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Governance Challenges for Global Finance

"Global banks are global in life
but national in death."

Mervyn King (2009)

The global financial system facilitates global trade, the exchange of goods and services across borders. Some would even argue that international finance has outgrown the needs of international trade. The unprecedented rise of global financial markets over the last decades has brought us the Second Age of Globalisation. International financial integration was high from 1870 to 1914, the First Age of Globalisation. It declined sharply through the Great Depression and the Second World War. Recovering after that period, the Second Age of Globalisation took off in the 1980s, as documented by Obstfeld and Taylor (2004). This second wave culminated in the Great Financial Crisis that started in 2007 and is not yet finished, as of this writing. The large international banks were found to be at the core of transmitting the shock from the US housing market collapse to the global financial and economic system. Substantial amounts of government support, in particular in the USA and Europe, were needed to steer international (and domestic) banks through the Great Financial Crisis.

The rise of large international banks is comparable to that of multinational companies, which underpin global trade. While multinational companies started with importing raw materials to, and exporting products from, their home base, the last decades have witnessed a shift towards direct foreign investment to produce goods locally. Similarly, large banks have expanded on a global scale by establishing branches and subsidiaries abroad, often through acquisition of local banks. These banks have grown into global powerhouses with balance sheets of up to USD 3 trillion of assets and span the global financial system.

New international institutions, like the International Monetary Fund (IMF) and the World Trade Organisation (WTO), were instrumental in restoring the global financial and trade system in the aftermath of the Great Depression and the Second World War. The central question in my new book *Governance of International Banking* (Schoenmaker, 2013) is, what institutional changes are needed to restore the stability of international banking? As the response of the international policy community, embodied in the newly emerged Group of Twenty (G-20), is slowing down, national supervisors are increasingly retrenching banks on national lines in the aftermath of the Great Financial Crisis.

The costs associated with financial crises can be large. They not only affect banks and their creditors and stakeholders, they also extract a toll from taxpayers and the real economy, as witnessed during the Great Financial Crisis. A central aim of financial regulation is to internalise these negative externalities, so as to provide banks with appropriate incentives to manage – and limit – their risks and authorities with the appropriate tools to reduce the impact of a failure on the wider financial

system. Regulation can achieve this central aim by reducing the incidence of distress at individual banks and by intervening in an efficient manner if insolvencies or financial crises do occur. However, this is complicated by the rise of large international banks that operate on a global scale across several jurisdictions. Most national authorities only address the spill-over effects gen-

erated by a distressed bank within their national perimeter and ignore cross-border spill-over effects. To summarise this point, Mervyn King (2009), the former governor of the Bank of England, has coined the famous sentence: "The collapse of Lehman Brothers showed us that global banks are global in life but national in death."

Since the 1990s, national authorities have adopted several policies based on essentially voluntary cooperation embodied in non-binding Memoranda of Understanding (MoUs). This policy approach failed during the Great Financial Crisis. The basic reason for this coordination failure is that both the incentives and the institutional framework for cooperation have been lacking. To overcome this policy failure, this book explores mechanisms for binding cooperation in the supervision and resolution of large international banks. While that is technically feasible, the real hurdle is politics. Countries want to preserve their sovereignty, and are thus not keen to share the control over their national banks, even when they operate on a global scale.

1 Governance Challenges

The international monetary and financial system poses several governance challenges for nation states. Monetary as well as financial stability are a public good. Can national governments still produce this public good at the national level in today's global financial markets?

Nation states

The coordination debate starts with the nation state as the holder of sovereign power. The modern state emerged after the peace of Westphalia in 1648. In reaction to the numerous complications of the feudal system in the Middle Ages, political philosophers like Jean Bodin (1530–1596) stressed the necessity for sovereignty to be one and indivisible. The key element of the nation state is that the ultimate sovereign power (state) and the cultural entity of people (nation) overlap. The nation state has become the dominant form of state organisation. In particular, the democratic nation state has emerged, in which the people determine public policy by electing the legislature and/or government. Key symbols of a nation state are its flag, its sword power, and its currency. The state and its currency are circular. While each state wants its own currency to foster its (monetary) independence, each currency needs a strong sovereign backstop to be credible (Goodhart, 1998). The power to tax (the "deep pockets" of government) is an important aspect of this sovereign backstop.

