B BASEL III

The financial crisis has revealed a number of shortcomings in the existing framework of prudential regulation. This special feature outlines the main elements of the Basel Committee on Banking Supervision's proposals to strengthen global capital and liquidity regulations, commonly referred to as Basel III.

INTRODUCTION

The recent financial crisis has clearly demonstrated that both the quality and size of the capital and liquidity base of the global banking system were insufficient to withstand severe economic shocks. Hence, at their Pittsburgh Summit in September 2009, the G20 leaders agreed to strengthen international frameworks for prudential regulation.

In December 2009 the Basel Committee on Banking Supervision (Basel Committee) published for consultation a package of proposals to strengthen global capital and liquidity regulations with the goal of promoting a more resilient banking sector.[1] At its meetings in July and September 2010, the Group of Governors and Heads of Supervision (GHOS), the oversight body of the Basel Committee, endorsed the design and calibration of the proposed measures.

MAIN ELEMENTS OF THE BASEL COMMITTEE'S REFORM PACKAGE

THE NEW DEFINITION OF CAPITAL

As revealed by the crisis, the existing definition of prudential own funds (capital) suffers from several fundamental flaws: (i) lack of a precise boundary between different capital components, (ii) inconsistent definition and application of regulatory adjustments[2] and (iii) weak transparency of the regulatory capital bases.

Under the existing Basel II rules, there is some divergence with regard to the classification of certain capital instruments. For example, the precise boundary between core Tier 1 and additional Tier 1 instruments is sometimes blurred, as is the case for certain types of preferred stock.

Moreover, there is no harmonised list of regulatory adjustments, which leads to divergent application in practice. In general, regulatory adjustments are currently applied to total Tier 1 capital or to a combination of Tier 1 and Tier 2.

Finally, the current disclosures by banks about their regulatory capital bases usually lack quality and detail. This makes it harder for stakeholders of a particular bank to adequately assess the quality of its capital base or to perform meaningful peer analyses.

In order to improve the quality and quantity of capital, the Basel Committee agreed on detailed capital measures. These measures are targeted at the different components of the capital base, as well as at the regulatory adjustments. In the future, all regulatory capital instruments must be capable of absorbing losses at least in "gone concern" situations (i.e. in the event of non-viability/insolvency). The main changes to the existing definition of regulatory capital are briefly summarised in Table below.

First, the quality and consistency of the common equity element of Tier 1 capital ("core Tier 1" or CET1) will be significantly improved. Going forward, common equity Tier 1 will only comprise common shares (or the equivalent for non-joint stock companies) plus retained earnings. Regulatory capital adjustments will be harmonised and taken generally from common equity. Instead of full deduction, some items will receive limited recognition in common equity, such as deferred tax assets arising from "temporary differences", significant investments

1 Basel Committee on Banking Supervision, "Strengthening the resilience of the banking sector – consultative document", BIS, December 2009 and "International framework for liquidity risk measurement, standards and monitoring – consultative document", BIS, December 2009.

2 The term "regulatory adjustments" generally relates to certain deductions from the capital elements (e.g. goodwill), as well as limits on the recognition of certain items in capital (e.g. minority interest).

Main changes to the definition of regulatory capital

	Basel II requirements	8%	Basel III requirements	8%
Tier 3			Abolished	
Tier 2	E.g. undisclosed reserves, subordinated debt - Deductions	4%	No substantial alterations	2%
Additional Tier 1	Some preference shares Hybrid capital - Deductions	2%	Some preference shares Portions of minority interests Hybrids with innovative features no longer accepted	1.5%
Core Tier 1	Common equity Retained earnings Minority interests Some preference shares - Deductions	2%	Common equity Retained earnings Portions of minority interests Preference shares generally excluded Silent partnerships generally excluded Portions of minority interests excluded - All existing deductions - Additional deductions (e.g. deferred tax assets)	4.5%

Source: ECB.
Note: GHOS agreement allows for a ten-year phasing-out period for certain instruments issued by non-joint stock companies.

in the equity of unconsolidated financial and insurance entities, and mortgage servicing rights (a particular type of intangible asset which is prevalent in the United States).

