Box 2
Basel III: capital and liquidity reform

Regarding recent global financial turmoil, the main reasons the financial crisis became so aggravated were that the banking sector employed excessive leverage, maintained an inadequate and deteriorated capital base and held insufficient liquidity buffers. The crisis was further amplified by a procyclical deleveraging process and the interconnectedness of systemically important financial institutions, resulting in significant global economic loss. To address these issues, the Basel Committee on Banking Supervision (BCBS) has introduced a number of capital and liquidity reforms[1] (Basel III) since 2009, which were finalized and published in December 2010 after endorsement by the G20 leaders at their November Seoul Summit.

1. Basel III: capital and liquidity reforms

The Basel III reforms not only emphasize microprudential supervision that raise the resilience of individual financial institutions when facing stressed conditions, but also have a macroprudential focus that helps to reduce the potential impacts coming from common exposures of banks and procyclicality.

1.1 Microprudential supervision reforms

The microprudential supervision reforms introduced in Basel III include three parts: (1) strengthening capital and liquidity regulations of individual banks; (2) enhancing related financial supervision, risk management and internal governance; and (3) reinforcing market discipline. The first part, capital and liquidity reforms, will significantly influence the global banking industry, and is described as follows.

Strengthening regulatory capital frameworks

Raising capital quality

Banks are required to raise their capital quality, which includes employing common equity as the predominant form of capital along with a stricter definition of common equity. Furthermore, the BCBS further requests banks, when issuing non-common Tier 1 and Tier 2 instruments, to incorporate provisions that require such instruments to either be written off or converted into common equity once they are determined to be non-viable by the relevant authorities.[2]

Enhancing risk coverage

With regard to securitization transactions, Basel III introduces higher risk-weights for complex securitization financial instruments and raises the capital charge for off-balance sheet exposures, while requiring banks to adopt more careful credit analyses on securitization transactions. Regarding trading book transactions, Basel III requires banks to calculate stressed value-at-risk at least every week and set aside additional capital charges accordingly, while banks using models to calculate specific risk are subject to the incremental risk capital charge. Additionally, Basel III also urges banks to strengthen capital charges and risk management for counterparty risk.

Increasing capital ratios

In order to enhance the loss absorbing capacity of banks, Basel III raises the common equity Tier 1 ratio from 2% to 4.5% and Tier 1 capital ratio from 4% to 6%, while asking for an additional capital conservation buffer of 2.5%, comprising only common equity, and a countercyclical capital buffer of 0-2.5%.[3]

Introducing a leverage ratio

Basel III introduces a non-risk based leverage ratio, which is calculated by dividing Tier 1 capital by total assets. The Tier 1 capital for the leverage ratio should be based on the new definition set out in Basel III, while total assets consists of on- and off-balance sheet assets. The preliminary leverage ratio is 3% and will commence in a parallel run starting from 1 January 2013. Any adjustments to the leverage ratio will be carried out in the first half of 2017 and the leverage ratio will be migrated to a Pillar I treatment on 1 January 2018.

Proposing international liquidity standards

During financial crises, liquidity can evaporate very quickly. In response, the BCBS has developed two minimum standards for funding liquidity, including: (1) the Liquidity Coverage Ratio (LCR) to strengthen banks' resilience to short-term liquidity needs; and (2) the Net Stable Funding Ratio (NSFR) to improve the problem of liquidity mismatch for banks over a longer time horizon. The minimum requirement for both ratios is 100%.

1.2 Macroprudential supervision reforms

Reducing procyclicality

In order to reduce procyclicality, the BCBS has proposed two capital requirements related to macroprudential supervision, including a capital conservation buffer and a countercyclical capital buffer, and suggested that the International Accounting Standards Board (IASB) adopt an expected loss approach for provisioning. The capital conservation buffer is designed to ensure that banks hold additional capital of 2.5% above the regulatory minimum. Restrictions on capital distribution will be imposed on banks if their capital conservation buffer falls below 2.5% so as to retain their capital. Regarding the countercyclical capital buffer of 0-2.5%, Basel III requires national authorities to monitor domestic credit growth with reference to the ratio of credit to GDP and other related indicators and apply adequate judgments in determining the size of such buffers.[4]

Addressing systemic risk and interconnectedness

The BCBS and the Financial Stability Board (FSB) are developing an integrated approach, including combinations of systemic capital surcharges, contingent capital and bail-in debt, which requires systemically important financial institutions to have loss absorbing capacities beyond the minimum standards. Moreover, the BCBS is developing quantitative and qualitative indicators to assess the systemic importance of financial institutions while studying viable alternative measures to strengthen the additional loss absorbency of systemically important financial institutions and reduce the risk of spillover among such institutions, including liquidity surcharges, tighter large exposure restrictions and enhanced financial supervision. Furthermore, according to the lessons learnt from the financial crisis, the orderly resolution of cross-border problem banks is key to decreasing systemic risk and solving the too-big-to-fail problem. Therefore, setting up a resolution mechanism for cross-border banks is also an important reform issue for the BCBS.

2. Potential impacts of Basel III on domestic banks

Based on the results of a quantitative impact study of Basel III conducted by the BCBS and the FSB, the BCBS announced the granting of an eight-year transition period for banks to raise capital ratios progressively starting from 2013 until full implementation of Basel III in 2019. In Taiwan, the Financial Supervisory Commission (FSC) has conducted preliminary calculations of capital ratios in accordance with Basel III standards using banks' data as of June 2010. The results indicated that the average common equity ratio of domestic banks was 7.54%, above the standard of 7% to be implemented in 2019, and the average Tier 1 capital ratio was 7.8%, also above the standard of 7.25% set to come into effect in 2017.[5] In line with the eight-year phase-in period of Basel III, the FSC has announced that banks will be required to strengthen risk absorbing capacities and meet international supervisory guidance through adequate long-term capital planning and dividend policies.

Notes: 1. The Basel Committee on Banking Supervision (2010), "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems" and "Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring," December.

2. The Basel Committee on Banking Supervision (2011), "Minimum Requirements to Ensure Loss Absorbency at the Point of Non-viability," January.

3. The Basel Committee on Banking Supervision (2010), "Guidance for National Authorities Operating the Countercyclical Capital Buffer," December.

4. Regarding the procedures and guidance for operating the countercyclical capital buffer regime, see the publication listed in note 3.

5. The Financial Supervisory Commission (2010), press release, 16 September.