In the Westphalian system of nation states, the balance of international power rests with clearly defined, centrally controlled nation states, which

recognise each other's sovereignty and territory (Cooper, 2003). In this system, states are equal and independent. States do not have to recognise a higher authority than their own, while their relations with other states are conducted on equal footing. The Westphalian system of states has evolved over the centuries into the global standard for the conduct between states. In his recent book, *The Globalization Paradox*, Dani Rodrik (2011) argues that the nation state remains the only game in town, when it comes to global governance.

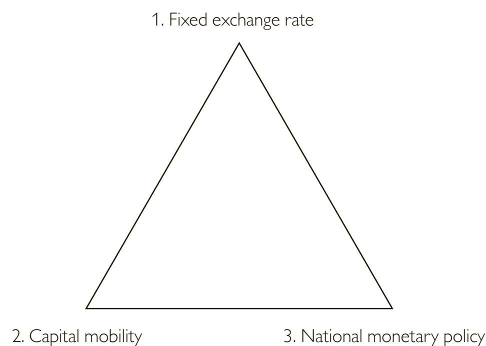
However, Padoa-Schioppa (2010) challenged this notion and suggested that new thinking on the concept of the state is needed. The Westphalian system of international relations between sovereign nation states may not be as absolute in a globalised world as it has been in previous centuries. International organisations such as the IMF and the WTO are already playing an important role in the present system of global governance. My new book explores the potential role of international organisations for the stability of the global financial system. A key element is the command over fiscal resources, which until recently were the exclusive domain of nation states, to provide a backstop to the global financial system. The IMF is the first example of an international organisation that can – albeit indirectly – marshal fiscal resources (from its member countries) to maintain global monetary and financial stability. Nevertheless, this command is constrained, as the IMF has an intricate governance structure involving member countries in the ultimate decision on financial support for countries in difficulties.

Monetary trilemma

Moving to the coordination challenges in a global financial system, fixed exchange rates have been found to be unstable on the monetary side. This led to the formulation of the monetary trilemma by Mundell (1963) and Fleming (1962), which states that (1) a fixed exchange rate, (2) international capital mobility, and (3) national independence in monetary policy cannot be achieved at the same time; one policy objective has to give. The corollary is that governments face a trade-off among these objectives and have to make a choice of two objectives. Chart 1 depicts the monetary policy trilemma.

Chart 1

The Monetary Trilemma



Source: Mundell (1963) and Fleming (1962).

Mundell and Fleming provide a theoretical underpinning for the monetary trilemma. The Mundell-Fleming model of an open economy portrays the short-run relationship between an economy's nominal exchange rate, interest rate, and output. By contrast, the closed-economy model focuses only on the relationship between the interest rate and output. The open economy assumption is the innovation in their model. They show that the interest rate and the exchange rate cannot be set independently in an open economy model.

The intuition of the model is as follows. Assuming perfect capital mobility and a fixed exchange rate, the slightest interest rate differential causes infi-

nite capital flows. Suppose a central bank tightens monetary policy by increasing its domestic interest rate. Portfolio holders worldwide shift their wealth to take advantage of the new higher rate. They buy domestic assets, tending to cause the exchange rate to appreciate. This forces, in turn, the central bank to intervene to hold the exchange rate constant. The central bank buys foreign money in exchange for domestic money, reversing the initial monetary tightening. This process comes to an end when the domestic interest rate is back at the foreign interest rate.

It follows that a country cannot pursue (3) an independent monetary policy under (1) a fixed exchange rate and (2) perfect capital mobility (chart 1). Interest rates cannot move out of line with those prevailing in the world market. Any attempt at independent national monetary policy leads to capital flows and a need to intervene until interest rates are back in line with those in the world market. The following simple equation gives the relationship between the domestic interest rate i_d and the foreign interest rate i_f:

$$i_d = i_f \quad (1)$$

The monetary policy trilemma is thus built on an arbitrage relationship between domestic and foreign interest rates. Any deviation from world interest rates would put pressure on the fixed exchange rate. Independent interest rate decisions are only possible when the economy is "closed" through capital controls, or the exchange rate is flexible.

