A more resilient financial system but... Basel III and the FSB

Enrique Perez Hernandez

IEB. Instituto de Estudios Bursatiles

December 2010

Online at https://mpra.ub.uni-muenchen.de/35908/
MPRA Paper No. 35908, posted 14. January 2012 02:30 UTC
A More Resilient
Financial System but…

Basel III and
the FSB

Pérez-Hernández, Enrique

Abstract
At the request of the recent G20 Summits held in the last two years in Washington, London, Pittsburgh and Seoul, different international organizations, such as the IMF, BIS, WB, ECB, WTO, FSB, etc… have engaged to collaborate in the preparation of a new regulatory frame for a sounder global financial system; in particular the BCBS (Basel Committee on Banking Supervision) at BIS (Bank of International Settlements) and the FSB (Financial Stability Board) have reached agreements or will presumably do so in the near future in crucial issues such capital requirements, liquidity, leverage, systemic risk, etc.

This paper tries to summarize the new regulatory standards, how they will be phased so that banks can meet the new requirements without impairing the economic recovery and our assessment on its macro and micro implications at the financial systems and real economies.

Keywords
Resilience, Supervision, Regulation, Micro prudential, Capital, Liquidity, Leverage, Macro-prudential, Procyclical, Systemic, Rating, Derivatives.

JEL classification
G20.
## 1. Introduction

The global financial crisis that blew up in September 2008 and its spill-over to the real economy have produced severe damages to the world economy:

- Individual institutions were declared bankrupt (Lehman Brothers), “fire sold” (Merrill Lynch), converted into holding bank companies (Goldman Sachs and Morgan Stanley), rescued on the brink of collapse (AIG, Freddy Mac and Fanny Mae) or bailed out by the authorities with taxpayer funds through recapitalizations in the US, UK and other western countries.
- The individual banks crisis was further amplified by a procyclical deleveraging process and by the interconnectedness of systemic institutions through an array of complex transactions; in the most severe episode of the crisis, the market lost confidence in the solvency and liquidity of the banking sector.
- These weaknesses were transmitted to the rest of the financial system and the real economy, resulting in a massive contraction of liquidity and credit availability.
- Ultimately, the public sector had to step in with unprecedented injections of liquidity, capital support and guarantees, with taxpayer funds and increasing dramatically public deficits.

The G20 Summits held in the last two years (Washington, London, Pittsburgh and Seoul) have asked several international organizations such as the IMF, WB, ECB, WTO, BIS and FSB to set up a new regulatory frame in order to create a sounder financial system and reduce systemic risk (BCBS, 2010a).

We shall try to summarise what BIS has agreed (Basel III regarding capital, liquidity and leverage) and in close collaboration, what the FSB (systemic risk, supervision, OTC derivatives and Credit Rating Agencies) has proposed and is presently in the process of discussion and elaboration.

## 2. BIS and the BCBS

### 2.1. BIS

Established on May 1930, the BANK OF INTERNATIONAL SETTLEMENTS (“BIS”) is the world’s oldest international financial organization with the mission to foster monetary and financial cooperation worldwide and serving as a bank for Central banks. The standing Committees located at the BIS are:
The Bank fulfils its mandate by acting as:

- A forum for discussion and decision-making among central banks and within the international financial and supervisory community.
- A centre for economic and monetary research.
- A prime counterparty for central banks in their financial transactions as agent or trustee.

The Board of Directors, chaired by Christian Noyer, Governor of the Bank of France, has at present 19 members and the General Manager is Jaime Caruana, former Governor of the Bank of Spain.

BIS acts as a bank for 130 central banks which have deposits, as March 2010, amounting to SDR (Special Drawing Rights) 196 billion, representing around 3% of the world foreign currency reserves (Caruana, 2010a).

### 2.2. BCBS

Founded in 1975, it is best known for its international standards on capital adequacy, the Core principles for Effective Banking Supervision and the Concordat on Cross-border Supervision.

Going through the list of its members (represented by the governors of central banks or heads of supervision) we can appreciate that all major financial systems in the world are on board (in 2009 it doubled in size to 27 jurisdictions):

Argentina, Austria, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR (Special Administrative Region), 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.
The Committee’s work is organized under 4 main expert sub-committees:

- The Standard Implementation group.
- The Policy Development group.
- The Accounting Task force.
- The Basel Consultative group.