All in all, more emphasis will be placed on core Tier 1 to make it the most predominant form of capital.

Second, capital instruments eligible for the remaining portion of Tier 1 ("additional going concern capital") will need to be loss absorbent on a going concern basis. This requires in turn that instruments are subordinated, have fully discretionary non-cumulative dividends or coupons and have neither a maturity date nor an incentive to redeem.

The Tier 2 capital element will be simplified by removing the existing sub-categories (i.e. upper and lower Tier 2). In order to be loss absorbent on a "gone concern" basis, eligible instruments will need to be subordinated to depositors and general creditors, and have an original maturity of at least five years. The existing Tier 3 capital will be entirely abolished.

In order to meet the stated objective of improving transparency of the capital base, banks will be required to make enhanced disclosures about their capital base, for example by disclosing all regulatory capital elements and fully reconciling them back to the balance sheet in the audited financial statements.

ELIGIBILITY OF SPECIFIC INSTRUMENTS UNDER BASEL III

Hybrids with innovative features. Hybrid instruments with a redemption incentive, such as "step-up clauses", will no longer be eligible for inclusion in Tier 1 capital. This is because the eligibility criteria for both common equity Tier 1 and additional Tier 1 capital preclude capital instruments that contain any such incentive to redeem. Under the existing Basel II rules, hybrid instruments with a redemption incentive that are issued with the aim of generating cost-efficient Tier 1 capital are limited to a maximum of 15% of Tier 1 capital.[3]

Non-joint stock issues, such as cooperative shares. Shares issued by cooperative banks may be eligible for inclusion in common equity (core) Tier 1 capital, provided that they meet the general eligibility criteria ("substance over form"), i.e. they are fully subordinated to all other claims in liquidation, have a principal that is

3 See Basel Committee on Banking Supervision, "Instruments eligible for inclusion in Tier 1 capital", press release, 27 October 1998.

perpetual and classified as equity for accounting and solvency purposes, carry no obligation or expectation as to repurchase or redemption, and their dividends are fully discretionary.

Preferred stock. Issued shares with preferential features (either cumulative or non-cumulative) will most likely no longer meet the eligibility requirements for common equity (core) Tier 1 capital. The new eligibility criteria require there to be "no preferential distributions, including in respect of other elements classified as the highest quality issued capital". On the other hand, it seems that some types of perpetual preferred stock would continue to be eligible as additional Tier 1 capital, since the applicable criteria do not exclude capital instruments with a distribution preference over common stockholders.

Country-specific hybrids, such as silent participations. Alternative funding through silent participations plays a major role in certain jurisdictions, notably Germany. These instruments would need to be adapted to the new rules in order to keep their eligibility for inclusion in core and additional Tier 1 capital for non-joint-stock companies and for additional capital of joint-stock companies, respectively.

COUNTERPARTY CREDIT RISK

In addition to raising the quality of the capital base, the Basel Committee considerably strengthened the rules underlying counterparty credit risk, thus providing a more comprehensive treatment of exposures arising from derivatives, repos and securities financing activities. Going forward, capital requirements for counterparty credit risk should be calculated using stressed inputs. A capital charge associated with the deterioration in the creditworthiness of a counterparty has also been introduced to complement the charge associated with default risk. Weaknesses related to interconnectedness within the financial system and the lack of transparency of the over-the-counter (OTC) derivatives markets are being addressed not only through increased risk weights but also through incentives to standardise market instruments and the widespread use of central counterparties. These new rules complement previously agreed changes mostly related to trading-book exposures[4] and aimed at minimising incentives for regulatory arbitrage between the banking and trading books.

Overall, this set of rules implies higher risk weights and thus affects the denominator of the solvency ratio, to ensure that the capital adequacy framework encompasses all the relevant risks to credit institutions.