The trilemma concept introduces a binding constraint for nation states that operate in the global financial system. In this case, the constraint makes it impossible for a country to have simultaneously a fixed exchange rate, capital mobility across its borders, and an activist national monetary policy. This is general equilibrium thinking and it implies that capital flows in global financial markets cannot be analysed independently of foreign exchange regimes and domestic macro policy (Obstfeld and Taylor, 2004).

While in "good" times pursuing the three objectives seems to be feasible, a crisis provides the real test. History has shown time and again that fixed exchange rates ultimately break down unless monetary policy is sufficiently powerful (large reserves) and only used to support the exchange rate. Moreover, underlying economic divergences, for example in productivity, may also lead to a breakdown of a fixed exchange rate. So, both monetary and macro policies need to underpin the exchange rate target.

Countries have taken different approaches towards the monetary trilemma. The USA, for example, has flexible exchange rates and national monetary policy. Europe has irrevocably fixed exchange rates and given up national monetary policy within the euro area. Finally, China has a fixed exchange rate in combination with capital controls.

Financial trilemma

On the financial stability side, Thygesen (2003) and I (Schoenmaker, 2005) suggested the possibility that a financial trilemma as financial integration is ongoing, both at a global level and in the European Union (EU). We raised the question; to what extent can countries manage financial stability at the national level in a financially integrated system? However, we did not provide a theoretical underpinning of the financial trilemma at the time. The lack of a rigorous underpinning is related to the lack of a clear and consensus definition of financial stability.

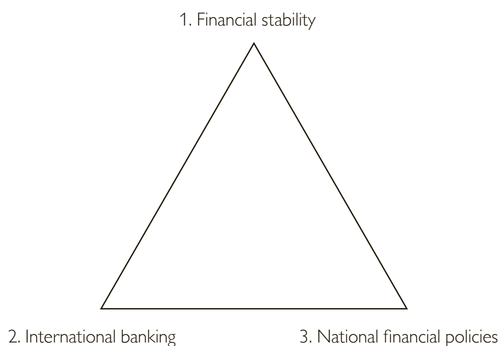
In a first model of the financial trilemma, I relate financial stability to the concept of externalities caused by a bank failure (Schoenmaker, 2008). The key insight is that national governments do not incorporate cross-border externalities of the failure of an international bank. They only care about the domestic effects, as they are accountable to their national parliament. Moreover, some banks are too large relative to the economy for a country to save. The Great Financial Crisis has subsequently confirmed that national financial supervision and resolution (i.e. crisis management) can indeed not cope with international banks.

The handling of international banks, such as Lehman Brothers and Fortis, are clear examples of coordination failure. The USA acted unilaterally, providing a resolution for the US broker/dealer arm of Lehman that, seen in isolation, can perhaps be said to have been orderly. But there was no cooperation offered in the resolution of the foreign Lehman subsidiaries, including the major operations in the UK. During the rescue efforts of Fortis, cooperation between the Belgian and Dutch authorities broke down despite a long-standing relationship in ongoing supervision. Fortis was split on national lines and subsequently resolved by the respective national authorities at a high overall cost.

These coordination problems informed a formal formulation of the financial trilemma (Schoenmaker, 2011), which states that (1) a stable financial system, (2) international banking, and (3) national financial policies for supervision and resolution, are incompatible. Any two of the three objectives can be combined but not all three; one has to give. Chart 2 illustrates the financial trilemma. The financial stability implication of international banking is that

Chart 2

The Financial Trilemma



Source: Schoenmaker (2011).

national financial policies are no longer adequate. Effective international cooperation for bank bailouts is needed. The full model is explained in chapter 2 of the book.

Until recently, much emphasis has been on supervisory cooperation. The Great Financial Crisis has shown that the endgame of resolution is decisive for international policy governance.

There is an interesting parallel with the monetary trilemma. The stability of a fixed exchange rate is tested during a crisis. Only then it becomes clear whether the authorities can weather the “attacks” from the markets (often dubbed as speculators) and maintain the exchange rate. Similarly, the stability of the financial system is tested dur-

ing a banking crisis, when it becomes clear whether the national authorities can cooperate to resolve an international bank failure. So, the financial trilemma suggests that international supervisory cooperation cannot be analysed independently of the resolution regime.

