Lecture 6 :Basel III and its role in banking risk management

Following the occurrence of the global financial crisis, the Basel Committee on Banking Supervision met to prepare new, more stringent standards complementary to what was stated in the principles of the Basel II Agreement, which was called Basel II. To address mortgage securitization problems.

Reasons for the emergence of the Basel Convention -3-

In the wake of the global financial crisis, the leaders of the Group of Twenty (G20) central bank officials met in 2009 with the aim of setting more stringent regulations and rules regarding capital, especially so that the consequences of any future financial crisis would be less harmful.

In this context, the Basel Committee on Banking Supervision announced the approval of the heads of central banks and officials of regulatory bodies from 27 countries of the world's leading economies to enact more stringent rules regarding the concept of capital and liquidity on September 12, 2010. This was called Basel III, representing... A set of new regulatory standards will be implemented gradually until the beginning of 2019.

-1 Improving the quality and structure of capital

The Basel Committee decided to support and improve the quality of bank capital to increase its ability to absorb resulting losses and ensure the strength and solidity of the banking financial system, by raising the minimum capital from 2% to 4.5%.

- The first tranche: (core capital), which is mainly represented by shareholders' equity, which is considered the solid core of the bank. It will be gradually increased from 2% to 4.5% at the beginning of 2015. As for the additional first tranche (declared reserves, other financial instruments...), it will It moves from 2% in 2012 to 1% in 2013, then 1.5% in 2014 to remain at this level, so that the first tranche capital requirements will be raised from 4% to 6% during the same period.

The second tranche: As for this segment, which includes the various tools used to raise debts, it will decrease gradually from 4% to 2%, starting in 2015.

So, it can be said that the Basel III agreement made fundamental changes with regard to the minimum requirements for capital, as it canceled the third tranche of capital and added precautionary capital. Thus, the minimum capital will become 10.5% compared to 8% in Basel II, and the agreement also worked. To increase the quality of the solid core ratio, which represents the strongest component of the bank's capital.

2019	2018	2017	2016	2015	2014	2013	2012	
4,5	4,5	4,5	4,5	4,5	4	3,5	2	**Percentage of solid core (Shareholders' rights)**
1,5	1,5	1,5	1,5	1,5	1,5	1	2	**Additional tranche ratio**
6,0	6,0	6,0	6,0	6,0	5,5	4,5	4	**Capital – Category -1-**
2	2	2	2	2	2,5	3,5	4	**Capital – Category -2-**
2,5	1,875	1,25	0,625	-	-	-	-	**Hedging capital**
8,0	8,0	8,0	8,0	8,0	8,0	8,0	8.0	**Minimum total capital**
10,5	9,875	9,25	8,625	8,0	8,0	8,0	8,0	**Minimum total capital + hedging capital**

2-Risk coverage

The Basel Accord allocated a portion of capital to cover risks arising from operations in derivatives and financing debt securities.

3-Entering the financial leverage ratio

The agreement introduced a new ratio called the leverage ratio, with the aim of putting an end to the increasing proportion of debt in the banking system resulting from the increase in granting bank loans, which is the reason that led to the bankruptcy of many banks before the financial crisis occurred, due to insufficient private capital to absorb losses. Therefore, this percentage was introduced as an additional guarantee to confront the basic risks. It is an optional percentage of (<3%) of the first tranche of capital and is calculated using the following equation:

$$\boldsymbol{Financial\ leverage} = \frac{\textbf{The first tranche of capital}}{\textbf{Total debt}} > \mathbf{3\%}$$

4-Organizing lending policy

The agreement spoke about this matter and stressed the necessity of not linking the policy of granting loans with the policy or economic cycle of countries, as in the event of a booming economy, banks are very active in financing the economy, but in the opposite case, i.e. in a recession, the lending rate declines.

5 -Reducing systemic risks

The risk to the banking system causes disruptions in the financial system and thus destabilizes the overall economy. That is why the Basel Committee sought to strengthen prudence requirements in the financial sector by introducing a new standard, which is the liquidity standard. The agreement proposed two basic ratios.

- Short-term liquidity criterion: (Liquidity coverage ratio) (LCR).

It requires banks to maintain highly liquid assets to cover cash flow within a maximum period of 30 days. This is to ensure the banks' ability to self-finance in the event of any crisis, and it is calculated as follows:

$$(\boldsymbol{LCR}) = \frac{\textbf{Total capital}}{\textbf{2Net cash flow within 30 days}\boldsymbol{a}} \geq \mathbf{100\%}$$

According to the agreement, high-quality liquid assets include all of the banks' reserves at the Central Bank, debt securities or securities guaranteed by the Central Bank... The primary goal of this ratio is to monitor the bank internally and take corrective measures in a timely manner in the event of a shortage or even a lack of liquidity.

Standard of Long-term liquidity (Net Stable Funding Ratio)

The goal of this ratio is to provide banks with stable sources of financing for their activities, especially during a period of financial distress or pressure that may last for a longer period as a result, for example, of a decline in performance and thus a decline in profitability... It is calculated as follows:

$$(NSFR) = \frac{\text{Stable materials available for a year}}{\text{The need for stable funding for a year}} \geq 100\%$$

According to the agreement, stable resources are private capital and preferred stocks... As for the need for financing, it is the total value of assets financed by the bank.

Therefore, the capital adequacy ratio becomes as follows:

$$\textbf{Capital adequacy rate} = \frac{\textbf{Capital (first + second tranche).}}{\textbf{Loan risk (75\%) + market risk (5\%) + operational risk (20\%)}} \geq \mathbf{10{,}5\%}$$