POTENTIAL IMPACT OF CAPITAL RULES ON BUSINESS MODELS

It can reasonably be expected that universal banks and large investment banks that carry out a range of different business activities will be hardest hit by the new, tougher requirements. Those banks may have significant "cross-holdings" (either consolidated or unconsolidated) which are subject to stricter conditions (e.g. minority interests and significant investments in the equity of unconsolidated financial and insurance entities), as well as significant amounts of deferred tax assets and intangibles which will (at least partly) need to be deducted from common equity Tier 1 capital. In addition, investment banks and universal banks, especially those with large trading and derivatives books, will also be significantly affected by the higher risk weights envisaged for these types of exposure. On the other hand, the new requirements will almost certainly have a severe impact on specific banking structures where banks often do not have direct access to capital markets, and hence have to rely on alternative funding (e.g. hybrid capital instruments). It seems fair to assume that many of these hybrid instruments will be excluded at least from the highest-quality capital component

4 These other requirements specific to the trading book will be implemented at an earlier stage than the counterparty credit risk framework, i.e. by the end of 2011. The most prominent features of these rules include: (i) the requirement for institutions using internal models in the trading book to calculate Value at Risk (VaR) by using parameters that account for more stressed economic conditions, (ii) strengthened treatment of certain types of securitisation and (iii) a higher credit conversion factor for short-term liquidity facilities to off-balance-sheet conduits.

(i.e. common equity). In consideration of the potential consequences, the GHOS September agreement[5] allows for a moderate phasing-out of instruments that no longer meet the eligibility criteria for common equity.

The imposed limits on the recognition of non-controlling interest (minority interest) in common equity Tier 1 capital may also potentially affect investments in emerging economies. These investments often require a local investor to take a minority stake; the non-eligibility of portions of this minority interest for capital purposes may render such investments less attractive.

LEVERAGE RATIO

Against the background of the excessive leverage in the banking sector prior to the onset of the financial crisis, the Basel Committee developed a simple, transparent and non-risk-based measure as a credible supplementary measure to the risk-based requirements. The leverage ratio will comprise a Tier 1 capital measure (numerator) and a total exposures measure (denominator). Off-balance-sheet items will be converted into on-balance-sheet items by means of "uniform credit conversion factors" (CCFs). These CCFs will be subject to further review to ensure that they are appropriately conservative based on historical experience.

A number of issues may need to be addressed. First, the interactions with other elements of the reform package and potential impacts on pro-cyclicality should be carefully explored. Second, a number of concerns have been raised with regard to the potential impacts of the leverage ratio on certain business models (in particular low-risk mortgage finance). Finally, there are different views with regard to the potential migration of the measure to Pillar 1, which is subject to an assessment of the results of a "test phase".

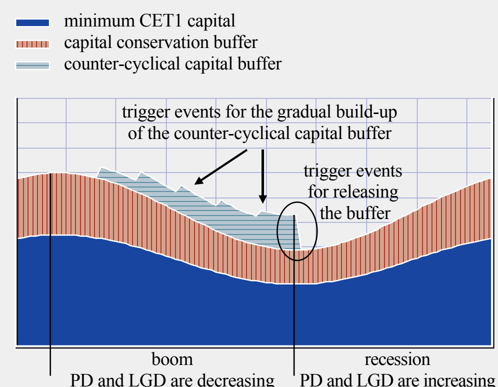
COUNTER-CYCLICAL BUFFERS

The Basel Committee aims to introduce a counter-cyclical capital framework requiring banks to build up capital buffers above the required minimum in good times so that they can be drawn down in periods of stress. More precisely, the Basel Committee has proposed a capital conservation buffer range of 2.5% of common equity Tier 1 established above the minimum, which could be extended up to an additional 2.5% of common equity Tier 1 or other fully loss-absorbing capital in periods of excessive credit growth (the so-called "counter-cyclical buffer"; see the chart below for an illustration). The proposal was published for comments following the July Basel Committee meeting. On the basis of the feedback received, a revised proposal will be submitted to the Basel Committee for endorsement by the end of this year.

