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Post-Basel III supervisory challenges

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Introduction

The finalisation of Basel III in December 2017 was an important milestone, marking the completion of the global reform of the regulatory framework that began following the onset of the financial crisis.[1] As a package, the reforms significantly strengthen the quality and quantity of capital, capturing a broader scope of risks faced by banks. And it is reinforced by macroprudential elements and multiple backstop measures to mitigate excessive leverage and liquidity risks. Full, timely and consistent implementation of Basel III remains fundamental to building a resilient financial system, maintaining public confidence in regulatory ratios and providing a level playing field for internationally active banks.[2] For supervisors therefore, the finalisation of Basel III marks only the beginning of the "heavy lifting" that will be needed to ensure effective implementation and robust supervision in a post-Basel III environment.[3]

As authorities continue their efforts to implement the Basel III standards, the demands on supervisors will be considerable. They will need to understand and oversee a large new set of rules, have a nuanced understanding of the individual risk profiles of regulated banks, taking into account the state of economic cycles around the world, use forward-looking assessments, and intervene early, before problems arise.[4] Supervisors will also need to widen the scope of supervisory reviews to address new emerging risks at the same time as dealing with legacy issues and the sustainability of business models. Adding further complexity is the role that supervisors must also play in assessing systemic vulnerabilities and macroeconomic pressures affecting the global financial system, generating potential issues with macroprudential coordination. Furthermore, there may be signs that the political priorities are changing, which could also influence the regulatory horizon.[5] Furthermore, despite the significant efforts that have been made in bank resolution and crisis management, there is also a looming risk that supervisors are not yet fully prepared for the possibility of a global bank failure. All of these in turn create considerable challenges and risks for supervisors going forward, which may put authorities under pressure to find supervisors with the broad skill sets needed to tackle these more encompassing tasks.

1 BCBS (2017c).

2 BCBS (2017b).

3 Carstens (2018b), Ingves (2018).

4 Carstens (2018b).

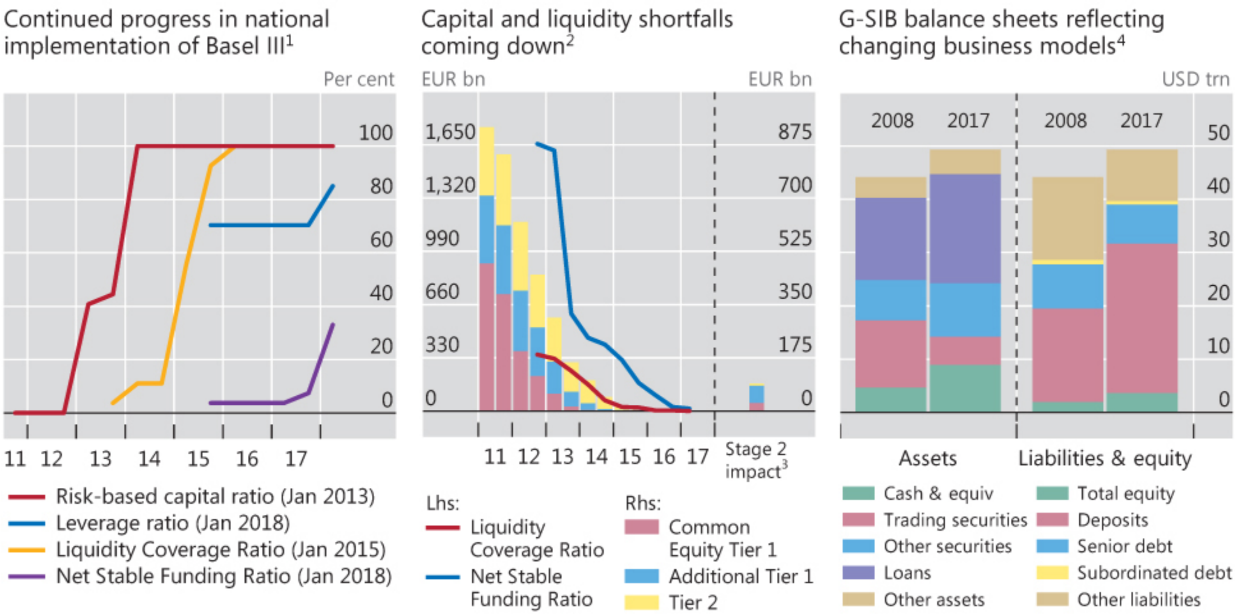
5 Carstens (2018a), Carstens (2018c).