The present chairman is Nout Wellink, Governor of the Central Bank of the Netherlands.

The Committee does not possess any formal supranational supervisory authority and its conclusions do not have legal force; it rather formulates broad supervisory standards and guidelines and recommends standards of best practice in the expectation that individual authorities will implement them through detailed arrangements, statutory or otherwise which are best suited to their own national systems (BCBS, 2010b).

**BASEL I**
In 1988, the BCBS introduced a capital measurement system, commonly referred to as BASEL CAPITAL ACCORD or BASEL I: it provided for the implementation of a credit risk measurement with a minimum capital standard of 8% by the end of 1992; since then, the framework has been progressively introduced not only in member countries but also in virtually all other countries with internationally active banks.

**BASEL II**
In 1995 the BCBS issued a proposal for a reviewed capital adequacy framework with 3 pillars: minimum capital requirements, supervisory review of each institution’s assessment procedure and capital adequacy, and effective use of disclosure to strength market discipline as a complement to supervisory efforts; the revised framework was issued in June 2004 and is known as BASEL II.

**BASEL III: A response to the financial crisis**
Basel III is a comprehensive set of reform measures to strengthen the regulation, supervision and risk management of the banking sector aiming to:

- Improve the ability to absorb shocks arising from financial and economic stress, whatever the source.
- Improve risk management and governance.
- Strengthen bank’s transparency and disclosures.
The reforms target:

- Bank level or micro prudential regulation, which will help raise the resilience of individual banking institutions in periods of stress.
- Macro prudential, system wide risks that can build up across the banking sector as well as the procyclical amplification of these risks over time.
- These two approaches to supervision are complementary as greater resilience of the individual bank level reduces the risk of system wide shocks (Caruana, 2010b).

The Basel Committee’s oversight body – the Group of Central Bank Governors and Heads of Supervision (GHOS) – agreed on the broad framework of Basel III in September 2009 and the Committee set out concrete proposals in December 2009. These consultative documents formed the basis of the Committee’s response to the financial crisis and are part of the GLOBAL INITIATIVES to strengthen the financial regulatory system that have been endorsed by the G20 leaders (which represent 85% of the world GDP). The GHOS subsequently agreed on key design elements of the reform package at its July 2010 meeting and on the calibration and transition to implement the measures at its September 2010 meeting.

Basel III is part of the Committee’s continuous effort to enhance the banking regulatory framework. It builds on the INTERNATIONAL CONVERGENCE of CAPITAL MEASUREMENT and CAPITAL STANDARDS document (BASEL II).

### 3. The financial crisis: the height in September 2008

As a matter of record we should not forget we were contemplating at the time an extraordinary panorama:

- Lehman Brothers declared bankruptcy.
- Morgan Stanley and Goldman Sachs converted to bank holding companies under the supervision of the Federal Reserve Board.
- Fannie Mae and Freddie Mack were nationalized (they acquired or guaranteed US$11.5 trillion mortgages).
- Fire sale of Merrill Lynch to Bank of America.
- AIG was brought back from the brink of collapse (accumulates today $135 billion in losses).
Fortis, the financial conglomerate, was broken up and sold.

Iceland banking system collapsed.

Many countries had to step in to provide massive support to their banks.

The main reasons the economic and financial crisis became so severe where:

- Excessive on- and off-balance sheet leverage of many banking sectors.
- Gradual erosion of the level and quality of the capital base.
- Insufficient liquidity buffers.
- The banking system was not able to absorb the resulting systemic trading and credit losses nor could cope with the reintermediation of large off-balance sheet exposures that had built up in the shadow banking system.
- The crisis was further amplified by a procyclical deleveraging process and by the interconnectedness of systemic institutions through an array of complex transactions.

A strong and resilient banking system is the foundation for sustainable growth, as banks is at the centre of the credit intermediation process between savers and investors; the crisis is not yet over and risks remain.

While painful and costly the crisis has nonetheless presented an opportunity to put in place longer term reforms needed to make banks and the financial system more resilient to future periods of stress.

4. Basel III reforms

BASEL III addresses the market failures with reforms on:

A) Capital adequacy.
B) Liquidity (new).
C) Leverage (new).
D) Transparency: disclosures.
A) CAPITAL ADEQUACY
The new elements are:

MICROPRUDENTIAL-bank level

- A new tighter definition of capital, raising bank’s loss absorption capacity.
- A broader and tougher definition of risk weighted assets (RWA), with a more restrictive treatment of the trading book, counterparty risk and securitizations.
- A new, higher minimum capital requirement in terms of common equity, up from 2 to 4.5% of RWA – an effective increase from roughly 1% to 4.5% once deductions from eligible capital are taken into account (Wellink, 2010).