The objective of the counter-cyclical buffer is to protect the banking sector from periods of excessive aggregate credit growth. In this context, mitigating the credit cycle is considered only as a side benefit. The proposal is based on a guided discretion approach, where the gap between the current level of private sector credit to GDP and its long-term trend provides

5 Basel Committee on Banking Supervision, "Group of Governors and Heads of Supervision announces higher global minimum capital standards", press release, 12 September 2010.

The development of minimum CET1 capital and buffer requirements for a given portfolio in boom and recession periods – stylised illustration



Source: ECB.
Notes: This chart is based on the assumptions of a constant portfolio composition, and a gradual build-up of the counter-cyclical buffer in equal steps and release in one step. The risk-weights fluctuate, reflecting changes in the probability of default (PD) and the loss given default (LGD) during the business cycle.

the buffer guide. The actual value of the buffer would be equal to the weighted average of buffers across countries, based on the principle of reciprocity in cross-border application.

It is important to emphasise, however, that the authorities will have to use all available information in making buffer decisions. Importantly, different indicators of excesses may perform differently in various stages of the economic cycle (boom versus bust indicators) and across countries. Therefore, effective international coordination mechanisms may need to be developed among authorities in order to allow for a timely identification of periods of excess in a cross-border context.

As regards mitigating cyclicality of the minimum (e.g. by using through-the-cycle or stress "probability of default" estimations) and forward-looking provisioning, the Basel Committee has not yet made any specific proposals. In this context, the potential interactions between the counter-cyclical buffer proposal and the other elements of the reform package would need to be identified and thoroughly assessed.

LIQUIDITY FRAMEWORK

Prior to the crisis that started in mid-2007, the financial system was characterised by ample liquidity, as measured, for instance, by compressed spreads and low volatility. Two key trends crucially affected the impact on liquidity observed during the crisis: first, the increased reliance on capital markets for funding and, second, the increased reliance on short-term maturity funding instruments. These trends were in turn reinforced by the concurrent build-up of contingent liquidity claims (e.g. from off-balance-sheet vehicles) and margining requirements (e.g. from derivatives transactions), against the backdrop of rapid financial innovation. The crisis clearly exposed the failure of both banks' liquidity risk management practices and supervisory standards to keep up with these developments.

In response to these crisis experiences, an international liquidity risk framework is being developed to improve banks' resilience to liquidity shocks and to increase market confidence in the liquidity position of banks. The framework consists of two main measures. A short-term measure, the Liquidity Coverage Ratio (LCR), establishes a minimum level of high-quality liquid assets to withstand an acute stress scenario lasting one month. A structural longer-term measure, the Net Stable Funding Ratio (NSFR), ensures that longer-term assets are funded by more stable medium or longer-term liability and equity financing. These measures are complemented by a set of tools to facilitate the ongoing monitoring of liquidity risk exposures and information exchange among supervisors.

LCR measure

The LCR measures the amount that banks hold as unencumbered, high-quality liquid assets to meet net cash outflows under a well-defined stress scenario persisting for a one-month period.

At their July 2010 meeting, the GHOS agreed to define the stress scenario underlying the LCR "to achieve a conservative bank level and plausibly severe system wide shock". The scenario consists of a combined idiosyncratic and market-wide shock. This entails, among other things, a three-notch downgrade in the institution's public credit rating, the run-off of a proportion of retail deposits, a loss of unsecured wholesale funding, a loss of secured short-term financing transactions for all but high-quality liquid assets, increases in market volatilities that impact the quality of collateral or the potential future exposure of derivatives positions.