Basel III "end game"? Risks for the banking system, old and new

The finalisation of Basel III was referred to by some industry observers as the "end game". Banks and markets responded positively to policy certainty, with bank share prices rising and analysts revising their calculations for the additional capital needed across the sector.[6] This reflected the significant progress already made towards increasing resilience, with most banks having made key adjustments to their balance sheets ahead of time to meet the new minimum requirements (Graph 1).[7]

Graph 1

Implementation of new requirements and banks' adjustments are progressing



[1] Percentage of BCBS member jurisdictions in which each standard is in force; agreed implementation dates in parentheses. [2] The height of each bar shows the aggregated capital shortfall considering requirements for each tier (ie CET1, Additional Tier 1 and Tier 2) of capital for the major internationally active banks monitored by the BCBS (BCBS (2018)). [3] Estimates based on end-2015 bank balance sheet information (BCBS (2017), Table 3). [4] Total values; based on a balanced sample of 28 G-SIBs. Cash & equiv = cash and cash equivalents.

Sources: BCBS; BCBS, *Basel III monitoring report*, December 2017 and March 2018; SNL; BIS calculations.

However, despite the progress made, market valuations and credit ratings for many banks point to continued investor scepticism about their earnings prospects. For instance, average price-to-book ratios remain lower than they were pre-crisis for many advanced economy banking systems.[8] While bank profitability has to a large extent been significantly constrained by a challenging macroeconomic environment, this continued market scepticism also points to other concerns, such as investor uncertainty over the sustainability of business models and the impact of legacy-related costs.

An ongoing challenge for banks is not only to deal with legacy issues, but also to tackle the strategic adjustments that may need to be made to their business models in order to achieve sustainable profitability. Banks need to cover the cost of their capital at a time when there is still limited scope to

[6] For example, see BBVA Research (2017), Euromoney magazine (2017).

[7] BIS (2018) Chapter III.

[8] Borio (2016), BIS (2018) Chapter III.

increase margins in a persistently low rate environment in many countries. As pressures on profitability are expected to intensify and banks look for opportunities for earnings growth, search for yield is still likely to be an issue. This means that there may be a risk that banks consider expanding their loan portfolios by adopting looser underwriting standards or more aggressive pricing policies. Alternatively, they may choose to cut costs further, particularly those of functions not directly related to profit generation, such as internal control and risk management functions.

For supervisors, oversight of banks' efforts to clean up their balance sheets remains complex and challenging, as does the task of closely monitoring the nature and types of change made to business models. Supervisors make use of business model analysis tools in order to assess the sustainability of certain business lines. However, there is a delicate balance between supervisors providing challenge to bank boards and senior management, and being perceived to be influencing or directing the bank's business strategy. Providing such challenge is also very difficult, given that business model profitability trends can differ across institutions. Furthermore, assessing business model sustainability can also be skewed where financial cycles are in the expansion phase in many advanced economies, supporting economic activity.[9]

In addition to these pressures, it is widely recognised that the excessive risk-taking that led to the financial crisis can be attributed to failures and weaknesses in corporate governance arrangements.[10] Despite efforts from authorities to strengthen corporate governance practices for banking organisations,[11] banks have continued to incur large fines resulting from serious misconduct and compliance failures. It is estimated that the cost of fines and settlements incurred by banks in the period 2009–16 is USD 321 billion.[12] The magnitude of these costs have not only become a material source of losses for many global banks but provisioning-related costs continue to act as a significant drag on banks' profitability and capital ratios.[13] According to a G30 report, conduct fines and litigation related costs are affecting bank valuations, and the uncertainty and unpredictability of those costs in the future are cited as one of the major barriers to a revaluation of the banking sector. More fundamentally, the reputation of the banking sector has deteriorated since the financial crisis, with public opinion of the integrity of the financial services industry still well below its pre-crisis levels.[14]

