Bank FSAP and ROSC assessments  
• RCAP (introduced in April 2012) seeks to ensure full, timely and consistent implementation of Basel III  
• RCAP includes both 'off-site' monitoring and 'on-site' peer review assessments | • Formal: N/A. However, Core Principles for Effective Banking Supervision form the basis of IMF/World Bank FSAP and ROSC assessments  
• Contractual: not applicable  
• Informal: potential intergovernmental and market-based reputational sanctions |

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<th>Policy process</th>
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<tr>
<td>IOSCO</td>
<td>• 124 ordinary members</td>
<td>• Co-ordinated through eight subject-matter committees</td>
<td>• No active monitoring of compliance</td>
<td>• Formal: limited formal enforcement for failure to pay membership fees</td>
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<td></td>
<td>• Principal decision-making body is the Presidents’ Committee, with each ordinary member having one vote</td>
<td>• New policy papers and proposed standards typically put out for public consultation</td>
<td>• Compliance with Objectives and Principles of Securities Regulation incorporated in IMF/World Bank FSAP and ROSC assessments</td>
<td>• Contractual: N/A</td>
</tr>
<tr>
<td></td>
<td>• Governing and standard setting body is the IOSCO Board, composed of representatives from 32 member states</td>
<td>• Comments received typically made available on website</td>
<td>• Informal: potential intergovernmental and market-based reputational sanctions</td>
<td>• Informal: potential intergovernmental and market-based reputational sanctions</td>
</tr>
<tr>
<td></td>
<td>• Decisions of the board made by majority vote, but the board seeks to operate on the basis of consensus</td>
<td>• Deliberations not open to the public. No publicly available record</td>
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<td>(continued)</td>
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<td></td>
<td>• Convenes both a Growth and Emerging Markets Committee and regional committees for Africa/the Middle East, Asia-Pacific, Europe and the Americas</td>
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<td>Institution</td>
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| CPSS        | - G20 (excluding Argentina and Indonesia), plus Belgium, Hong Kong, the Netherlands, Singapore, Sweden and Switzerland | - Working groups established to carry forward studies or policy initiatives  
- Proposed standards typically not put out for public consultation  
- Deliberations not open to the public. No publicly available record | - Historically, no active monitoring of compliance  
- In April 2013, announced that it would begin co-ordinating assessments of implementation of Principles for Financial Market Infrastructures | - Formal: not applicable. However, in future Principles for Financial Market Infrastructures will form the basis of IMF/World Bank FSAP and ROSC assessments  
- Contractual: not applicable  
- Informal: potential intergovernmental and market-based reputational sanctions |
| IASB        | - 16 independent experts drawn from five regions  
- Each member has one vote  
- Necessary majority depends on the nature of the decision (new standards require approval of at least 10 members)  
- Work complemented by an Interpretations Committee and Advisory Council | - Six-stage process typically involving creation of working group, preparation of discussion paper and public consultation by publication of exposure draft  
- All meetings of the IASB and Interpretations Committee are held in public and broadcast via website | - Responsibility falls to the Interpretations Committee  
- Primary purpose of monitoring is to identify potential divergences in national accounting practices with a view to determining if it is necessary to issue an interpretation | - Formal: not applicable  
- Contractual: not applicable  
- Informal: potential intergovernmental and market-based reputational sanctions |

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<tr>
<td>IAIS</td>
<td>Regulators and supervisors from almost 200 jurisdictions, representing nearly 140 member states</td>
<td>Spearheaded by the Technical Committee, and delegated to subcommittees and working groups</td>
<td>Responsibility falls to the Implementation Committee</td>
<td>• Format: members may be removed at the discretion of the General Meeting. Insurance Supervisory Principles form the basis of IMF/World Bank FSAP and ROSC assessments</td>
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<tr>
<td></td>
<td>General Meeting has ultimate decision-making authority. However, smaller Executive Committee generally responsible for preparing programme, consulting with members, and adopting principles, guidance and standards</td>
<td>Typically involves publication of issue papers</td>
<td>While no systematic active monitoring, it recently invited member states to complete a questionnaire on the topics of supervisory review and reporting, preventative and corrective measures, and enforcement</td>
<td>• Contractual: not applicable</td>
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<td></td>
<td>Consultation generally takes place amongst members. Broader external consultations are relatively rare</td>
<td>Deliberations not open to the public. No publicly available record, but subcommittees and working groups will occasionally publish newsletters reporting on their activities</td>
<td>Responses to questionnaire will remain strictly confidential</td>
<td>• Informal: potential intergovernmental reputational sanctions</td>
</tr>
<tr>
<td></td>
<td>• Deliberations not open to the public. No publicly available record, but subcommittees and working groups will occasionally publish newsletters reporting on their activities</td>
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<tr>
<td>IADI</td>
<td>75 members representing 73 states</td>
<td>Spearheaded by the Research and Guidance Committee</td>
<td>Conducts periodic surveys on aspects of deposit guarantee schemes of member states</td>
<td>• Format: not applicable</td>
</tr>
<tr>
<td></td>
<td>General Meeting has ultimate decision-making authority. However, smaller Executive Council is structured as the primary working body</td>
<td>All research and proposed guidance vetted through public consultation process</td>
<td>• Contractual: not applicable</td>
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<td></td>
<td>Executive Council supported by seven standing committees, along with regional committees for Africa, Asia-Pacific, the Caribbean, Eurasia, Latin America, the Middle East and North Africa, and North America</td>
<td>Panel of independent experts also provides advice on research and guidance</td>
<td>• Informal: potential intergovernmental reputational sanctions</td>
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Appendix II

Systemic Risk Questionnaire

The following is a questionnaire listing the information required to construct a preliminary map of a state’s financial system and identify potential channels for the transmission of systemic risks. This questionnaire is designed to assist states in identifying both the potential sources of systemic risk which might reside within their domestic financial system and the ways in which such risks – if they materialise – might metastasize across borders.