These stress assumptions then define the cumulative cash outflows and inflows over the 30-day period. The cash outflows are computed by multiplying outstanding balances of liabilities by run-off factors which reflect the expected roll-off of the different short-term sources of funding, or by multiplying drawdown

amounts to the off-balance-sheet commitments. For instance, short-term unsecured wholesale funding provided by financial institutions is assumed to roll off entirely. Stable retail deposits are assumed to roll off at 5%. Whereas the December consultation paper left it to the banks' discretion to determine the rollover of the lending activity during the stress period, the GHOS, in its July press release,[6] clarified that the LCR measure should specify a concrete harmonised treatment that reflects supervisory assumptions. The difference between these cumulative cash outflows and inflows determines the net cash outflows – the denominator of the LCR.

To cope with the net cash outflows, the LCR sets a minimum required level of assets to remain liquid during the stress. The definition of liquid assets agreed by the GHOS separates liquid assets into two categories. The first category consists of level 1 liquid assets which are defined as: (i) government and public sector entity assets qualifying for the 0% risk weight and (ii) sovereigns that do not have a 0% risk weight, allowing the inclusion of domestic sovereign debt issued in a foreign currency (to the extent that the currency matches the currency needs of the bank's operations in that jurisdiction). The level 2 liquid asset category can include up to 40% of the stock of liquid assets and can comprise: (i) government and public sector entity assets qualifying for the 20% risk weight under Basel II and (ii) high-quality corporate and covered bonds (not self-issued). In order to determine the eligibility of level 2 liquid assets, the GHOS specifies that additional criteria have to be used, as well as external ratings. A 15% haircut would apply to the level 2 liquid assets.

NSFR measure

The NSFR sets a minimum amount of stable funding required by the liquidity characteristics of various assets or activities (which also comprise, for example, off-balance-sheet contingent exposures and exposures from securitisation pipelines) held by institutions over a one-year horizon. Assets that are more liquid and can more easily be used as a source of longer-term liquidity, i.e. in terms of outright sale or because they can be used as collateral in secured borrowing, will require a lower level of stable funding during stressed conditions than assets that are less liquid. This liquidity aspect is reflected through the use of weighting factors, i.e. the required stable funding factor. This total required stable funding enters into the denominator of the NSFR measure.

The required stable funding of a bank's activities has to be offset by the liabilities that determine the available stable funding. The stable funding comprises equity and liability financing over a one-year horizon, as well as a portion of non-maturity or term deposits with maturities of under one year that are expected to remain in the bank under the conditions of the envisaged extended stress event.[7] Weighting factors, i.e. the available stable funding factor, are used to recognise the stability of the funding. For instance, under the GHOS agreement, stable retail deposits receive a 90% weighting factor, thus assuming that 10% of the retail deposits flow out under the extended stress assumption. The total amount of stable funding enters the numerator of the NSFR measure.

Impact on financial markets and monetary policy

The new liquidity risk rules are likely to have an impact to some extent on the behaviour of financial markets and institutions, as well as central banks' monetary policy and its transmission mechanism.

For example, the definition of the liquid assets underlying the LCR measure will probably, as a direct effect, prompt banks to favour liquid assets over the defined illiquid assets, with potential impacts on yields and spreads. An (intended) impact of the rules on financial markets

6 Basel Committee on Banking Supervision, "The Group of Governors and Heads of Supervision reach broad agreement on Basel Committee capital and liquidity reform package", press release, 26 July 2010.

7 The GHOS's July press release (op. cit.) states that the Basel Committee will continue to consider whether and to what extent to recognise the matched funding within the one-year time frame.

is reduced reliance on short-term unsecured wholesale funding, which can diminish the activity at the short end of the money market. These effects on financial markets will require a close monitoring of the implications for the transmission of monetary policy.

As central bank funding obtained through open market operations or lending facilities is recognised as liquid assets within the LCR measure, the liquidity rules could affect the demand and the variation in demand for central bank liquidity. Additionally, as the liquidity rules provide incentives to finance activities over the longer rather than shorter term, banks might try to shift their participation in open market operations. However, opposing effects may come into play, given the rollover assumption on secured central bank funding against collateral which is not considered in the regulatory definition of liquid assets within the LCR.