A core element of any supervisory review process is to assess banks' governance decision structures and processes. However, addressing risk culture in the banking sector is a very complex supervisory issue as it involves behaviours and attitudes, making it very difficult to define and measure. A considerable amount of judgment must still be exercised by supervisors on whether a healthy culture is fostered by board and senior management oversight. The crisis revealed that supervisory interventions need to be signalled early and more proactively so that problems can be addressed well before they materialise. However, post-crisis, early intervention is still challenging as it involves a difficult trade-off. Intervening too much and too often risks supervisory interference, while doing too little risks supervisory

9 BIS (2017) Chapter III.

10 Kirkpatrick (2009).

11 See for example BCBS (2010) and BCBS (2015). See also the Financial Stability Board's *Guidance on Supervisory Interaction with Financial Institutions on Risk Culture* (2014) and *Strengthening Governance Frameworks to Mitigate Misconduct Risk: A Toolkit for Firms and Supervisors* (2018).

12 Boston Consulting Group (2017).

13 In 2016, the 10 largest investment banks collectively made provisions of USD 43.7 billion to pay future fines and litigation costs, up from the USD 36.3 billion of provisions posted at the start of 2015. See *Financial Times* (2016).

14 G30 (2015); Lagarde (2015), ESRB (2015).

complacency and forbearance.[15] The ongoing challenge for supervisors is to strike the right balance between taking a more intensive, proactive approach and not unduly influencing the strategic decisions of the institution's management.[16]

While supervisors need to stay focused on these existing sources of risk, another key challenge is the need to widen the scope of supervisory attention to new and emerging risks that have a bearing on prudential supervision.[17] The most prominent example of this is the growing importance of financial technology ("fintech") and cyber-security (Chart 2).[18] Bank systems' multiple points of contact with outside parties result in significant vulnerability to cyber-attacks, and could be used as entry points for attacks targeting other parts of the financial system.[19] Fintech has the potential to not only change traditional banking business models, structures and operations, including the delivery of financial services but also to further increase banks' vulnerability to cyber-risks. Such fintech-related changes will require bank supervisors to reassess their current supervisory models and resources in order to ensure continued effective oversight of the banking system. New expertise may also be needed to assess new technology-driven risks, including strategic risk, operational risk, cyber-risk and compliance risk.[20]

15 Caruana (2017).

16 G30 (2015).

17 Carstens (2018b).

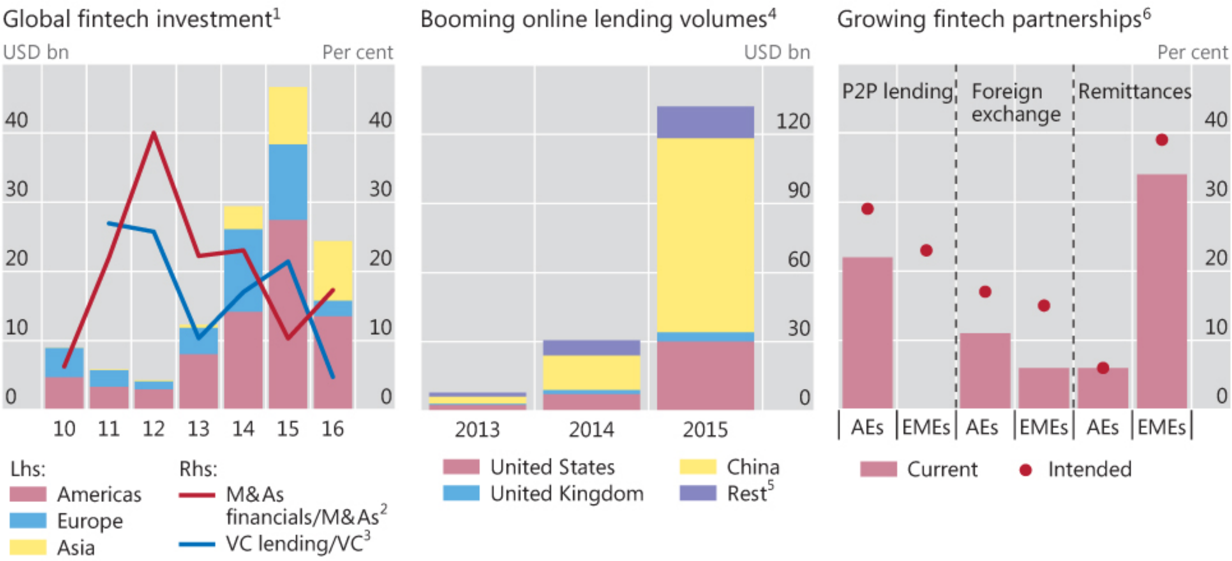
18 The BCBS defines fintech as "technologically enabled financial innovation that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services". The topics of fintech and cyber-risk will be covered extensively at the ICBS 2018.

