Basel Committee
on Banking Supervision

A Sound Capital Planning Process: Fundamental Elements

Sound practices

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1. Background

An important lesson from the financial crisis concerned the need for banking organisations ("banks") to strengthen their capital planning processes. Some of the observed weaknesses reflected banks' processes that were not sufficiently comprehensive, appropriately forward-looking or adequately formalised. As a result, some management teams underestimated the risks inherent in their banks' business strategies and, in turn, misjudged capital needs.

In the absence of comprehensive information, some banks continued to pay dividends and repurchase common shares when capital could have been retained to insulate them against potential future losses. Some banks also issued large amounts of capital instruments – such as hybrid debt – that ultimately proved ill-equipped to absorb realised losses. In sum, many banks did not scale their decisions about the level and composition of regulatory capital to the potential impact of changing economic conditions.

During and after the financial crisis, the official sector in certain jurisdictions conducted ad hoc stress tests to assess the capital adequacy of banks within their financial system. Because of the pressing need to determine whether banks were appropriately capitalised, those first rounds of official stress tests often did not include an assessment of the processes banks themselves employ to project potential capital needs and to manage capital sources and uses on an ongoing basis. More recently, supervisors have begun to codify their expectations for what constitutes sound capital planning. In sum, those planning processes enable management at banking organisations to make informed judgments about the appropriate amount and composition of capital needed to support a bank's business strategies across a range of potential scenarios and outcomes.

2. Objective

The Basel Committee on Banking Supervision[1] ("Basel Committee", or "Committee") has conducted an exercise to understand how capital planning processes at banks of different sizes, risk profiles and business models have evolved. This was done through informal data collection[2] and comparison of existing supervisory knowledge and practice. This effort is consistent with the Basel Committee's long-standing emphasis on the need for banks to have strong internal control, governance and risk management processes. It also expands on supervisory expectations set forth in the "*Enhancements to the Basel II framework*"[3] released by the Basel Committee in July 2009. That 2009 publication emphasised the importance of effective capital planning and longer-term capital maintenance.

[1] The Basel Committee on Banking Supervision provides a forum for regular cooperation on banking supervisory matters. It seeks to promote and to strengthen supervisory and risk management practices globally. The Committee comprises representatives from Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. Observers on the Basel Committee are: the European Banking Authority, the European Central Bank, the European Commission, the Financial Stability Institute and the International Monetary Fund.

[2] Information was informally gathered about the capital planning process of banks in 15 member countries located in Africa, Asia, the Americas, Europe and the Middle East. Most of these banks provide commercial and retail banking services. Some of the larger banks also engage in capital market and asset management activities, among others.

[3] www.bis.org/publ/bcbs157.pdf

This paper does not set forth new capital planning guidance. Rather, it presents sound practices observed at some banks to foster overall improvement in the capital planning processes of banks required to implement the Basel III framework. It is not intended to describe an ideal state, as banks' practices and processes are expected to continue to improve and evolve. Nor is the paper meant to outline a one-size-fits-all approach to capital planning, as it is understood that banks would need to adopt solutions that are tailored to their individual circumstances.

3. Fundamental components

The remainder of this paper provides an overview of four fundamental components of a sound capital planning process:

(a) Internal control and governance

(b) Capital policy and risk capture

(c) Forward-looking view

(d) Management framework for preserving capital

Section (a) describes the importance of a formalised capital planning process that is administered through an effective governance structure. Section (b) discusses the role of a capital policy in codifying guidelines that senior management will rely upon in making decisions about capital deployment or preservation. It also reiterates the importance of sufficient risk capture. Section (c) highlights the benefits of incorporating forward-looking measures about potential capital needs into a bank's capital planning process. The final section summarises the need for a formal management process to consider and prioritise a range of actions that could be taken to preserve capital.

As discussed below, sound practice generally involves incorporating conservative assumptions about the plausibility of capital actions under stress into a capital plan, and applying an appropriate degree of scepticism about management's ability to execute on those actions presuming the bank is impaired as a severe scenario unfolds. In the best of examples, a capital plan includes a clear indication to decision-makers as to what capital actions they might feasibly consider taking at the group or business line level.