2 International Policy Proposals

In the aftermath of the Great Financial Crisis, several international policy proposals have been put forward to repair the fault lines of the global financial system. The politicians have taken the lead in the Group of Twenty (G-20). The G-20, founded in 1999, has a broader membership than the traditional western dominated groupings, such as the Group of Seven (G-7). The new economies of China, India, Brazil, and South Africa, for example, are among the G-20 members.[2] While the G-20 used to meet at the level of finance ministers and central bank governors, it has changed gear after the start of the Great Financial Crisis. Since November 2008, a bi-annual Summit of the political leaders of the G-20 countries has been added on top of the ministerial and governors' meetings. The G-20 is thus pushing the international policy agenda and monitoring progress of the more technical committees, such as the Basel Committee on Banking Supervision and the Financial Stability Board (FSB).

International banking policy coordination got started after the failure of an international, albeit small, German bank, Bankhaus Herstatt, which operated on the global foreign exchange (FX) market. On 26 June 1974, Herstatt became insolvent after the German markets were closed, but before the US markets were closed. Herstatt had thus received its part on the Deutsche mark lag of FX deals, but was not able to pay on the US lag. This small international bank failure led to sizeable losses on the global FX market and prompted the establishment of the Basel Committee on Banking Supervision in 1974 (Goodhart, 2011).

In its early years, the Basel Committee worked on the supervisory coverage of international banks, in particular the relative responsibilities of the home and host supervisors. The main result of this work is the Basel Concordat setting out the principles for the supervision of foreign branches and subsidiaries, which chapter 3 of the book discusses in more detail. At a later stage, the Basel Committee moved to setting minimum regulatory standards to promote a level playing field for international banks. A major result is the well-known 1988 Basel Capital Accord (Basel I), which developed a single risk-adjusted capital standard to be applied throughout the major banking countries of the world. The subsequent 2004/6 Revised International Capital Framework (Basel II) allows the large

[2] *The full list of G-20 members include Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, the United States and the European Union.*

banks to use their internal risk management models to calculate capital requirements.

The Basel Committee of Banking Supervision is a committee set up under the auspices of the Bank for International Settlements (BIS), but has no legal personality of its own. The Basel Committee does not possess any formal supranational supervisory authority and its standards do not have legal force. The Basel Committee formulates and recommends broad supervisory standards, which can be seen as soft law, to be implemented in hard law by the national authorities. Nevertheless, the Basel standards have a legally significant impact, as the Basel standards have become the effective standards for banking supervision across the world. Because of its lack of legal status, the Basel Committee shies away from sanctions, in case a country does not implement and enforce the agreed standards, and crisis resolution, which involves finance ministries and politicians (Goodhart, 2011). The Committee regards these domains as the prerogative of sovereign states.

The IMF and the FSB have started to fill this international void. The IMF established the Financial Sector Assessment Program (FSAP) in 1999, which provides a comprehensive and in-depth analysis of a country's financial sector. As part of the FSAP, the IMF performs a detailed assessment as to what extent countries observe relevant financial sector standards and codes, including the Basel standards. It should be added that the FSAPs were originally conducted on a voluntary basis. It took the Great Financial Crisis before the USA and China were prepared to submit their financial system to an assessment by the IMF. The US and Chinese FSAP happened in 2010 and 2011 respectively, more than ten years after the start of the programme. Finally, in 2010, the IMF made financial stability assessments under the FSAP a mandatory part of IMF surveillance every five years for the 25 largest countries deemed systemically important based on the size of their financial sector and their global interconnectedness.

The FSB was established by the G-7 in 1999 under the name, Financial Stability Forum, to promote international financial stability. Shortly after the outbreak of the Great Financial Crisis, the G-20 heads of states and governments took over from the G-7 and upgraded the name from Forum to Board, vested the FSB with legal personality (an association under Swiss Law), and enhanced the capacity. The G-20 follows a gradual approach towards the institutionalisation of the FSB. The legal personality is a first step. The G-20 considers a treaty-based international organisation not to be an appropriate legal form at this time (FSB, 2012). The FSB thus falls short of full-blown international organisations, such as the IMF and the WTO. But the strong backing of the G-20 political leaders has increased the powers and standing of the FSB as an international body. The mandate of the FSB includes *inter alia* the following tasks:

- assess vulnerabilities affecting the global financial system;
- support contingency planning for cross-border crisis management; and
- promote members' implementation of agreed standards through monitoring.