How to approach the completion of this questionnaire

The questionnaire is divided into six principal categories: macroeconomic variables, deposit-taking institutions, non-deposit-taking institutions, financial markets, financial market infrastructure providers, and government financing activities. Important threshold questions in respect of each of these categories is whether: (1) the relevant markets or institutions have a material presence within a state’s domestic financial system and (2) whether domestic markets and institutions have a material connection to the relevant markets or institutions located in other states. Where the relevant markets or institutions do not have a material presence or connection, domestic officials are advised to disregard the remaining questions within that particular category. Indeed, for a great many states, we would expect categories 1, 2 and 6 to be by far the most relevant and important.

How this questionnaire feeds back into the larger project

The objective of this exercise is ultimately to gather information about domestic financial markets and institutions, the instability of which could potentially undermine the stability of financial markets or institutions in other states. Where this exercise
identifies domestic markets or institutions falling into this category, member states should prioritise the implementation of international regulatory reforms designed to ensure their stability. Conversely, where the information gathered pursuant to this exercise persuasively demonstrates that domestic instability will not generate instability elsewhere, or where international regulatory reforms target objectives other than financial stability, the prioritisation and implementation of these reforms should be left to domestic policy-makers.

1. Macro-Economic Variables

(a) What was the member state’s gross domestic product (GDP) for the most recently concluded 12-month period?

(b) What is the member state’s global capital account surplus (deficit)? What is the member state’s capital account surplus (deficit) vis-à-vis each of its top five trading partners?

(c) What is the member state’s current outstanding public debt? What proportion of this debt is held by non-residents? Who are the top five non-resident holders of this debt and how much do they hold?

2. Deposit-Taking Institutions

(a) How many deposit-taking institutions are currently authorised to operate in the member state? What is the aggregate size of these deposit-taking institutions (by assets)?

(b) What are the top 10 deposit-taking institutions (by assets)?

(c) For the institutions identified in response to question 2(b):

(i) what proportion of their equity, debt, deposits, or other outstanding liabilities is held by non-residents?

(ii) what proportion of their overall lending activities – e.g. loans, mortgages, guarantees, trade financing, and other commitments – involves the extension of credit to non-residents?

(iii) how many branches and subsidiaries do they have in other countries?

(d) How many subsidiaries and branches of non-resident deposit-taking institutions are currently authorised to operate in the member state? What is the aggregate size of these branches and subsidiaries (by assets)?

3. Non-Deposit-Taking Institutions

(a) How many of each of the following non-deposit-taking institutions are currently authorised to operate in the member state? What is the aggregate size of the institutions in each category (by assets)?

(i) broker-dealers

(ii) collective investment schemes

(iii) pension funds
(iv) insurance and reinsurance companies
(v) mortgage financing firms
(vi) other non-deposit-taking financial institutions

(b) What are the top 5 institutions in each category (by assets)?

(c) For the institutions identified in response to question 3(b):

(i) what proportion of their equity, debt, or other outstanding liabilities is held by non-residents?

(ii) what proportion of their overall assets is represented by claims issued by non-residents?

4. Financial Markets

(a) What is the market capitalisation of stock, bond, and derivatives exchanges and alternative trading systems (ATS) authorised to operate in the member state?

(b) For each exchange and ATS:

(i) what proportion of their equity, debt, or other outstanding liabilities is held by non-residents?

(ii) what proportion of their overall assets is represented by claims issued by non-residents?

(iii) what is the number and aggregate market capitalisation of non-resident issuers?

(iv) what proportion of exchange/ATS members are non-residents?

5. Financial Market Infrastructure Providers

(a) How many of each of the following financial market infrastructure providers are currently authorised to operate in the member state?

(i) large value and retail payment systems

(ii) central securities depositories

(iii) centralised counterparties or clearing houses

(iv) custodians or sub-custodians

(b) For each financial market infrastructure provider:

(i) what proportion of their equity, debt, or other outstanding liabilities is held by non-residents?

(ii) what proportion of their overall assets is represented by claims issued by non-residents?

(iii) what proportion of its members, clients, or customers are non-residents?
6. Government Financing Activities

(a) Does the member state directly or indirectly hold any of the following?

(i) currencies or public debt issued by other states

(ii) foreign real estate

(iii) equity, debt, or other claims issued by non-resident firms

(b) If yes to questions 6(a), are any of these holdings large enough that their significant reduction in value, default, or expropriation would expose the member state to a significant loss?

(c) Does the state have any direct or indirect liabilities to non-residents under loans, guarantees, derivatives contracts, or other commitments?

(d) If yes to question 6(c), is it likely that the member state’s default on these obligations would expose the relevant counterparties to a significant loss?