MACROPRUDENTIAL OVERLAY

- A CAPITAL CONSERVATION BUFFER, adding another 2.5%, set as a fixed proportion of RWA. A salient feature of this buffer is that, unlike the minimum, it can be drawn down as banks experience losses, thereby lessening pressure to restrict credit.
- Dipping into it, however, will involve some costs, in the form of restrictions on capital to shareholder distribution, buy back of shares and bonus payments. This will help to conserve capital, but will also make bank managers somewhat reluctant to draw on the buffer. While designed primarily to strengthen the individual firm, this buffer has macro implications through its impact on credit supply.
- A COUNTERCYCLICAL BUFFER, set as a variable proportion of the minimum of up to 2.5%.

This buffer is purely system-wide in its design. It is based on the fact that private sector growth that is out of line with historical experience often ultimately imposes losses on the lenders. This buffer will be imposed when, in the view of national authorities, excess aggregate credit growth is judged to be associated with an excessive build-up of system-wide risk and will be maintained during such periods of excess credit growth. Conversely, the buffer would be released when, in the judgement of the authorities, the released capital would help absorb losses in the banking system that pose a risk to financial stability. This would help reduce the risk that available credit is constrained by regulatory capital requirements.

Systemic risk: provisions to increase the loss-absorbing capacity of SIFI (SYSTEMICALLY IMPORTANT FINANCIAL INSTITUTIONS).
Measures are needed both to make their failure less likely – stronger capital and liq-uidity- and to reduce the severity of any such failure (eg resolution regimes and re-silient trading infrastructure).

After analysing the industry responses to the consultation documents and the impact studies in the leading institutions of each country, the BCBS agrees the following harmonised structure of capital:

**A.1 Elements of Capital**

Total regulatory capital will consist of the sum of the following elements:

1. **TIER 1 CAPITAL** (going concern capital).
   b. Additional Going-Concern capital.

2. **TIER 2 CAPITAL** (gone concern capital).

For each of the three categories above there will be a single set of criteria which instruments are required to meet before inclusion in the relevant category.

**A.2 Limits and Minima**

All elements above are net of regulatory adjustments and are subject to the following restrictions.

- Common Equity, Tier 1 Capital and Total capital must always exceed explicit minima of 4, 5, 6 and 8% of RWA, respectively; this will be phased in by 1 January 2015. The Tier 1 capital requirement will increase from 4% to 6% over the same period; this table summarises the new capital requirements:

<table>
<thead>
<tr>
<th>Table 1. Calibration of the Capital Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital requirements and buffers (all numbers in percent)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Conservation Buffer</td>
</tr>
<tr>
<td>Minimum plus conservation buffer</td>
</tr>
<tr>
<td>Countercyclical buffer range*</td>
</tr>
</tbody>
</table>

*Common equity or other fully loss absorbing capital

- The predominant form of Tier 1 must be Common equity
To understand the full ramifications of the reform it is essential that we consider the entire package.

We must start with the simple division of minimum capital requirements into their three constituent parts:

- The numerator (how you measure capital).
- The denominator (how you measure the assets against which loss-absorbing capital must be held).
- The ratio itself.

First, regarding the numerator, BCBS efforts to strengthen the capital base has been focused on common equity, the most loss-absorbing form of capital. The result is a much stricter definition of what counts as common equity as it has to meet certain criteria:

A.3 Criteria for inclusion in Common Equity:

- Represents the most subordinated claim in liquidation of the bank.
- Has an unlimited and variable claim, not a fixed or capped claim.
- Principal is perpetual and never repaid outside of liquidation.
- There are not circumstances under which the distributions are obligatory; non payment of dividend is therefore not an event of default.
- Distributions are paid only after all legal and contractual obligation have been met and payments on more senior capital instruments have been made.
- It is the issued capital that takes the first and proportionately greatest share of any losses as they occur.
- The paid in amount is recognized as equity capital (ie not recognized as a liability) for determining balance sheet insolvency.
- The paid in amount is classified as equity under the relevant accounting standards.
- It is directly issued and paid-up.
- The paid in amount is neither secured nor covered by a guarantee of the issuer or related entity.
- It is clearly and separately disclosed on the bank balance sheet.
The capital structure has also been harmonised and simplified with stringent qualifying criteria for Tier 1 (going concern basis) and Tier 2 (gone concern basis); the distinction “Upper and Lower” Tier 2 under Basel II is eliminated and Tier 3 (covering market risk) under Basel II deleted.

