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TÍTULO: *International Banking Regulation: the Basel Accords and EU
implementation of Basel III*

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ABSTRACT

This paper analyzes the key role banks have in the financial system, as well as the importance of international banking regulation in a globalized economy. The latter task has been performed by the Basel Committee on Banking Supervision for several years, representing the will of the broader international community. The three Basel Accords appear as the crystallization of a number of regulatory international dealings, each of them presenting some innovations, which will be also examined. In particular, the latest Basel Accord cannot be understood without knowing the context of the last financial crisis. Moreover, there will be a special focus on Basel III and its implementation path within the European Union, which can lead to a result that remains uncertain.

INTRODUCTION

Although sometimes unnoticed, banks usually play a major role in our economy. While some economists think that 'where enterprise leads, finance follows', as Joan Robertson declared in 1952, others strongly believe in the importance of the financial system for economic growth.

Overall, it seems that an optimal financial system, combined with a well-developed legal system, should incorporate elements of both direct, market and indirect, bank-based finance. As Duisenberg said in 2001, 'a well-developed financial system should improve the efficiency of financing decisions, favoring a better allocation of resources and thereby economic growth'.

In order to make the system work properly, national authorities have traditionally exerted their power by setting a series of measures under the name of 'banking regulation'. There have been times when this regulation has been very strong, while there have also been times when it has hardly affected banks' activity. However, there is no doubt that regulation has always influenced it.

Now that globalization is taking place, financial transactions take place between a large number of countries. As a result, whereas it was generally assumed that regulatory decisions should only be adopted by national authorities based upon their view, it is currently evident that international banking regulation is essential in order to ensure that this set of rules is effective.

The aim of this paperwork is to analyze international banking regulation from both an historical and a current perspective. The Basel Committee on Banking Supervision has largely performed this activity through the so-called 'Basel accords', which have proved to be insufficient to adequately prevent the last global financial crisis. In response to this tragedy, the Committee recently launched a new package of regulations under the name of 'Basel III'.

Lastly, this work will focus on the Basel III implementation within the European Union framework, where Spain is located. The peculiarities of this economic and political project require a specific approach for the purpose of clearly appreciate how this implementation path is being followed. This process will be likely to end up with the fulfillment of a pretentious project, which is the European Banking Union, whose foundations will lie in most of the Basel III norms.

1. BANKING REGULATION

1.1. THE BANKING ACTIVITY

1.1.1. Concept of bank

The *raison d'être* of a bank was given by Rowlings (2011), who defined a bank as 'a financial intermediary that acts between those with spare funds (depositors) and those with a shortage of funds (borrowers)'.

But why are banks necessary? People with spare funds and the desire to invest them could decide to directly lend them to borrowers in exchange for periodic repayments of the principal and interests¹. However, this would involve resources and costs for both the lender and the borrower: (1) on the one hand, it is extremely difficult for the lender to have an accurate picture of the borrower's situation in terms of guarantee, so lender would have to monitor the borrower so as to assess the security of the investment; (2) on the other hand, the borrower might want a larger loan than the lender is able to provide or perhaps needs the money for a longer period of time than the lender can afford.

The intervention of a bank avoids these issues and offers advantages to both parties. Typically, the funds that lenders deposit in the bank are repayable on demand and the depositor does not have to know anything about the ultimate borrower because it is the bank and not the depositor that contracts with the borrower. In addition, borrowers can withdraw more money and for longer periods than individual investors would be willing to grant.

1.1.2. The role of banks in the financial system

Allen and Caretti (2008) affirm that the main roles banks perform in the economy are the following:

- (i) They ameliorate the information problems between investors and borrowers by monitoring the latter and ensuring a proper use of the depositors' funds².
- (ii) They provide inter-temporal smoothing of risk that cannot be diversified at a given point in time as well as insurance to depositors against unexpected consumption shocks³.

¹ Interests must always be satisfied due to the *time value of money* theory. There are three reasons why a dollar tomorrow is worth less than a dollar today: the preference for current consumption in contrast to future consumption of individuals, the monetary inflation and the risk associated with the cash flow in the future (Damodaran).

² Diamond (1984) states that financial intermediaries precommit to monitor borrowers by promising lenders a fixed return, while Boot and Thakor (1997) develop a model of financial system architecture that builds on the view of banks as delegated monitors.

- (iii) They have a key function in spurring growth⁴.
- (iv) They play an important role in corporate governance where there is a lack of strong market for corporate control, v. gr. in Japan and Germany.