But these tasks are still relatively modest, as they enable the FSB to promote, rather than to lead and command, international cooperation.

Reform agenda

The Great Financial Crisis brought into sharp focus the massive costs associated with the bailout of complex systemi-

cally important financial institutions, which were perceived as too-big-to-fail. The too-big-to-fail doctrine has been reinforced, if anything, by governments' handling of the financial crisis. As a result, the most significant regulatory reform proposals have focused on the question of how to curtail the too-big-to-fail problem. Namely, how can one reduce moral hazard and rein back expectations of future bailouts of the global systemically important banks (G-SIBs)?

The main reform proposals to strengthen financial stability are twofold:

1. Reduce the probability of failure by increasing capital substantially. The new Basel III Capital Framework increases the quality and quantity of capital, resulting in higher levels of core equity. Moreover, there is a capital surcharge for the global systemic banks. The objective is for banks to internalise the externalities of a systemic failure and thus to better protect taxpayers against any future public bailouts.
2. Reduce the impact of a systemic failure of a global systemic bank. The FSB has formulated Key Attributes of Effective Resolution Regimes for Financial Institutions. A central plank is a Recovery and Resolution Plan drawn up *exante* with the purpose of using it if a bank gets into difficulties. These plans may allow global systemic banks to fail or, at least, to be unwound in an orderly manner without imposing disproportionate costs on the taxpayer.

Both elements can reinforce each other to potentially reduce the too-big-to-fail problem. Other elements on the reform agenda are proposals to strengthen actual supervision, to move OTC derivatives to central clearing (reducing counterparty risk), to address the gaps in the rules for securitisation (strengthening risk management), to strengthen regulation and oversight of the shadow banking system (extending the regulatory remit towards all financial institutions involved in credit intermediation), and to adopt macroprudential frameworks and tools (preventing/mitigating asset price booms and pro-cyclical microprudential rules). A discussion of these other elements is beyond the scope of the book.

Enhanced capital and liquidity holdings

Banks were caught heavily undercapitalised at the time of the Great Financial Crisis. Some components of regulatory capital, like sub-ordinated debt, were not found to absorb losses. Authorities were afraid to impose losses on sub-ordinated bondholders out of fear for further contagion in the financial system. Moreover, banks had been making large pay-outs to shareholders through dividends and share buy-backs until early 2008, the onset of the Great Financial Crisis.

The main purpose of the Basel III capital reform is to raise the quality and level of capital (Basel Committee on Banking Supervision, 2010). There is a greater focus on common equity (that is shareholders' equity, including reserves) to absorb losses. The common equity minimum is raised to 4.5% of risk-weighted assets. Together with a further 3.5% of Tier 1 and Tier 2 capital, the total minimum capital amount is 8%. Next, a capital conservation buffer, comprising a common equity of 2.5%, puts a constraint on a bank's discretionary distributions, such as dividend payments or share buy-backs. In addition, a countercyclical capital buffer, ranging from 0% to 2.5%, creates a buffer that is built up in good times, and used in economic downturns. The

Chart 3

Basel III Capital Charges

Component	Charge	Description
Pillar 2	? %	Extra capital for other risks
G-SIB surcharge	1–2.5%	Extra capital for G-SIBs
Countercyclical buffer	0–2.5%	Extra cushion of capital Only in boom times
Capital conservation buffer	2.5%	Extra cushion of capital
Total minimum	8.0%	Minimum capital amount

countercyclical buffer is meant to stabilise the supply of credit in an economy.

There is an extra capital surcharge for G-SIBs. These global systemic banks must have higher loss absorbency capacity to reflect the greater risk that they pose to the global financial system. The G-SIB surcharge ranges from 1% to 2.5%, depending on a bank's systemic importance. A surcharge of 3.5% is reserved for G-SIBs whose systemic importance increases in the future. Chapter 3 of the book explains the assessment methodology to identify G-SIBs and contains the list of current G-SIBs.