Criteria for inclusion in TIER 1 ADDITIONAL GOING CONCERN BASIS: This element of capital allows instruments other than common shares to be included in Tier 1 capital. Their inclusion will be limited by the requirement that the predominant form of Tier 1 must be Common Equity. To maintain the integrity of tier 1 capital any instrument included must at least:

- Help the bank avoid payment default through payments being discretionary.
- Help the bank avoid balance sheet insolvency by the instrument not contributing to liabilities exceeding assets if such a balance sheet test forms part of applicable national insolvency law; and
- Be able to bear losses while the firm remains a going concern.

Based on this high level view, the proposed minimum set of criteria are:

- Issued and paid in.
- Subordinated to depositors, general creditors and subordinated debt of the bank.
- Neither secured nor covered by a guarantee of the issuer or related entity.
- Is perpetual, i.e. there is no maturity date and there are no incentives to redeem.
- May be callable at the initiative of the issuer only after a minimum of five years with prior supervisory approval and the bank demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised.
- The bank must have full discretion at all times to cancel distribution/payments and therefore cancellation of discretionary payments must not be an event of default.
- Dividends/coupons must be paid out of distributable items.
- The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the bank current credit standing.
- If the instrument is not issued out of an operating entity or the holding
company in the consolidated group (e.g., a special purpose vehicle – SPV-) proceeds must be immediately available without limitation to an operating entity or the holding company in the consolidated group in a form which meets or exceeds all of the other criteria for inclusion in Tier 1 Additional Going Concern.

- The above criteria will also apply to instruments which appear in the consolidated accounts as minority interest.

Criteria for the inclusion in TIER 2 GONE CONCERN BASIS.

The objective is to provide loss absorption on a gone concern basis:

- Issued and paid in.
- Subordinated to depositors and general creditors of the bank.
- Is neither secured nor covered by a guarantee of the issuer or related entity.
- Minimum original maturity of at least 5 years; recognition in the remaining 5 years before maturity will be amortised on a straight line basis; no incentives to redeem.
- May be callable at the initiative of the issuer only after a minimum of five years with prior supervisory approval and without creating an expectation that the call will be exercised.
- The investor must have no rights to accelerate the repayment of future scheduled payments (coupon or principal) except in bankruptcy and liquidation.
- The instrument may not have a credit sensitive dividend feature, that is, a dividend that is reset periodically based in whole or in part on the bank current credit standing.

Second, regarding the denominator, the Committee wants to ensure that the regulatory framework covers the full range of significant risks.

Adequate capital can only protect against unexpected losses provided all risks are comprehensively covered; in particular the trading book exposures, the counterparty risk and securitisations will have new rules.

For instance, trading book exposures had a regulatory deficiency. Banks had built up massive illiquid credit exposures in these portfolios. The VAR-based capital regime, with its 10 day liquidity horizon was not designed for this. Banks abused this regime, and warehoused highly illiquid structured credit assets in the trading book for which
there was no market, which were impossible to value when liquidity broke down, and for which too little capital was held to protect against risks. This is where the first wave of losses hit.

The revised trading book framework, on average, requires banks to hold around three to four times the old capital requirements.

**And third, looking at the ratio itself**, there is a significant increase of the minimum common equity requirement from 2 to 4.5% (given the current composition of assets banks are holding, the previous minimum would be closer to 1%.

In short the total increase of the common equity will be from 1% to 7% (4.5% minimum plus 2.5% conservation buffer plus 2.5% countercyclical buffer).

BIS estimates that, during recent crises, losses experienced by large globally active banks at the 99th percentile were 4.5% of RWA. That is 99% of observed losses were equal to or less than 5% of RWA. (BCBSb, 2010).

**A.4 Transition arrangements**
Since the onset of the crisis, banks have already undertaken substantial efforts to raise their capital levels. However, preliminary results of the Committee’s comprehensive quantitative impact study show that as the end of 2009, large banks will need, in the aggregate, a significant amount of additional capital to meet the new requirements. Smaller banks, which are particularly important for lending to the SMS sector, for the most part already meet these high standards.