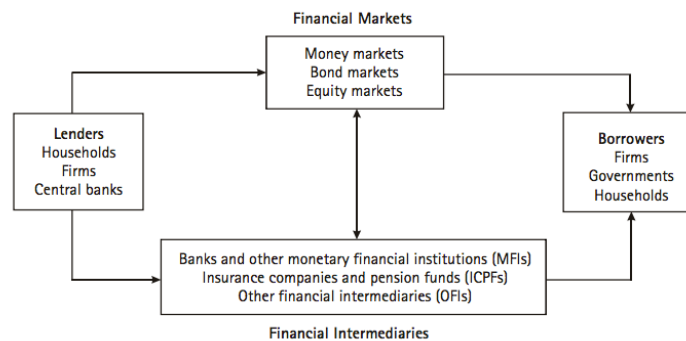


Figure 1. An overview of the financial system.
Source: Allen, Chui and Maddaloni (2007)

As shown in figure 1, banks do not rely exclusively on deposit taking as the source for their funds; they also enjoy access to financial markets (money markets, bond markets and equity markets). Money markets⁵ provide banks with the opportunity of lending to, and borrowing from, one another⁶. Capital markets (bond and equity) represent a complex world with many participants and strict rules (Geambasu and Matei 2010). Institutions operating in the capital markets access them to raise capital for long-term purposes. Few issues have been as controversial as the appropriate scope of commercial banks activities and whether they should participate in capital market activities, providing both lending and other services, such as underwriting⁷ (Drucker and Puri 2006).

1.2. BANK REGULATION

1.2.1. Why should we regulate banks?

Bank regulation aims to accomplish four major objectives (Spong 2000):

³ Allen and Gale (1997) argue that such risks can be averaged over time as long as banks build up reserves when the returns on the banks' assets are high and run them down when the returns are low.

⁴ Even so, there has been debate on the relative effectiveness of banks compared to financial markets in doing this (Allen, F. & Carletti, E. 2008, pp. 14-16).

⁵ Money market is the component of financial markets involved in short-term borrowing, lending, buying and selling (one year or less).

⁶ This is commonly known as the *interbank market*. It was the freezing up of interbank lending that placed banks like Northern Rock in such great difficulties during the last financial crisis (Alford 2010).

⁷ Underwriting is process by which investment bankers raise investment capital from investors on behalf of corporations and governments that are issuing securities (equity and debt).

⁸ Some theories argue that commercial banks generate conflicts of interest when engaging in investment activities; other arguments cast doubt on the possibility of commercial and investment banks co-existing.

(i) Protection of depositors:

When customers want to write and cash checks or carry out any financial transaction, they must maintain a deposit account. As a result, they become bank creditors and remain associated to the bank's fortune⁹.

(ii) Monetary and financial stability:

The most important foundation for regulation in banking is to address concerns over the safety and stability of financial institutions, the financial sector as a whole, or the payments system (Biggar and Heimler 2005). In this sense, regulation is supposed to prevent some consequences *bank runs* and *moral hazard* have on the economy. *Bank runs* occur when depositors are afraid of the insolvency of their bank, so they 'run' to withdraw their fund¹⁰. *Moral hazard* introduces the idea of banks taking too much risk in order to benefit from undue actions (Dow 2010).

These consequences are related to the danger of widespread bank failures, which have an adverse impact on the whole economy.

(iii) Efficient and competitive financial system:

In order to promote efficiency and competency, regulation needs to follow a series of principles. Dodge (2015) set these principles:

First, regulation is appropriate to correct a market failure [...]. The second principle is that regulation must be effective [...]. The third principle is that the benefits of a particular regulation must be greater than the costs it imposes.

(iv) Consumer protection:

The last goal of regulation is protecting the consumer, most notably through safeguarding their deposits and promoting competitive banking services¹¹.

⁹ Yes, that's how our monetary system works - savers are the banks' creditors. Anyone wanting to participate in payment transactions or save money without risk of fluctuation must give a bank credit - whether they like it or not (Häring 2013).

¹⁰ The two most important theories explaining the reason why *bunk runs* happen are those of Dybvig (1983) and Bryant (1980). Dybvig considers bank runs as a sunspot phenomenon, unrelated to any underlying economic variables, while the latter thinks that bank runs originate from negative information depositors have about the bank's situation.

¹¹ Some examples of good practices could be: equal treatment of all the customers, providing meaningful disclosure of deposit and credit terms, promoting financial privacy or avoiding abusive practices during credit transactions, debt collections or reporting of personal credit histories (Spong 2000).