Chart 3 presents an overview of the new capital buffers in the Basel III framework: the capital conservation buffer, the countercyclical buffer, and the G-SIB surcharge. Furthermore, on top of these capital requirements, supervisors may add extra capital to cover for other risks following a supervisory review process (as part of the so-called pillar 2 of the Basel capital framework). The new Basel III capital rules are phased in gradually from 2013 till 2019.

Another problem with the previous Basel II capital framework was that banks underrepresented their risk-weighted assets to save on capital. Under Basel II banks were, and still are under Basel III, allowed to calculate the risk-weights of the various asset categories with their own internal models. Banks are thus tempted to downplay the riskiness of assets to reduce capital ratios. New research at the IMF reports substantial variations in the calculation of risk-weighted assets across banks and countries, which may undermine the Basel II/III capital framework (Le Leslé and Avramova, 2012). To address this bias, Basel III introduces the leverage ratio, a traditional backstop to the risk-based capital requirement. The leverage ratio is calculated as Tier 1 Capital divided by Total Assets (so without risk-weighting) and set at 3% for all banks. The leverage ratio is a rough measure to ensure there is sufficient capital in the overall banking system and to limit the growth of bank balance sheets (at a given amount of available

capital). Although it would be consistent to apply the G-SIB surcharge also to the leverage ratio (for example a 4% leverage ratio for global systemic banks), the Basel Committee has not (yet) decided to do that.

Banks were also short of liquidity at the onset of the Great Financial Crisis. They had insufficient freely available liquid assets, as the entire system seized up. Moreover, banks relied heavily on short-term wholesale funding for their long term assets, creating a substantial liquidity mismatch. Basel III introduces the liquidity coverage ratio, requiring banks to have sufficient high-quality

liquid assets to withstand a 30-day stressed funding scenario, and the net stable funding ratio, a longer-term structural ratio designed to address liquidity mismatches. The latter ratio covers the entire balance sheet and provides incentives for banks to use stable sources of funding.

Effective resolution

Resolution of international banks was extremely difficult during the Great Financial Crisis. Several countries lacked an effective national resolution regime. On top of that, national resolution proceedings differed greatly, complicating an international resolution. Chapter 4 of the book discusses some major international bank failures in detail. The big lesson of the Great Financial Crisis is that the world needs a way of resolving any financial institution – no matter what size – if it gets into trouble. The establishment of an effective resolution framework is therefore high on the policy agenda. The FSB (2011) has formulated the Key Attributes of Effective Resolution Regimes for Financial Institutions.

The Key Attributes require national jurisdictions to have designated resolution authorities with a broad range of powers to intervene and resolve a financial institution that is no longer viable. These intervention powers enable resolution authorities to order transfers of business and creditor-financed recapitalisation ("bail-in") that allocate losses to shareholders and unsecured creditors, like bondholders, in their order of seniority. So, shareholders and bondholders should absorb losses, before public bailouts are considered. Some countries, such as the UK, the USA, Japan, Germany, the Netherlands, and Switzerland, have implemented special resolution regimes, as reported in chapter 6 of the book.

Next, national jurisdictions should remove impediments to cross-border cooperation and provide resolution authorities with incentives and statutory mandates to share information across borders. It should also achieve a coordinated solution that takes into account financial stability in all jurisdictions affected by a financial institution's failure. While this Key Attribute to share information and achieve a coordination solution is laudable, the FSB fails to specify the incentives for effective cooperation (see below).

Finally, the Key Attributes contain two special requirements for global systemic banks. The first is that recovery and resolution plans are put in place for all G-SIBs. These recovery and resolution plans map out the actions a bank or a supervisory/resolution authority would take in the event of another crisis. These plans provide additional confidence that the bank in question can for-

mally "de-risk" itself to avoid a liquidity crisis, or in the worst case, be unwound in a responsible way that will help avoid sparking a systemic risk event. A particular challenge is to develop a credible group resolution plan, which is more than a string of national resolution plans.