The governors and Heads of supervision also agreed on transitional arrangements for implementing the new standards. These will help ensure that the banking sector can meet the higher capital standards through reasonable earnings retention and capital raising, while supporting lending to the economy. The transitional arrangements, which are summarised in Table 2 include:

- National implementation by member countries will begin on 1 January 2013. Member countries must translate the rules into national laws and regulations before this date. As of January 2013 banks will be required to meet the following new minimum requirements in relation to RWAs:

  * 3.5% common equity/RWAs.
  * 4.5% Tier 1 capital/RWAs.
  * 8% total capital/RWAs.
The total capital requirement remains at the existing level of 8% and so does not need to be phased in. The difference between the total capital requirement of 8% and the tier 1 requirement can be met with tier 2 and higher forms of capital.

Banks that already meet the minimum ratio requirement during the transition period but remain below the 7% common equity target (minimum plus conservation buffer) should maintain prudent earnings retention policies with a view to meeting conservation buffer as soon as reasonably possible.

Existing public sector injections will be grandfathered until 1 January 2018. Capital instruments that no longer qualify as non common equity Tier 1 or Tier 2 capital will be phased out over a 10 year horizon beginning 1 January 2013; their recognition will be capped at 90% from 1 January 2013, with the cap reducing by 105 in each subsequent year. In addition, instruments with an incentive to be redeemed will be phased out at their effective maturity date.

Capital instruments that do not meet the criteria for inclusion in common equity Tier 1 will be excluded from common equity tier 1 as of 1 January 2013. However, instruments meeting the following three conditions will be phased out over the same horizon described above.

- They are issued by a non-joint stock company.
- They are treated as equity under the prevailing accounting standards.
- They receive unlimited recognition as part of Tier 1 capital under current national banking law.

Only those instruments issued before 12 September 2010 should qualify for the above transition arrangements.

Table 2 shows the phase-in arrangements:

**B) LIQUIDITY**

Strong capital requirements are a necessary condition for banking sector stability but by themselves are not sufficient. A strong liquidity base reinforced through robust supervisory standards is of equal importance. To date, however, there are no internationally harmonised standards in this area; the BCBS is therefore building out its liquidity framework by introducing internationally harmonised global liquidity standards. As with the global capital standards, the liquidity standards will establish minimum requirements and will promote an international level playing field to help prevent a competitive race to the bottom.


Table 2. Phase-in arrangements (shading indicates transition periods) (all dates are as of 1 January)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisory monitoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Common Equity Capital Ratio</td>
<td>3.5%</td>
<td>4.0%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Capital Conservation Buffer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Common equity plus capital Ratio conservation buffer</td>
<td>3.5%</td>
<td>4.0%</td>
<td>4.5%</td>
<td>5.125%</td>
<td>5.75%</td>
<td>6.375%</td>
<td>7.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSR’s and financials)</td>
<td></td>
<td></td>
<td></td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
<td>80%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Minimum Tier 1 Capital</td>
<td>4.5%</td>
<td>5.5%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Minimum Total Capital</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Minimum Total Capital plus conservation buffer</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.625%</td>
<td>9.25%</td>
<td>9.875%</td>
<td>10.5%</td>
<td></td>
</tr>
<tr>
<td>Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Phased out over 10 year horizon beginning 2013</td>
</tr>
<tr>
<td>Liquidity coverage ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observation period begins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce minimum standard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net stable funding ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observation period begins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce minimum standard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
During the early “liquidity phase” of the financial crisis, many banks, despite adequate capital levels, still experienced difficulties because they did not manage their liquidity in a prudent manner. Prior to the crisis, asset markets were buoyant and funding was readily available at low cost. The rapid reversal in market conditions illustrated how quickly liquidity can evaporate and that liquidity can last for an extended period of time. The banking system came under severe stress, which required central bank action to support both the functioning of money markets and, in some cases, individual institutions.

The Committee introduces two minimum standards for funding liquidity:

LIQUIDITY COVERAGE RATIO (LCR): it is a 30-day liquidity coverage ratio which is intended to promote short term resilience to potential liquidity disruptions and will help ensure that global banks have sufficient high quality liquid assets to withstand a stress funding scenario specified by supervisors; in short it identifies certain liquid assets (basically high rated public debt) that can be used to offset net cash outflows under short term (30 days) stress scenarios defined by supervisors.

