Basel III

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1 Abstract

This project is written for those who want to get familiar with the basics of the Basel III regulations and why they exists. First there will be an introduction about Basel III and the regulations that preceded it. There will be a briefly presentation about the key principles in Basel III such as capital requirements, leverage ratio and liquidity requirements of the frameworks. Furthermore the project is rounded off with a discussion and a reading guide for those who want to dig deeper in the Basel III regulations.

2 Introduction

Late in 2009 the Basel Committee on Banking Supervision gave out the first version of Basel III which is based on the previous Basel I and II regulations. In 1988, when Basel I was published, the main focus was on credit risk and the idea to deal with this was to create a bank asset classification system. The goal for Basel III was that the regulation, supervision and risk management within the banking sector would be improved. This would make financial bubbles and crisis less common. In this project we will present facts about Basel III. There will also be a discussion about problems with this framework and the results of it. Since this is a small project the content will focus on the main parts of Basel III. For those who want to learn more about Basel III there will be a reading guide. [1] [2]

3 Facts

3.1 Key principles

3.1.1 Capital Requirements

There are a couple of different kinds of capital ratios mentioned in Basel III where one can summarize it like a ratio with some kind of regulatory measure of capital divided by risk-weighted assets.

$$\frac{Regulatory\ capital}{Risk-weighted\ assets}$$

The regulatory capital can be divided into three parts:

- Core capital: Common Equity Tier 1 and Additional Tier 1
    - The most important capital measure is the Tier 1. The essential constituents of this measure is retained earning and the equity of the shareholders but it can also contain some other kinds of reserves including special kinds of preferred stock which is what constitutes the Additional Tier 1 capital.
- Supplementary capital: Tier 2
    - Consists of five parts:
        - Undisclosed reserves which is a measure that differs a bit between different countries depending on accounting laws. In Sweden it consists of profits that a company has not paid taxes for yet. [3]
        - Revaluation reserves is the reserves that occur as a result of some kind of revaluations that are allowed in some countries. The reason for these revaluations may be for instance the difference between the value of an asset on the balance sheet and the current value due to accounting methods that values the assets based on historical costs.
        - General provisions/general loan-loss reserves is reserves created to cover up for so far unidentified losses that may be visible in the future.
        - Hybrid debt capital instruments consists of a couple of instruments that has attributes of both debt and equity.
        - Subordinated term debt is debt that in the case of a liquidation or bankruptcy of a company is prioritized after other debt (senior debt). [4]

The minimum levels of the capital ratios is for Tier 1 capital changed from 4.5% in Basel II to 6.0% in Basel III and for the Total capital it is the same as in Basel II, 8%. The risk-weights are mainly based on credit ratings and the banks' internal models which are regulated within Basel III and by national authorities, for instance Finansinspektionen in Sweden. [5] [6]

3.1.2 Leverage Ratio

The general definition of a Leverage Ratio-measure is:

$$\frac{Capital\ Measure}{Exposure\ measure}$$

Specified for Basel III the capital measure is the Tier 1 capital which we recall from 3.1.1. The exposure measure is the bank's total exposure which is made up by four parts:

- Exposures on the balance sheet
- Exposures linked to derivatives
- So called Securities financing transaction exposures which can roughly be described as all transactions where one uses cash to borrow securities or the other way around. [7]
- Exposures to components outside the balance sheet

The minimum level for the leverage ratio is 3 %. [8]

3.1.3 Liquidity Requirements

To improve the liquidity standard in banks, Basel III established two ratios connected to the liquidity of the bank. Liquidity disruptions that could appear within 30 days can be a huge problem for banks. The first ratio, Liquidity Coverage Ratio, deals with this problem. It says that the bank should have enough liquid assets with high quality so that they can deal with all cash outflows that appears in the next 30 days. This requirement came up because of the financial crisis in 2008.[9] The ratio should be more or equal to 100 % and it is given by:

$$LCR = \frac{High\ quality\ liquid\ assets}{Total\ net\ liquidity\ outflows\ next\ 30\ days}$$

The second ratio that Basel III introduced was Net Stable Funding Ratio. Unlike the first ratio, this one covers a period of one year. The aim for this requirement is to make the banks stable funding more sustainable. It is a ratio between the amount of stable funding that is available and the amount of stable funding that is required. This ratio should also be more or equal to 100 % and it is given by the following: [10]

$$NSFR = \frac{Available\ amount\ of\ stable\ funding}{Required\ amount\ of\ stable\ funding}$$

The available amount of stable funding is for example the bank's capital, preferred stocks or liabilities that has a maturity that is one year or longer etc. The denominator, Required amount of stable funding, is a weighted sum of the value of the assets that the bank is handling.

3.2 Countercyclical buffer

Bank's has an inclination of being cyclical in the way that their growth is very big when the economy as a whole is growing. Growth in lending is a big reason for this. But the side effects of this is that the downside when the economic situation changes is as big. In Basel III there are rules for countercyclical buffer with the purpose of limiting the increment of system risk that was the case for instance in the years prior to the financial crisis in 2008.

4 Discussion

Basel III has not been completely spared from criticism. When it comes to the specifics and more technical things one important thing is that Basel III still uses similar risk-weighting methods as before, for instance it still relies on credit rating institutes which, as we saw in the financial crisis 2008, obviously is a pretty bad method of measuring credit risk. Another thing that has been criticised is that Basel III is mainly a regulation that is made up to prevent risk-events like 2008 but when it comes to handling unknowable risk, so called Black Swans, it's not as good. The new, higher requirements may also lead to a higher threshold for new actors in the business which is leading to reduced competition in an oligopolistic industry. Bigger capital reserves will also, instinctively, affect GDP growth negative since there is more "dead" money that the bank's can not use to lending. [11] [12] Another part of the whole regulatory wave is that those with an ideological opposition to regulations may see this as a threat and a further step towards a economic and financial system that is more and more controlled by the government and big organisations.

5 Reading guide

For those who wants to learn more about Basel III we strongly recommend the Bank For International Settlements webpage (https://www.bis.org/) where you can find all the details about the regulations. Two brief and simple summaries of Basel III is especially recommended as an introduction:

- https://www.bis.org/bcbs/basel3/b3_bank_sup_reforms.pdf
- https://www.bis.org/bcbs/publ/d424_inbrief.pdf

The Wikipedia-page on Basel III is also a good overall view and a good source for further reading tips:

- https://en.wikipedia.org/wiki/Basel_III

6 Reference list

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