1.2.2. Standard instruments of bank regulation

1.2.2.1. Risks affecting the banks

Due to the underlying objectives of bank regulation, it is commonly referred to as 'prudential regulation'. It emphasizes on banks' management of risk¹².

There are four main risks undertaken by banks (Dima and Orzea 2012):¹³

- (i) Credit risk: 'Credit risk is the most obvious risk of a bank by the nature of its activity [...] Credit risk is the risk that a borrower defaults and does not honor its obligation to service debt' (Gestel and Baesens 2009).
- (ii) Interest rate risk: bank's exposure to adverse movements in interest rates.
- (iii) Liquidity risk: this risk arises because revenues and outlays are not synchronized (Holmström and Tirole 1998)¹⁴.
- (iv) Operational risk: the risk of direct or indirect loss resulting from inadequate or failed internal process, people and systems, or from external events (Gestel and Baesens 2009).

1.2.2.2. Regulation instruments

Among these risks, liquidity and credit risks denote the most significant concerns for bank regulators. Thus, regulation instruments usually focus on them. A basic bank balance sheet might be helpful in order to explain them.¹⁵

Assets		Liabilities	
Cash and other liquid assets	100	Deposits	800
Loans	900	Debt	100
Total assets	1000	Equity	100
		Total liabilities	1000

Figure 2. Basic bank balance sheet.

Source: *Bank Regulation & Resolution of Banking Crisis* 2012.

¹² A sub-genre of prudential regulation is the *macroprudential regulation*, which according to Tarullo (2014) has informed major changes since the financial crisis and has aimed to mitigate the risk of the financial system as a whole.

¹³ But these are not the only ones. For example, the *interest rate risk* can be included in a broader category, *market risk*, which refers to the risk of losses in positions arising from movements in market prices.

¹⁴ An interesting distinction is drawn by Tian (2009): *market liquidity risk* is the loss incurred when a market participant wants to execute a trade or to liquidate a position immediately while not hitting the best price, whereas *funding liquidity risk* is the risk that a bank is not able to meet the cash flow and collateral need obligations.

¹⁵ A real balance sheet is much more complex, but this basic skeleton enable us to isolate some basic elements of prudential regulation.

(i) Liquidity risk:

As shown in figure 2, fractional-reserve banking is the practice whereby a bank holds reserves (meaning cash and other liquid assets) that are a small fraction of its deposit liabilities (Abel and Bernanke 2005)¹⁶. It is an inherent part of the banking system. This hazardous practice is one source of liquidity risk. To prevent illiquidity, regulators might have an interest in setting a liquidity ratio so they make sure that banks' reserves of cash and liquid assets are not 'too small' in comparison to their deposits or total liabilities:¹⁷

$$\text{Liquidity ratio} = \frac{\text{Liquid assets (cash and others)}}{\text{Liabilities}}$$

Besides, regulators can sometimes set a net stable funding ratio (NSFR), which can be defined as follows (Basel Committee on Banking Supervision 2014a):

$$\text{NSFR} = \frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} \geq 100\%$$

Gobat, Yanase and Maloney (2014) suggest that the available amount of stable funding (ASF) is the portion of a bank's funding structure (capital and liabilities) that is reliable over a one year time horizon, while the required amount of stable funding (RSF) is the portion of a bank's assets and off-balance-sheet (OBS) exposures that are regarded as illiquid over a one year horizon and hence should be backed by stable funding sources.

(ii) Credit risk:

Regulatory authorities can address credit risk in two complementary ways:

- The first method consists in imposing restrictions on banks' lending practices, for example, by regulating the loan-to-value ratio (LTV) in mortgage lending and thus, by requiring that when giving mortgages the loan is no greater than a certain percentage of the mortgaged property.

During the housing boom in Spain, a significant number of mortgages loans had associated a LTV ratio above 100% (Díaz-Serrano 2015).

¹⁶ This practice is related to *maturity transformation*, which is the transformation of claims over fundamentally illiquid assets into claims that are highly liquid. Banks do it by borrowing short-term and lending long-term, and it is one of the critical functions that the financial sector provides for the community (Lowe 2015).

¹⁷ The question would be how small. It is clear that all deposit liabilities cannot be backed by cash reserves, for that would mean the abolition of fractional-reserve banking and consequently the demolition of the banking system.

