Redrawing Banking Standards with BASEL III

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Abstract
The real economy needs developed and efficient financial markets. Therefore, the experience of the financial crisis shows the need to re-design the rules of financial market participants and thus the prudential rules. But precisely because of the economic importance of the financial sector there is a need for an upstream in-depth impact analysis of the new proposed regulations to allow for an accurate and safe procedure to keep unwanted side effects low. The new Basel III rules include three main topics that will be also subject to impact assessment: (a) changes in capital mix and the increase of minimum capital ratios; (b) introduction of a leverage ratio; (c) introduction of liquidity ratios (liquidity coverage ratio and net stable funding ratio). We would like to make a sort of preliminary debate of the above problems, understanding the environment in which Basel 3 will develop them.

Key words: Capital requirements; liquidity ratio; leverage ratio.

JEL Codes: G21, G32

1. Introduction
Banking crises are not uncommon: since 1985, there have been thirty such crises, and each time they have caused very high cost to the community. The response of the regulators, or “Basel III”, is thus an urgent and necessary reform to reduce the probability and severity of future crises. “Basel III” provides in particular an increase of bank capital.

In the banking industry it leads to some counter-argument that the current economic downturn is not the appropriate time to require banks to increase their capital base. We argue the opposite: due to the fact that the economy is under pressure, it is more urgent to strengthen the financial system and to continue to increase the safety and soundness of banks and restore confidence.

While some in the banking industry say that the banks are not penalized by a stricter regulation, others support a return to sustainable long-term value. And if one day we ask shareholders and customers most of them will probably answer that they would rather see strong banks, whose existence is assured and continuously generate profit, than weak banks, which occasionally perform extremely well, only to collapse suddenly. Furthermore, if by regulations we manage to bring the financial sector back to its core mission of providing capital for productive purposes in the real economy, this will benefit everyone, not just the stakeholders in the financial system, but also the society.

2. The Basel III Framework
Basel III is the third Basel Accord, whose main concern is the capital requirements for banks: it is to be defined legally how much capital banks must hold as a minimum. As a result, the financial system in particular should be stabilized to reduce the probability and the sharpness of future crises.

In 1988, the Basel Committee on Banking Supervision, belonging to the world’s leading banking supervisory authorities, set a number of minimum capital requirements for banks, as the Basel Accords (Basel I) are known and have been enshrined in law in the G-10 countries in 1992.

Basel I focused primarily on credit risk and stipulated how much capital they need to compensate for losses. The assets of the banks have been depending on the degree of risk. Risk weights have been assigned to risks divided into five categories. The general rule was that banks must keep equity capital amounting to at least 8% for their risk-weighted assets.

Basel II, the second coming in line, was published in June 2004. It advanced the scope of the hedged risk and aimed at improving the method for the calculation of risk weights.
In 2010, the Basel Committee on Banking Supervision published the agreement "Basel III", a series of updated international rules for banks' capital requirements. These rules are currently a legislative package with the "CRD IV" label (Capital Requirements Directive), which is currently being discussed by the European institutions and transposed into EU law. The legislative package includes two texts: a Directive that each member state has to implement into its national law, as well as a regulation which is directly applied across the EU.

3. Main elements of Basel III

3.1. Capital requirements

Overall, the capital requirements for banks increased from 8% to 10.5%. In addition, a countercyclical capital buffer is provided (see below).

Now the equity can consist of multiple financial instruments (shares, profit reserves, deferred tax assets, etc.), some of which proving ineffective, as shown by the losses during the crisis. Therefore, the criteria for the choice of the instruments which are considered equity are more strictly construed in Basel III.

Also, Basel III prescribes an additional capital buffer of 0% - 2.5%, which is added to the above requirements: all the Member States shall check each quarter if too many loans are granted and threaten to create a credit bubble. Based on this evaluation, each Member State should check if the banks in their own countries need to increase their capital. This scheme is based on the following idea: as the lending subject to business cycles and credit bubbles can form, the banks have to increase their equity position in good times so that they are more resilient in an economic downturn (BCBS, 2011).

3.2. Review and strengthening of securitization measures

Securitizations and re-securitizations are also affected by the Basel III reform. In fact, capital requirements will be higher for re-securitization positions with a weight multiplied by 3-4 and a stronger requirement for liquidity positions. On the other hand, it will implement the alignment of capital requirements for securitization positions with a flat-rate charge to reduce regulatory arbitrage between banking and trading portfolios (Lessambo, 2012). Finally, the Committee strengthens the requirements in relation to the information disclosed.

3.3. The Leverage Limit

If a bank’s equity capital is the foundation of a building, then the ability to leverage resembles to the height of the building: the higher the structure, the higher the profit potential, but it would be more unstable. Thus, it raises the following choice between we want our financial system to be prepared for hurricane and strong storms or to be able to fend off weak breezes. Debt-equity ratio (leverage) of a bank refers to the ratio of total assets to equity. With a high leverage, a bank has a high relative ratio of total assets to equity. By increasing debt levels, the bank increased the chance to make profits with its assets. At the same time it also increased the risk of loss. Under otherwise identical conditions, a higher debt-equity ratio is always linked to higher risks. In theory, the banks hands are tied in terms of the proportion of assets they can hold in relation to equity share (8%). This means that banks must hold at least 8 EUR in equity to borrow 100 EUR.