(a) Internal control and governance

There is considerable variation in how banks structure their capital planning processes. At some banks, the various responsibilities associated with capital planning are divided along functional lines. For example, experts assigned to a business unit have responsibility for establishing capital targets and managing their business in relation to them. Those estimates are aggregated to arrive at a firm-wide view of capital adequacy. Other banks rely on a more centralised model. In this model, a central group develops assumptions to be used firm-wide and has the authority and responsibility to review and challenge the estimates produced by individual areas of the bank. Irrespective of how a bank's capital planning process is oriented, it should aim at the sound practice of producing an internally consistent and coherent view of a bank's current and future capital needs.

It is important that a capital planning process reflects the input of different experts from across a bank, including but not limited to staff from business, risk, finance and treasury departments. There should be a strong link between the capital planning, budgeting and strategic planning processes within a bank. Collectively, these experts provide a view of the bank's current strategy, the risks associated with that strategy and an assessment of how those risks contribute to capital needs as measured by internal and regulatory standards. Otherwise, banks may run the risk of developing capital plans that do not accurately reflect the strategy individual business lines are pursuing or that are incomplete in their scope, resulting in capital targets at the group level that may be overly optimistic.

Banks with sound capital planning processes have a formal process in place to identify situations where competing assumptions are made. In this context, differences in strategic planning and capital allocation across the bank are escalated for discussion and approval by senior executives. More concretely, this may include, for example, whether it is acceptable for one business unit to anticipate a rapid growth in loan balances while a complementary business unit may assume a sharp decline in such balances.

A sound practice observed at a number of banks involves exposing capital plans and their underlying processes and models to regular independent validation. This layer of review is important for confirming that the processes are strong, are applied consistently and remain relevant for the bank's business model and risk profile.

As a general matter, both senior management and the board of directors[4] are involved in the capital planning process.[5] Sound practice typically involves a management committee or similar body that works under the auspices of a bank's board of directors and guides and reviews efforts related to capital planning. Typically, the board of directors sets forth the principles that underpin the capital planning process. Those principles may include the forward strategy for the bank, an expression of risk appetite and a perspective on striking the right balance between reinvesting capital in the bank's operations and providing returns to shareholders.

Banks with stronger governance of the capital planning process require the board of directors or one or more committees thereof to review and approve capital plans at least annually. Those same bodies are also required to consider the outcome of the capital planning process when appraising business developments and strategy. The analysis captured in a capital plan informs the capital actions contemplated by the board of directors including, for example, whether to reconfirm or change a common stock dividend or common stock repurchase plan and/or issue regulatory capital instruments. In cases where this decision-making has been delegated to one or more committees of a board of directors, approval of the capital plan typically falls within the remit of the board's risk committee.

(b) Capital policy and risk capture

A review of current practice suggests that the purpose of a capital policy and its role in the capital planning process need clarification. It is in this area that the Basel Committee observed the widest variation in practice. A capital policy is a written document agreed by the senior management of a bank. It specifies the principles that management will follow in making decisions about how to deploy a bank's capital.

Leading practice among the banks observed is for a board of directors to hold a management team accountable for demonstrating that adherence to a capital policy will allow the bank to maintain ready access to funding, meet its obligations to creditors and other counterparties, and continue to serve as a credit intermediary before, during and after a stressful scenario. Implicitly, this means that a

4 This note refers to, by way of example, a corporate governance structure comprising senior management and a board of directors. It is not meant to suggest that the Basel Committee is advocating a specific governance structure given that regulatory and legislative requirements differ by jurisdiction.

5 This observed practice is in line with the Basel Committee's *Principles for enhancing corporate governance* (2010): www.bis.org/publ/bcbs176.pdf

sound capital policy also details the range of strategies management is able to employ to address anticipated and unexpected capital shortfalls.

Typically, a capital policy will reference a suite of capital- and performance-related metrics against which management monitors the bank's condition. Regulatory capital measures feature prominently in banks' capital policies. Among the key metrics, banks focus on the Common Equity Tier 1 ratio and on ensuring that enough capital is retained to meet future requirements, such as the G-SIB surcharge. Non-regulatory based metrics tend to focus on returns. Some of the more common return measures employed by banks include return on equity (ROE), return on risk-adjusted capital (RORAC), and risk-adjusted return on capital (RAROC).