To foster such group-wide thinking, the second requirement is to maintain crisis management groups for all G-SIBs, bringing together home and key host authorities. These groups should be underpinned by institution-specific cross-border cooperation agreements. Again, the challenge is to achieve appropriate incentives for cooperation among home and host authorities.

Incentives for cooperation

In the slipstream of the Great Financial Crisis, international governance has significantly been stepped up. The Basel Committee on Banking Supervision responsible for setting international banking standards is now supplemented by the G-20 on the political front and the FSB on the resolution front. This raises both the quality and the monitoring of standards on international banking regulation, supervision, and resolution. The enhanced monitoring of national implementation of international standards by the G-20 also promotes the harmonisation of national standards, reducing the scope for conflicts of interests between countries. While greater harmonisation *enables* international cooperation, it may not require it.

An additional next step is needed to make cooperation actually occur. The Basel Concordat on Supervisory Coordination specifies the allocation of supervisory responsibility between home and host supervisors for international banks, but the Concordat does not incorporate mechanisms to enforce cooperation or incentives to induce cooperation within these so-called supervisory colleges. The Basel Concordat has given rise to hundreds of Memoranda of Understanding (MoUs) for coordinating supervisory efforts and sharing information across borders. More recently, some of these MoUs have been expanded to include crisis management, establishing (cross-border) crisis management groups. The range of signatories has also been expanded beyond supervisors to include central banks and ministries of finance (see, for example, various EU MoUs). But MoUs are signed on a voluntarily basis, following a soft law approach. The last article of a typical MoU specifies that the arrangements discussed are not legally binding and thus preserves the sovereignty of national supervisors. Claessens et al. (2010) note dryly that these MoUs were not used during the crisis (see also chapter 4 of the book).

International policy proposals have so far focused on a soft law approach to address the governance challenge in global banking (Brummer, 2010; Ferran, 2010). Given the experiences during the crisis, it is somewhat disappointing that the new proposals to strengthen supervision and resolution continue to rely on this soft law basis for supervisory colleges and crisis management groups to facilitate – but not force – cooperation between home and host authorities.

Experience has shown that in times of stress, information-sharing agreements are likely to fray. Bad news tends to be guarded as long as possible. Baxter, Hansen and Sommer (2004, p. 79) note: "Once the bank's condition degrades, supervisors think less about monitoring and more about protecting their creditors. This creates a conflict among supervisors." An example is the reluctance of the Japanese supervisory authorities to share with the USA

authorities their discovery of trading losses in Daiwa's New York branch. A trader in the New York Daiwa office had lost USD 1.2 billion in a series of unauthorised trades over an 11 year period from 1985 to 1996. When the trader finally confessed, and the home country authorities in Japan were informed, there was a two-month lag before the information was shared with the host country authorities in the USA. This is only one of many examples of home authorities showing reluctance to share information on a timely basis with host country authorities (see the case studies in chapter 4 of the book).

Bank managers are often reluctant to share bad news with their supervisors because they hope that it will blow over (wishful thinking) and they fear they will lose discretion for dealing with the problem (and, indeed, lose their jobs as well). Similarly, the primary banking supervisor is likely to be reluctant to share bad news with other supervisory authorities out of concern that the leakage of bad news could precipitate a liquidity crisis, or that the other supervisory authority might take action that would constrain the primary supervisor's discretion in dealing with the problem or exercising forbearance. Often, the primary supervisor uses its discretion to forbear as long as there is a possibility that a bank's condition may be self-correcting, particularly if the alternative is closing the bank. A decision to close a bank is sure to be questioned, so supervisors tend to forbear until losses are so large that there can be no reasonable doubt that the institution is insolvent. Moreover, losses that spill across national borders intensify conflicts between home and host country authorities and make it difficult to achieve a cooperative resolution of an insolvent bank. Thus, international cooperation may break down precisely when it is most needed (Herring, 2007).

3 Conclusion and Organisation of the Book

The global financial system poses several governance challenges for nation states. The underlying problem is that markets and financial institutions are operating on a global scale, while sovereign power is defined at the national level. Financial authorities, such as supervisors, central banks, resolution agencies, and finance ministries, derive their mandate and powers from national legislation and are thus national-based. This scope mismatch between global financial players and national financial authorities creates major coordination challenges. The international financial reform agenda comprises useful efforts to strengthen supervision with substantial higher capital requirements and new resolution standards, but so far fails to provide (binding) incentives for cooperation between national authorities.