This ratio will be submitted to an observation period beginning in 2011 and will be introduced as a minimum standard in 2015.

NET STABLE FUNDING RATIO (NSFR): is a long term structural ratio to address liquidity mismatches and provides incentives for banks to use stable sources to fund their activities; this ratio is a full balance sheet metric that compares an estimate of reliable funding sources under more prolonged and less acute stress than the LCR.

In this ratio the observation period begins in 2012 and its introduction as minimum standard will take place in 2018 (Cecchetti, 2010).

C) LEVERAGE
One of the lessons of the crisis was that there are circumstances in which risk-weighted capital ratios provide a misleading picture of bank’s overall health. That is, there are times when the risk weighting rules understate the actual risks.

To address the potential for the underestimation of risk, the new framework introduces a leverage ratio which should help to contain the build-up of systemic risk that arises when leverage expand quickly.

The capital requirements are supplemented by a non risk leverage ratio that will serve as a backstop to the risk-based capital requirement. In the lead –up to the crisis, many banks reported very strong Tier 1 risk-based ratios while, at the same
time, managed to build up high levels of on- and off-balance sheet leverage. The use of this supplementary leverage ratio will help contain the build-up of excessive leverage in the system and will also serve as an additional safeguard against attempts to “game” the risk based requirements and will help address model risk.

In July 2010, Governors and Heads of Supervision agreed to test a minimum Tier 1 leverage ratio of 3% on total assets (including off balance sheet exposures) during the parallel run period. Based on the results of the parallel run period, any final adjustments would be carried out in the first half of 2017 with a view to migrating to a Pillar 1 treatment on 1 January 2018 based on appropriate review and calibration.

In any case, for global banks with significant capital markets activities, this 3% calibration is likely to be more conservative than the current measures of leverage in place in some countries.

The main factors to be taken into account are the new definition of capital and the inclusion of off-balanced-sheet items in the calculation of the leverage ratio.

D) TRANSPARENCY: DISCLOSURES
Banks will be required to disclose the following:

- A full reconciliation of all regulatory capital elements back to the balance sheet in the audited financial statements.
- Separate disclosure of all regulatory adjustments.
- A description of all limits and minima, identifying the positive and negative elements of capital to which the limits and minima apply.
- A description of the main features of capital instruments issued.
- Banks which disclose ratios involving components of regulatory capital (eg “Equity Tier 1”, “Core Tier 1” or “Tangible Common Equity” ratios) to accompany these with a comprehensive explanation of how these ratio are calculated.

In addition to the above, banks will be required to make available on their websites the full terms and conditions of all instruments included in regulatory capital.

The purpose of these disclosures is to help improve transparency of regulatory capital and improve market discipline.
5. Financial stability board (FSB)

Set up in April 2009, after the G20 London summit as a successor to the Financial Stability Forum (FSF) its board includes all G20 major economies, FSF members, Spain and the European Commission. It is based in Basel and represents the G20 leader’s first major international institutional innovation; Secretary of the US Treasury, Tim Geithner has described it as “in effect, a fourth pillar” of the architecture of global economic governance and works in close collaboration with the IMF, World bank, WTO and BIS and its BCBS.

Chairman of the board is Mario Draghi, governor of the Bank of Italy.

The FSB has issued important proposals related to systemic risk, supervisory intensity and effectiveness, improvement of OTC derivative markets and principles to reduce reliance on CRA (Credit Rating Agencies) credit ratings. (FSB, 2010a)

5.1. Systemic Risk

The G20 leaders at the Seoul Summit on 11-12 November endorsed the FSB policy framework for reducing the moral hazard risk associated with SIFIs (Systemically important financial institutions).

SIFIs are firms whose disorderly failure, because of their size, complexity, and systemic interconnectedness, would cause significant disruption to the wider financial system and economic activity. Too often, the lack of tools and capacity to coordinate resolution across borders has led to bail outs using taxpayer funds.

The agreed framework calls for action in five areas:

- First, and foremost, improvements to resolution regimes to ensure that any financial institutions can be resolved without disruptions to the financial system and without taxpayer support
- Second, a requirement that SIFIs and initially in particular global SIFIs (G-SIFIs) have additional loss absorption capacity beyond the Basel III standards to reflect the greater risks that these institutions pose to the global financial system.
- Third, more intensive supervisory oversight for financial institutions which may pose systemic risk.
- Fourth, stronger standards for core financial infrastructure to reduce contagion risk from the failure of individual institutions.
Fifth, peer review by an FSB Peer Review Council of the effectiveness and consistency of national policy measures for G-SIFIs, beginning by end 2012.