Several banks note the use of economic capital as another complementary view of a bank's condition. This is an example of how management teams employing sound capital planning practices seek to evaluate their capital adequacy from many different perspectives. A bank employing this practice aggregates economic capital need, inclusive of any risk diversification benefits and capital cushions for model risks, cyclicality or other factors, and compares it to the available financial resources.

Even when a banking organisation is diligent in defining a broad set of potential adverse outcomes, actual events can be worse. Capital policies that stood out incorporate minimum thresholds that are monitored by managers to ensure that the bank remains strong. Most banks identify triggers and limits for every metric specified in the capital policy. The considerations of many stakeholders are taken into account when setting a minimum threshold, including those of market participants, shareholders, rating agencies and regulators.

It is important for a monitoring framework to be in place and complemented by a clear and transparent formal escalation protocol for those situations when a trigger or limit is approached and/or breached, at which point a timely decision needs to be taken. Some banks described a protocol that results in increasing levels of scrutiny and/or action when thresholds are approached.

An important input to a capital policy is an expression of risk tolerance by management and the board of directors. A risk tolerance statement is approved by the board of directors and renewed annually. It directly informs the bank's business strategy and capital management, including, for example, through the establishment of return targets, risk limits and incentive compensation frameworks at the group and business unit levels.

As a general matter, the credibility of a bank's capital planning can be questioned if the process does not adequately reflect material risks, some of which may be difficult to quantify. Banks routinely quantify and hold capital against those risks that are specified in the minimum requirements or Pillar 1 of the Basel II/III regimes. Those risks include credit, counterparty, market and operational risk. Banks with better practices have a comprehensive process in place to regularly and systematically identify, and understand the limitations of, their risk quantification and measurement methods.[6] In addition, banks seek to capture in their capital plans those risks for which an explicit regulatory capital treatment is not present, such as, but not limited to, positions that result in concentrated exposures to a type of counterparty or industry, reputational risk and strategic risk. It is also important to establish clear links between capital and liquidity monitoring, considerations that banks did not feature as prominently in past evaluations of capital adequacy.

For risks that are more difficult to quantify, carefully validated assumptions made in the estimation process are widely discussed and understood by senior management to ensure the potential

[6] See the Committee's *Principles for effective risk data aggregation and risk reporting* (2013): http://www.bis.org/publ/bcbs239.pdf

for these to negatively impact a bank is not underestimated. Risks arising from the application of a model that is unable to capture embedded risks of a complex portfolio, for example, from limitations in data and/or quantification methods may fall within this category.

Some banks have developed formal processes for determining the severity of risk management gaps and developing appropriate responses, including for monitoring and limiting the exposure in question and holding regulatory capital to serve as a buffer to absorb these risks where warranted. The Basel Committee acknowledges that there are many different means by which such risks or exposures could be addressed. Sound practice exists where those risk identification and mitigation efforts, together with an appraisal of their limitations, are incorporated into the capital planning process. Otherwise, management teams and boards of directors may have a false sense of comfort about the capitalisation of their banks.

(c) Forward-looking view

Another key element of a sound capital planning process is stress testing or scenario analyses. These techniques are often used to obtain a forward view on the sufficiency of a bank's capital base.

As noted in the "*Principles for sound stress testing practices and supervision*"[7] issued by the Basel Committee in May 2009, an effective capital planning process requires a bank both to assess the risks to which it is exposed and to consider the potential impact on earnings and capital from an assumed economic downturn. In other words, stress testing needs to be an integral component of the capital planning process.

Indeed, stress testing and scenario analyses provide a view as to how the bank's capitalisation could be jeopardised if there were a dramatic bank-specific or economic change. Absent such a component, a bank's capital plan would be highly vulnerable, and thus any actions pursuant to it may not adequately insulate the bank against future adverse developments.

Stress testing or scenario analyses are quantitatively based, incorporate all relevant risks to the bank and conservatively capture and account for changes in key risk factors across all portfolios and businesses under appropriately severe forward-looking scenarios. In addition, sound practice is evidenced in the repeatability of stress testing and the capability of performing ad hoc scenarios outside the normal stress testing procedures.