The trilemma is a powerful concept stating that only two out of three policy objectives can be achieved at the same time; one objective has to give. The monetary trilemma explains the coordination challenge in the monetary field that (1) a fixed exchange rate, (2) international capital mobility, and (3) national monetary policy are not compatible. The monetary trilemma is underpinned by a theoretical model and well established in academic journal articles, as well as in standard macroeconomic textbooks.

Turning to financial stability, the financial trilemma explains a new coordination challenge, highlighted by the Great Financial Crisis, that (1) a stable financial system, (2) international banking and (3) national financial policies are incompatible. The

financial trilemma is new. The book *Governance of International Banking* (Schoenmaker, 2013) aims to provide a clear and solid exposition of the financial trilemma and explore alternative solutions to the governance challenge in global banking.

Organisation of the book

The remainder of the book is organised as follows. Chapter 2 poses the question whether the public good of international financial stability can be produced by individual nation states, or not. Critical for the argument in this book, our model of the financial trilemma clearly shows that nation states are not able to produce this public good. Each country plays the game of contributing to financial stability as "individually rational" in the sense that each country's payoff is as large as it would be by acting independently. Countries thus arrive at a non-cooperative Nash equilibrium, in which they do not contribute sufficient funds for recapitalising an ailing international bank, even if such a recapitalisation is efficient from a public policy perspective. The model indicates that the potential for coordination failure among national supervisors increases, as internationalisation of banking rises.

Chapter 3 first analyses the business model of international banks. Next, it documents the rise of international banking, both within the major regions and between the three regional blocks. It is found that international banking is most advanced in Europe and least in Asia. The Americas take an intermediate position on the internationalisation scale. Chapter 3 also documents the degree of internationalisation of the large global systemic banks. The Financial Stability Board, the newly emerged body dealing with international financial stability, has produced a list of 28 global systemically important banks (G-SIBs), which face higher regulatory requirements. The chapter confirms that all large and internationally operating banks are on this list.

Next, chapter 4 provides case studies of some major international bank failures during the Great Financial Crisis. It appears that most of these bank failures, such as those of Lehman and Fortis, follow the theoretical model. Coordination breakdown between national authorities thus happens in practice.

Chapter 5 develops some model-based solutions to the financial trilemma. International governance mechanisms for coordination include supranational approaches, where an international institution takes over from the nation states. An alternative approach is burden sharing under which national governments pre-commit to share the burden of an international bailout. To curtail the moral hazard of an international safety net, the chapter proposes to apply the new capital surcharge for the

global systemic banks (the so-called G-SIBs) to all banks that would fall under the proposed safety net. Higher capital reduces the incentive for excessive risk taking. Moreover, there should be effective resolution plans for these banks.

Chapter 6 discusses the political economy of international governance. The fiscal dimension is key to any international governance in global finance. The control over fiscal resources to provide the ultimate backstop for a potential international bank bailout defines the incentives for cooperation. As long as the fiscal backstop is fully national, international cooperation will remain fragile. Only when there is an international governance mechanism to pool fiscal resources, international cooperation can be made to work. Effective international cooperation challenges the core of sovereign power (the power to tax and to set the budget independently). It also touches the core of citizens' identity. Are citizens only prepared to express solidarity within their nation state? Or, can we also develop a transnational identity necessary to shift resources at the broader international level?

Finally, chapter 7 lays down a framework for global governance. In the game-theoretic framework applied throughout this book, we propose a backward-solving approach. The endgame of resolution is setting the incentives for the supervisory agency. So, resolution and supervision should be lifted in tandem to the regional or international level. The chapter outlines the potential for turning existing international bodies, such as the Bank for International Settlements and the International Monetary Fund, into international institutions for financial stability. At the regional level, Europe is contemplating a fully-fledged banking union to match its monetary union. This book focuses on the governance of international banks, but similar arguments are more or less applicable to the governance of other parts of the global financial system.

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