19 Crisanto and Prenio (2017).

20 BCBS (2018).

Graph 2

Buoyant global investment in fintech and online credit volumes



[1] Total global investment: venture capital, mergers and acquisitions (M&As) and private equity. [2] M&As by financials as a share of total M&As. [3] Venture capital (VC) investment in online lending as a share of total fintech VC investment. [4] Total volume of financing, including crowdfunding, by online platforms. [5] Americas excluding the United States, Europe excluding the United Kingdom and Asia excluding China. [6] Percentage of banks offering services in partnership with fintech companies and expectations (next 12 months); survey of 61 banks across 24 countries, as of May 2016.

Sources: KPMG, *The pulse of fintech Q4 2016*, February 2017 (data sourced from PitchBook); Cambridge Centre for Alternative Finance; UBS.

The sustainability of earnings is an important focus for many supervisors, but for some authorities, "sustainability" has also taken on a broader meaning for financial stability. The new wave of thinking behind "green finance" is that, with climate change, we are collectively dealing with a very large, potentially irreversible negative externality with significant distributional effects across societies. There are therefore increasing calls for the financial sector, central banks and prudential supervisors to take on a special role in tackling the economics of climate change. Specifically, some authorities are advocating the use of a wide range of instruments to address climate change-related negative externalities by changing the incentives for financial market participants.[21]

For example, the G20's Green Finance Study Group and the Financial Stability Board (FSB) Task Force on Climate-Related Financial Disclosures have recommended steps towards encouraging financial institutions to conduct environmental risk analysis and to improve environment- and climate-related information disclosure.[22] More recently, the Network of Central Banks and Supervisors for Greening the Financial System was formally established to help to strengthen the global response required to enhance

[21] Pereira (2017).

[22] The G20 Green Finance Study Group was established in 2016 and supports the G20's strategic goal of strong, sustainable and balanced growth. "Green finance" can be understood as financing of investments that provide environmental benefits in the broader context of environmentally sustainable development. The FSB Task Force on Climate-related Financial Disclosures (TCFD) develops voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers and other stakeholders. For more information see www.fsb-tcfd.org/.

the role of the financial system to manage risks and incentivise green and low-carbon investments in the broader context of environmentally sustainable development.[23]

As with all existing and new emerging risks, achieving a balance between supervisory prudence and regulatory incentives to encourage innovation, without creating distortions in the market, will further increase the complexity of supervision going forward. However, at a more practical level, retaining and developing the skills and supervisory resources needed to deal with existing and new risks appears to be the more significant and immediate challenge for supervisory authorities. Supervisors may need to consider assessing their current staffing and training programmes to ensure that the knowledge, skills and tools of their staff remain relevant and effective in supervising the risks of new technologies and innovative business models.[24]

Complacency and politics: risks for the global financial system

In June 2018, the BIS *Annual Economic Review* reported that, on the one hand, the global economy outperformed expectations, global growth rates both strengthened and broadened, inflation remained subdued and global financial conditions eased further even as monetary policy moved slowly towards normalisation. On the other hand, financial vulnerabilities have also been rising and financial markets appear overstretched. Worryingly, there has been a continuous rise in the global stock of debt, both public and private, relative to GDP and there have also been increasing episodes of financial volatility in emerging market economies (EMEs).[25]