In many jurisdictions, reliance on stress testing has been driven by regulatory requirements. While those requirements differ across Basel member countries, there are some common themes. There is a general expectation that banks will estimate their potential capital needs over a specific time horizon presuming at least baseline and downturn economic conditions.

Some of the advancements achieved over the past five years include banks undertaking estimates of how their risk profiles and, in turn, capital needs could change over the next 24 to 36 months. For the purpose of capital planning, financial institutions estimate the impact of at least a baseline and a downturn scenario that incorporate a combination of economic, market and bank-specific indicators.

The impact of a scenario reflects estimated changes to a bank's revenue, loss, balance sheet, exposure measures and risk-weighted assets. Of the banks observed, leading practice involved exploring the impact of scenarios that captured plausible, severe market-wide and idiosyncratic events that could

[7] *Principles for sound stress testing practices and supervision*: www.bis.org/publ/bcbs155.pdf

negatively impact the bank. The Basel Committee's *Principles for sound stress testing practices and supervision* discusses various techniques that could be used to develop a robust stress test.

Many of the banks that perform stress testing as part of the capital planning process do not incorporate diversification effects across risk dimensions or businesses. This practice is more commonly incorporated into economic capital frameworks. By not incorporating a diversification assumption, a bank is presuming that the impact of a scenario is additive. That is, it would negatively affect all aspects of a bank's business, rather than presuming that some activities would continue to perform well in the scenario while others would experience difficulties. While conservative, this assumption leads to greater prudence in capital deployment decisions.

Banks do tend to reflect in their estimates actions that the management team could reasonably undertake to mitigate the impact of a modelled economic downturn. Those management actions may include potential changes in business strategy, such as growth limits or divestitures; reductions in staff and other operating expenses; or capital actions, such as reductions in or cessation of dividends or the issuance of regulatory capital instruments.

Consistent with the expectations outlined in the internal controls and governance section of this paper, it is important that senior executives are aware of and have approved such assumptions regarding potential management actions given that they could have the potential to dampen the capital impact of the scenario on a particular business. It is a sound practice for such actions, like significant portfolio sales or substantial staff reductions, to be scrutinised. Management in those cases determines whether experts are making heroic assumptions about their ability to react in a stressed environment, and question whether the implied benefit of such actions is reasonably conservative – particularly if many banks are trying to execute on the same strategies in the midst of the stress scenario being modelled.

(d) Management framework for preserving capital

For a capital planning process to be meaningful, a bank's senior management and directors should rely on it to provide them with views of the degree to which a bank's business strategy and capital position may be vulnerable to unexpected changes in conditions.

Sound practice entails senior management and the board of directors ensuring that the capital policy and associated monitoring and escalation protocols remain relevant alongside an appropriate risk reporting and stress testing framework. In addition, they are responsible for prioritising and quantifying the capital actions available to them to cushion against unexpected events.

In practice, those actions include reductions in or cessation of common stock dividends, equity raises and/or balance sheet reductions. This last set of potential actions could, for instance, include the disposition of capital markets inventory, monetising business units or reducing credit origination. It is critical that management teams assess the feasibility of the proposed contingent actions under stress, including potential benefits and long-term costs, and have a high degree of confidence that such actions can be executed as described. Otherwise, they should not be captured in a bank's capital plan.

Banks exhibiting sound practice have also developed guiding principles for determining the appropriateness of particular actions under different scenarios, which take into account relevant considerations, such as economic value added, costs and benefits, and market conditions. In summary, it is important that actions to maintain capital are clearly defined in advance and that the management process allows for plans to be updated swiftly to allow for better decision-making in changing circumstances.

4. Conclusion

The Basel Committee recognises that there is variation across jurisdictions related to the scope of authority of supervisors in the area of capital planning. Accordingly, this paper highlights fundamental components of a sound capital planning process. The Committee believes that they are broadly applicable to banking organisations required to implement the Basel III framework.

The Basel Committee views capital planning as a necessary complement to a robust regulatory framework. Sound capital planning is critical for determining the prudent amount, type and composition of capital that is consistent with a longer-term strategy of being able to pursue business objectives, while also withstanding a stressful event. More broadly, the provision of better capital planning practices furthers the Basel Committee's objective of consistently implementing the Basel III framework as a means of maintaining the resilience of the global financial system.