Under the Basel rules, the required equity ratio is not applicable to total assets, but to the sum of risk-weighted assets, a code which is intended to reflect the risks of individual assets in a lump sum. Therefore, banks – at a given equity – are investing significantly greater amounts in theoretically less risky assets (e.g. government bonds) than in riskier assets (such as corporate loans). A bank that wants to maximize its return on equity would invest exclusively in government bonds: while government bonds may yield a lower interest rate than corporate loans, this disadvantage is, however, compensated for by the fact that the bank may invest hundred times more for the same equity. In the last years it was allowed for major banks to specify the risk weights based on their internal calculation models. Thus they should receive incentives for developing robust internal risk management methods. Incentives develop however at the same time for assigning small risks to net assets in order to be able to increase the debt ratio and/or total net assets with the own capital funds given.

It is now well documented that different banks assign different risk weights to identical assets. Therefore some banks can have a higher level of debt than others and be correspondingly risk-prone. To overcome this problem, Basel III is planning the introduction of a leverage ratio (leverage cap), which limits total asset amount a bank may hold in relation to its equity.

The leverage cap does not consider the risk weights and is therefore easier to handle and less prone to manipulation. In technical terms, the debt ratio is determined by dividing Tier 1 capital (core capital; essentially corresponding to the share capital) by the sum of assets (including the so-called “off balance sheet assets”). Banks, which typically invest heavily in low risk assets such as government bonds, reject a debt limit because it restricts their view, their room for maneuver. In addition, there are many banks refusing to disclose their debt.
The fact that banks are not willing to inform their shareholders and the general public on their debt makes us anxious. We believe it is essential to ensure transparency and to inform investors and customers and also we are in favor of a smaller debt ratio.

3.4. The Liquidity Ratios

Traditional banking business involves something called “liquidity and maturity transformation”: long-term investments and investments in long-term illiquid assets are financed by short-term loans (or other cash instruments). For example, a bank could receive cash for three months in the capital markets to fund 30-year maturity mortgages for its customers. However, with the renewal of short-term financing there is a risk of problems for the bank by being required to repay the money before receiving back the money invested. This is called liquidity risk (BCBS, 2010). For this, the bank has generated a liquidity premium from the difference between long term and short term interest rates, which increases with the size of the run-time differences (and the bank becomes more profitable).

In the years preceding the crisis some banks have drifted with liquidity transformation to the point where sometimes they have financed the purchase of long-term illiquid net assets with only one week maturity loans, so the risks were significantly increased. This has led to the fact that starting from 2008 several banks have been in a liquidity crisis.

„The rating of liquidity risk is categorized into two sets of indicators, that is, the quantitative and qualitative liquidity risk indicators. Table 1 shows the quantitative and qualitative liquidity risk indicators. In light of the above, the rating for quantitative liquidity risk management is classified into three levels, that is, low, moderate level, and high level of liquidity risk. Therefore, a bank with a full set of all the indicated quantitative indicators has a low level of liquidity risk. Moreover, the rating for qualitative liquidity risk is divided into three levels, that is, strong, satisfactory, and weak quality of management of liquidity risk.

Table 1. Quantitative and qualitative liquidity risk indicators

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<tr>
<th>QUANTITATIVE INDICATORS</th>
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<tr>
<td>Availability of funds</td>
<td>Effectiveness of a board’s policy in response to liquidity risk</td>
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<td>Diversification of funding sources</td>
<td>Effectiveness process in identifying, measuring, monitoring, and controlling</td>
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<td>Alternative funding sources</td>
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<td>Capacity to augment liquidity through asset sales and/or</td>
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<td>securitization</td>
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<td>Volume of wholesale liabilities with embedded options</td>
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<td>Vulnerability of a bank to funding difficulties</td>
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<td>Support provided by parent company</td>
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In the above, we indicated that rating of liquidity risk is divided into two sets of indicators, namely, the quantitative liquidity risk indicators and qualitative liquidity risk indicators. According to Table 1, a bank with a full set of all the indicated qualitative indicators has a low level of liquidity risk, while a bank with a full set of all indicated qualitative indicators has a higher level of liquidity risk management” (Gideon et al., 2012).

In order to limit this risk, the supervisory authorities have decided to introduce two ratios for bank liquidity, to ensure that banks provide a minimum liquidity buffer. The first ratio, the liquidity coverage ratio (liquidity coverage requirement LCR), seeks to ensure that banks have sufficient funding available for the next 30 days. Banks are required to have sufficient liquid assets to meet net cash outflows expected for the next 30 days (cash withdrawals by customers).

The second liquidity ratio, the structural liquidity ratio (net stable funding ratio NSFR), seeks to ensure that banks have sufficient financial resources for the next 12 months and that they are available to meet the needs anticipated for this period (BCBS, 2013).

The definitions of what liquid assets are represented by or what stable funding sources should be used have been hotly debated; in principle, we believe that the results were reasonable and our judgment seems to be however reasonable. However, we must not forget that liquidity problems often hide signs of other major problems, such as investors’ doubts on the solvency of a bank whose capital they deem inadequate.

4. Conclusions

The Basel III framework governs assets’ risk weighting in a meaningful way, which will have serious repercussions for the financial sector. In a race to meet the capital requirements, where banks will certainly tweak their business portfolios, probably at the expense of higher risk-weighted assets, they represent the crux of the business aspect of the matter that all structures and units of individual banks will have to face with. Not all structures and organizational units of banks will be actually involved in capital increases and decisions on quantitative and qualitative aspects of the company’s assets, while all will be affected on a daily basis to achieve the objectives set for their surveys and so on.
References