More generally, financial cycles have been a key determinant of macroeconomic dynamics and financial stability. Peaks in the financial cycle have tended to signal subsequent periods of banking or financial stress. From this perspective, the BIS has observed that, while for some major advanced economies the financial cycles are at a relatively early stage of the expansion, ongoing or prospective financial cycle downturns in some EMEs and smaller advanced economies pose a risk to the outlook. On balance, the BIS analysis suggests that financial cycle risks are material in a number of economies, and that it is difficult to predict how the tightening of financial conditions will unfold across regions.[26]

In some economies, financial markets appear overstretched and credit has expanded strongly, often alongside large property price increases and sometimes heavy foreign currency borrowing. Globally, aggregate total non-financial debt has risen further relative to income.[27] Financial exuberance may signal some light at the end of the post-crisis tunnel, but it may also indicate that markets are not considering potential downside risks. The biggest risk for the global economy and financial system is therefore what is described as "complacency and self-delusion".[28]

How should supervisors oversee these systemic vulnerabilities? One of the key lessons of the crisis is that vulnerabilities can build up across the system even though individual institutions look stable on a standalone basis. The new macroprudential frameworks are therefore designed to focus on the

[23] See for example Bank of France, *Network for Greening the Financial System*, www.banque-france.fr/en/financial-stability/international-role/network-greening-financial-system.

[24] BCBS (2018).

[25] BIS (2018) Editorial.

[26] BIS (2017) Chapter III.

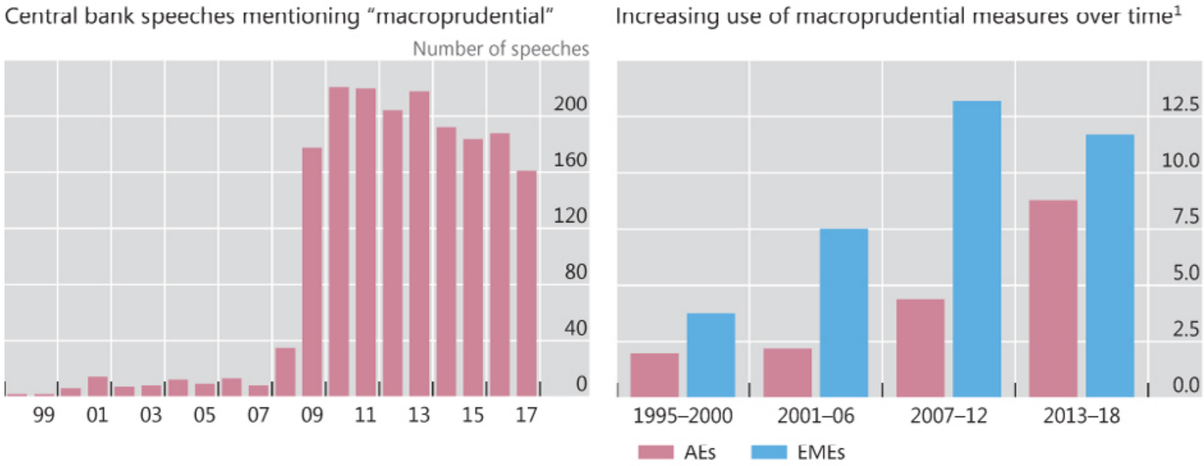
[27] BIS (2018) Chapter I.

[28] Pereira and Takáts (2017).

financial system as a whole, as systemic risks can have a direct bearing on the stability of financial institutions. Post-crisis, the term "macroprudential" has become part of the mainstream terminology used by authorities when assessing financial stability. The adoption of macroprudential measures has also increased significantly since the crisis, with a number of advanced economies increasing their use in recent years (Graph 3).[29]

Graph 3

Macroprudential orientation moves to the mainstream



¹ The bars show the average number of macroprudential measures per year and per 10 economies in each group of economies.

Sources: BIS central bankers' speeches; BIS calculations based on macroprudential measures recorded in Table IV.1.

However, studies undertaken by the BIS and the Basel Committee on Banking Supervision (BCBS) have shown that adopting macroprudential measures comes with a number of challenges.[30] Supervisors will typically use early warning indicators for identifying systemic risks, but it is difficult to determine with sufficient certainty when actions may need to be taken. Risks can build slowly over many years without leading to any acute stress. The BCBS found also that there is wide variability among its members for instance on the number of indicators used to identify periods of excess credit and systemic risk. Authorities have also adopted a wide range of measures to target specific macrofinancial risks. However, measuring the effectiveness and impact of these macroprudential tools is very difficult, given their complex interaction with other regulatory, monetary and fiscal policies.