Furthermore, the rollover assumption on central bank refinancing backed by illiquid assets, together with a central bank-eligible collateral pool which is broader than the regulatory definition of liquid assets, provides banks with the incentive to retain the most liquid assets and to pledge the more illiquid assets as collateral at the central bank.

In view of the difficulty in fully identifying the potential impact of the liquidity risk regulation on financial markets and monetary policy, the new rules and their implications will be carefully assessed during the transition period, in order to avoid any unintended consequences.[8]

CALIBRATION AND PHASE-IN ARRANGEMENTS

At its meeting in September 2010, the GHOS reached an agreement on the calibration of the measures as well as on the phase-in arrangements, resulting in a significant increase in minimum capital requirements. The minimum requirement for common equity Tier 1 capital will be increased from the current level of 2% to 4.5% and will be accompanied by an additional 2.5% capital conservation buffer, representing a de facto minimum CET1 requirement of 7% for banks. Additional capital requirements in the form of counter-cyclical buffers, as well as possible capital surcharges for systemically important financial institutions, will come on top of these requirements.

National implementation of the new measures will be gradual, beginning on 1 January 2013. The transition period will continue through 2018, and the new regime will become fully effective on 1 January 2019.

Existing public sector capital injections will be grandfathered until 1 January 2018. In addition, banks that issued prior to 12 September 2010 certain capital instruments that no longer meet the stricter eligibility criteria will receive a ten-year period (until 2023) to replace those instruments.

As mentioned above, the new capital requirements will be supplemented by a non-risk-based leverage ratio. A minimum Tier 1 leverage ratio of 3% will be tested during a parallel run period (2013-17). Based on the results of this "observation period" and subject to appropriate review and calibration, the leverage ratio may be introduced as a Pillar 1 measure on 1 January 2018. Similarly, after observation periods beginning in 2011 and 2012, the Liquidity Coverage Ratio and the Net Stable Funding Ratio will be introduced on 1 January 2015 and 1 January 2018 respectively.

CONCLUDING REMARKS

The proposed measures, which represent a major overhaul of the current regulatory regime, will substantially strengthen banks' capital and liquidity positions and thus enhance the resilience of the financial system as a whole. The extended phasing-in and observation periods aim to ensure that the new measures do not represent an excessive burden on the financial sector nor hinder the ongoing recovery.

8 Basel Committee on Banking Supervision, "Group of Governors and Heads of Supervision announces higher global minimum capital standards", press release, 12 September 2010.

In this context, the agreed implementation schedule gives the financial institutions sufficient time to adjust to the new regulatory requirements (e.g. by earnings retention) without major adverse short-term effects on market dynamics and lending behaviour. In addition, any potential unintended consequences will be continuously monitored by regulators and supervisors, taking full advantage of the observation periods in the case of the leverage and liquidity ratios.

With regard to the long-term effects of the measures on the real economy, the impact assessments undertaken by the Basel Committee and the Financial Stability Board revealed that despite certain transitory costs, the enhanced capital and liquidity regulation may have substantial long-term benefits, stemming mostly from the reduced frequency of future crises.[9]

The Basel Committee's proposals were endorsed by the G20 leaders at their summit in November 2010. The Basel Committee is expected to publish the new capital and liquidity framework in December 2010.

In parallel with the work at the international level, the European Commission intends to implement the measures in the EU by means of further amendments to the Capital Requirements Directive (commonly referred to as "CRD IV"). The Commission plans to publish draft legislation in the first quarter of 2011, accompanied by an in-depth impact assessment aimed at supporting the right calibration of the capital and liquidity measures.

9 See the following reports: Basel Committee on Banking Supervision, "An assessment of the long-term economic impact of stronger capital and liquidity requirements", BIS, August 2010 and Basel Committee on Banking Supervision and Financial Stability Board, "Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements", BIS, August 2010.