The launch of ESRB:
The European Council and the European Parliament have decided to create a new body to provide macro prudential oversight of the European financial system: the ESRB (EUROPEAN SYSTEMIC RISK BOARD). This new body will be part of the new European System of Financial Supervision and will be located in Frankfurt; it will bring together the governors of the national central banks, the new ESAs (European Supervisory Agencies for banks, insurance and securities), the European Commission and the national supervisory authorities of all 27 member states.

The establishment of the ESRB was first recommended in February 2009 in the report of a high level group chaired by Jacques de Larosiere. Its secretariat will be located at the ECB (European Central Bank), making it operational (January 2011) and providing analytical, statistical, logistical and administrative support; but it will be a separate body-distinct from the ECB- which will maintain its statutory role in monetary policy. In short its aim is to identify systemic risk and respond to threats.

One of the lessons of the crisis is that what is true for a part or even for all parts is not necessarily true for the whole system. Amongst other elements of systemic risk, inter-linkages between institutions, concentrated and correlated exposures to risk, as well as herding behaviour may contribute to a destructive dynamic between institutions, markets and infrastructures.

The national supervisory authorities will remain the direct interface for financial firms on micro as well as macro-prudential issues. The ESRB warnings and recommendations will be directed “to the Union as a whole, or to one or more member states or to one or more of the ESAs or to one or more national supervisory authorities”.

In order to counter the build-up of risk in the financial system, competent authorities can use different tools such as possible capital add-ons, counter-cyclical buffers or maximum loan to value ratios.

In essence systemic risk is the outcome of individual market players for the system as a whole; a macro-prudential oversight of the system should be to the advantage of all players in the industry and to everyone in the wider economy (Trichet, 2010).
5.2. Supervisory Intensity and Effectiveness
Basel III rules and those addressing SIFIs on their own are not enough. Every country must have a supervisory system which ensures that the new regulations are backed up by effective risk assessment and enforcement.

In consultation with the IMF, the actions proposed will:

- Ensure that supervisors have unambiguous mandates, sufficient independence and appropriate resources.
- Provide supervisors with the full suite of powers necessary for effective early intervention.
- Improve supervisory standards to reflect the complexity of financial institutions and the system as a whole.
- Increase the frequency of assessments of supervisory regimes.

5.3. OTC Derivative Reforms
A report has been submitted to the Seoul G20 concerning standardisation, central clearing, organized platform trading, and reporting to trade repositories.

Authorities will need to coordinate closely to minimise the potential for regulatory arbitrage.

The FSB will review regular reports on progress in implementing the necessary reforms as from March 2011 (FSB, 2010b).

5.4. Credit Rating Agencies
The Toronto G20 Summit asked the FSB to reduce reliance on external ratings in rules and regulations.

The goal is to reduce the cliff effects and herding associated with CRA ratings changes that can amplify procyclicality and cause systemic disruption.

The FSB has set up certain principles which would do so by removing the “hard wiring” of CRA rating thresholds which cause mechanistic responses to CRA rating changes:

- Standard setters and authorities should assess references to CRA ratings in standard, laws and regulations and whenever possible, remove them or replace them by suitable alternative standards of creditworthiness.
- Banks, market participants and institutional investors should be expected to make their own credit assessments, and not rely solely or mechanistically on CRA ratings.
- Central banks should reach their own credit judgements on the financial instruments that they will accept in market operations, both as collateral and as outright purchases.
- Banks must not mechanistically rely on CRA ratings for assessing the creditworthiness of assets and must have the capability to conduct their own judgement and satisfy supervisors of that capability.
- Investment managers and institutional investors (money market funds, pension funds, mutual funds, investment companies and security firms) must not mechanistically rely on CRA ratings for assessing the creditworthiness of assets.
- Market participants and central counterparties should not use changes in CRA ratings of counterparties or of collateral assets as automatic triggers for large, discrete collateral calls in margin agreements on derivatives and securities financing transactions.

These principles should be translated into more specific policy action and the FSB will report to G20 Finance Ministers and Governors on progress during 2011 (FSB, 2010c).