In addition, the governance or institutional arrangements that are in place for macroprudential frameworks also differ markedly across countries. These differences in turn affect the degree of reliance on formal versus judgmental approaches in making decisions (particularly with regard to the countercyclical buffer or "CCyB") and their communication and reciprocity practices.[31] For most supervisory authorities, macroprudential decisions must be coordinated with other institutions such as the central bank or separate macroprudential authority. A common approach is to allocate macroprudential functions to several authorities, which are then coordinated through a committee.

However, the BIS and BCBS have found that there is still some uncertainty about the effectiveness of these arrangements, particularly in situations where macroprudential goals may conflict with

29 BIS (2018) Chapter IV.

30 BIS (2018) Chapter IV, BCBS (2017a).

31 BCBS (2017a).

microprudential perspectives. For example, in a boom, bank supervisors may not see the need to tighten regulatory requirements while, from a macroprudential perspective, concerns might be raised about aggregate risk-taking and potential procyclicality in the system. Conversely, in a generalised downturn, macroprudential objectives would aim to release buffers to dampen the impact on the real economy, whereas supervisors may prefer that banks preserve as much capital as possible in order to better withstand losses.[32]

Perhaps more difficult for authorities is the communication strategy on the use of macroprudential measures in sectors of the economy that have political implications. Tightening measures that affect lending and borrowing in housing markets is one such example. Effective communication is therefore critical as it can explain the objectives, strategy and policy process to the general public, and thus build political support.[33] Even when such communication strategies are deployed, there is a risk that the public reaction and media backlash are negative, which can significantly hamper the reputation of authorities.

In an environment where there is strong political will and support for enacting robust regulatory requirements, negative public and media attention would not constrain the ability of supervisors and authorities to impose such measures. However, of significant concern more recently is what appears to be changing political priorities. After decades of increasing international cooperation, this change comes in part as a result of the fallout from the post-crisis recession. The increase in international tensions is reflected in worrying developments, such as the UK Brexit vote, nationalist movements and the shift in US trade policy.[34]

These attempts to reverse open markets and to retreat into protectionism put at risk the real economic gains that have come about through closer trade and investment links enabled by multilateralism. However, they also increase the risk of financial fragmentation and the unravelling of the post-crisis international regulatory reform agenda. A political backlash against globalisation could create more suspicion of international agreements and a negative sentiment towards regulatory authorities and central banks.[35] Supervisory efforts to oversee banks' efforts to build resilience could therefore become much more difficult.

Are we prepared for failure?

Prior to the financial crisis, the traditional focus of supervisors was primarily to assess risks and to reduce the probability of bank failure. The financial crisis, however, laid bare two serious weaknesses with this approach. The first was that, when banking is international, it can be difficult for supervisors to get a full understanding of the risks being generated by global banks without effective home/host oversight, cooperation and coordination across borders. Second, supervisory authorities were not sufficiently prepared for bank failure, where many jurisdictions lacked the necessary powers and procedures for resolving systemically important banks.[36]

[32] BIS (2018) Chapter IV.

[33] BIS (2018) Chapter IV.

[34] Carstens (2018c).

[35] Pereira and Takáts (2017).

[36] Breeden (2016).

The approach to supervising international banks in the lead-up to the crisis has been described as one of fragmentation, where host supervisors focused on local risk in locally domiciled entities and home supervisors did not fully take into account the risks stemming from overseas operations. In the immediate aftermath of the crisis, national approaches prevailed where fragmentation soon became what is referred to as regulatory "balkanisation".[37] There were moves made not only to separate local subsidiaries from their parent groups to make sure they were sufficiently standalone, but to "ring-fence" certain businesses within banking groups by means of ad hoc changes.[38]

The post-crisis reforms to address "too big to fail" have significantly strengthened the global framework to make systemically important banks resolvable, reducing the risk that regulatory fragmentation or balkanisation results again in the event of failure.[39] Effective resolution planning and the orderly resolution of a cross-border bank require national authorities to have legal powers and efficient processes for sharing information, to have developed institution-specific cooperation agreements (CoAgs) with host authorities on Crisis Management Groups (CMGs) for G-SIFIs, and to be able to give prompt effect to foreign resolution actions.

However, despite significant progress made in implementing these reforms, the FSB has reported that substantial work remains in achieving effective resolution regimes and operationalising plans for systemically important banks and non-bank financial institutions.[40] Significant challenges remain to put these arrangements in place and to remove impediments to cooperation and the sharing of resolution-related information with all relevant authorities. For example, only some home jurisdictions of global systemically important banks (G-SIBs) have implemented bank resolution regimes with comprehensive powers broadly in line with the FSB Key Attributes of Effective Resolution Regimes for Financial Institutions. CMGs have been established for all G-SIBs, but CMGs have no legal authority and cross-border cooperation agreements need to be put in place before resolution plans can become operational. However, as at 2017, the FSB found that CoAgs are still not in place for nine G-SIBs.[41] The FSB reports that there are reforms underway in several jurisdictions to address some of these issues, but further reforms will be necessary to address gaps.

The way forward

As 10 years of international policymaking has come to a close, it is tempting to retreat into a false sense that post-crisis challenges have largely abated. For supervisors, the task ahead is considerable, as risks for both banks and the financial system continue to evolve and grow. But this is not unique, and there is nothing new in supervisors tackling complex risks and changes. In 2001, the General Manager of the BIS remarked:

"Over the last decades, the world has become far more complicated. Firms are running more complex risks, sectoral distinctions are blurring and markets are integrating globally. This has made the tasks

[37] Breeden (2016), Carstens (2018a).

[38] For example, the largest UK banks are required by UK law to separate core retail banking services from their investment and international banking activities by 1 January 2019. This is known as ring-fencing. See Bank of England, www.bankofengland.co.uk/prudential-regulation/key-initiatives/structural-reform.

[39] These reforms include, for example, the global systemically important bank (G-SIB) framework, the total loss-absorbing capacity (TLAC) standard and the Key Attributes of Effective Resolution Regimes for Financial Institutions.

[40] FSB (2017).

[41] Caruana (2016), FSB (2017). The G-SIBs that do not have CoAgs in place have not been identified in the FSB report.

of authorities responsible for financial stability more difficult to define and execute: there are more parameters to be considered, shocks come from many more corners, and the manner in which supervisory actions affect supervised institutions is far more complex."[42]

Almost 20 years on, supervisors must deal with a still more complex environment. The most important tool available to prudential authorities is strong supervision, which encompasses a highly skilled but also willing army of front-line supervisors, who are best positioned to say "no" even when there is pressure to say "yes".[43] Developing supervisory capacity, including the technical skills and supervisory judgment needed to undertake both quantitative and qualitative assessments, is critical for this task. Strong supervision is supported by training and development that enable supervisors to take action. Supervisors with diverse backgrounds and experience can also help authorities to have broad and deep technical and behavioural skills in the organisation. Forward-looking assessments and sophisticated tools have little value therefore without investment in building supervisory resources.

Finally, at a time when the political priorities are changing and there is a risk of winding back the significant progress made in building more resilience in the banking system, continued international cooperation is all the more critical. One key area of this cooperation is the regular exchange of practices and experience among supervisors, which not only helps to increase the shared knowledge of risk areas but also builds trust among the international regulatory community. Maintaining a dedicated spirit of cooperation will therefore enable supervisors to deal effectively with the challenges that lie ahead.[44]

Questions for discussion

Q1. What post-crisis challenges face your authority and how are your supervisors dealing with "old" and "new" risks? Do you see any additional global risks you would like to draw attention to?

Q2. What are some of the challenges that your authority faces in developing the expertise and skills needed for supervisors to assess new emerging sources of risk?

Q3. How can supervisory authorities deepen their cooperation with other financial authorities, both domestically and at the international level, enhancing their cooperative approach to seeking consistency with an adequate recognition of differences?

Q4. What can supervisory authorities do to maintain support by relevant stakeholders while protecting their independence from markets and other pressures?

42 Crockett (2001).

43 Carstens (2018b); see also Viñals and Fiechter (2010).

44 Caruana (2017).

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