### 6. European commission: new taxation proposal

The European Commission (EC) has submitted for discussion to the forthcoming meeting of the Ecofin the introduction of a new tax frame in order to achieve two goals:

- The financial system must contribute more equitably to public finance.
- Governments need new sources of revenues in the present scenario.

The EC is proposing two new taxes:

First, a FINANCIAL TRANSACTION TAX to be levied on “turnover” with a global scale and contributing to meet international challenges such as sustainable growth and climate changes.

Second a FINANCIAL ACTIVITY TAX (European scale) to be imposed on profits and compensation taxing the financial entity and not the participants in the transaction. These proposals meet fierce resistance from some European countries and presumably will not be approved.
7. Assessment of the new regulatory frame already approved or in progress

In short:

- While Basel III (capital, liquidity, leverage) and presumably the issues under discussion at the FSB (systemic risk, intensive supervision, CRA and OTC derivatives) brings macro prudential policy into the mainstream of financial supervision, it remains the responsibility of the national authorities to put it into practice. The national implementation of the risk-based requirements will begin on 1 January 2013 and member countries must translate the new rules into national laws and regulations before that date. From that point forward, the capital requirements, rise each year, with the transition to the newly agreed levels fully completed on 1 January 2019.

- The macro prudential settings do not run solely on autopilot. They rely on the exercise of judgement and discretion by national supervisory authorities and therefore the responsibility for effective macro prudential policy ultimately rests on them.

- At the same time macro prudential policy cannot deliver financial stability on its own: monetary and fiscal policies must provide support and at the international level, the mutual assessment of macroeconomic policies, with the input of IMF, is essential:

- The new frame is a “trade off” between very stringent capital, liquidity etc. requirements and a very long (2013-2019) transition arrangements in order to facilitate its implementation by the market without harming the modest economic recovery.

* What is foreseeable?

* Banks will be better capitalized, more liquid and present limited leverage.

* Banks will suffer lower profitability (downward trend for ROE as more capital and liquid assets are required) to the extent they have to allocate more funds to meet these requirements.

* The new leverage ratio will limit growth and the “Magic of Leverage” will be “ring fenced”.

* GDP growth will be affected as the banking sector will transmit more limited credit to the real economy in the intermediation process between savers and investors. The FSB/BCBS Macroeconomic Assessment Group (which includes the modelling expertise of two dozen national authorities and international organizations) estimates that for each percentage point increase in required capital implemented over a four year horizon, the level of GDP relative to the baseline path declines by a maximum of about...
0.19%; most marker analysts are projecting a much higher contraction of GDP.

* The availability of credit will diminish and the cost will increase.
* International trade of goods and services, a pillar of economic growth, could be slowed down.
* Asset & liabilities management will become crucial: capital increases, earnings retention/lower-nil dividends, sale of high capital consuming assets, resetting of loan and investment portfolios to lower capital consumption, correction of asset and liabilities mismatching, low yield short term assets for the Liquidity Coverage ratio etc. will have to be considered.

The banking community will complain of excessive “ultra” regulation, restricting the “dynamism” as a salient feature of financial activity.

The new regulatory frame has to be accepted by all countries in the world in order to avoid “regulatory arbitrage”.

There is a trend from market analysts to measure banks in the immediate future as if Basel III is already fully implemented ignoring the transition arrangements, furthermore some supervisors are asking for an immediate introduction; this attitude will create disruptions and should be avoided.

The reform must continue addressing systemic risks contained outside traditional banks, where a vast amount of intermediation takes place at non bank intermediaries.

A clear lesson of this financial crisis is that safeguards that where in place were too weak and that globalisation, while bringing to the system many benefits, means also that weaknesses in one country’s financial system can spread quickly to others.

All in all the reinforcement of the regulatory frame is necessary and very positive but it is not free.

We have to assume that the short term costs will be manageable and transient, while the benefits of a stronger financial system will be there for years to come.
References

- Caruana, J. (2010a). Re-establishing the resilience of the financial sector: aspects of risk management and supervision, General Manager Speech, 9 November 2010, BIS.

- Caruana, J. (2010b). Macropurdenental policy: Could it have been different this time?, General Manager Speech, 19 October 2010, BIS.


- GHOS (2010). Group of Governors and Head of Supervision announces higher global minimum capital standards, press release, 12 September 2010.


- FSB (2010b). FSB issues to reduce reliance on CRA credit ratings, 27 October 2010 paper.