- The second method consists in setting rules for banks to have adequate capital. We can find:
 - Minimum leverage ratios. The Basel Committee on Banking Supervision defines this ratio as follows (2014b):

$$\text{Leverage ratio} = \frac{\text{Capital measure}}{\text{Exposure measure}^{18}}$$

- A rule setting risk-weighted capital adequacy requirements, a ratio of capital to the value of assets where assets are weighted according to their risk¹⁹.

Two general difficulties that lie at the heart of designing risk-adjusted capital adequacy rules are (1) agreeing on satisfactory methods for measuring risks and (2) deciding what types of financial investment in the bank should be counted as elements of its capital. In fact, Basel III is fundamentally based on developing the concept of risk-weighted capital requirements (Blavarg 2014).

2. INTERNATIONAL REGULATION BEFORE THE FINANCIAL CRISIS OF 2007

2.1. BASEL COMMITTEE ON BANKING SUPERVISION

2.1.1. A brief history

As the Basel Committee on Banking Supervision²⁰ (BCBS) states on its web page, '[BCBS] is the primary global standard-setter for the prudential regulation of banks and provides a forum for cooperation on banking supervisory matters'.

The BCBS had its origins in the financial market agitation that followed the failure of the Bretton Woods system of managed exchange rates in 1973. In response to these and other disruptions in the international financial markets²¹, the central bank governors of the G10 countries founded the BCBS by the end of 1974. According to Goodhart, who is the main reference when approaching the BCBS history, '[BCBS] has become a de facto international regulatory body', though BCBS never had and never chose to have legal power to sanction regulation for countries. Penikas (2015) added that, essentially, the

¹⁸ According to the Basel Committee on Banking Supervision, a bank's total exposure is the sum of: on-balance-sheet exposures, derivative exposures, security financial transaction (SFT) exposures; and OBS items.

¹⁹ In the Basel I Accord, the Basel Committee on Banking Supervision explains why they consider that a weighted risk ratio in which capital is related to different categories of asset or OBS exposure, weighted according to broad categories of relative riskiness, is the preferred method for assessing the capital adequacy of banks.

²⁰ Its original name was *Committee on Banking Regulations and Supervisory Practices*.

²¹ Including the collapse of *Bankhaus Herstatt* in West Germany.

documents that the BCBS has elaborated throughout its history have become the framework for global supervision and particularly for risk regulation best practice. Often these documents originated from best practices, or in fact from the member countries' experience²². Sometimes they originated from industry practice or simply from particular cases demanding new solutions.

BCBS's activity can be divided into five main regulatory waves, each of them reflecting the name of the dominating document that occupied the mind of bankers at the time (Penikas 2015):

- (i) 1974-1986: *Concordat*²³.
- (ii) 1987-1998: Basel I.
- (iii) 1999-2008: Basel II.
- (iv) 2009-2011: Basel III.
- (v) 2012-2014: Post-Basel III.

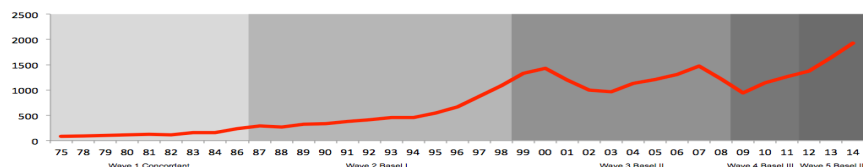


Figure 3. Chart of Regulatory Waves and S&P Index.

Source: Penikas (2015)

Upon studying figure 3, one may conclude that the Basel Committee is likely to cause economic crisis. As Penikas (2015) explains, the opponents to Basel I tried to justify that the 1992 crisis in the US was driven by Basel I and that similar artificial logic may be applicable to Basel II, as the 2007 crisis started after the final (comprehensive) version of Basel II was published.

Nevertheless, Goodhart (2011) denies direct causality of Basel I and the forthcoming crisis, and Penikas (2015) reminds us that US banks associated with the source of crisis did not adopt Basel II, although it was recommended to them. It was not, however, imposed by the Federal Reserve in the US.

2.1.2. Goals

Wellink²⁴ (2006) said that the broad goals of the Committee are three:

²² Let's think of the arguments for Basel I whether to have it as a risk-weighted or risk-unweighted capital ratio.

²³ Jackson (2002) assures that the *Concordat* in 1975 was adopted in order to close gaps in international supervisory coverage. The aim was to ensure that no foreign banking establishment would escape supervision and that this supervision would be adequate and consistent across member jurisdictions (BCBS 2015).

²⁴ Chairman of the Basel Committee on Banking Supervision in 2006.

- (i) To provide a forum for dialogue among supervisors.
- (ii) To promote improvements in bank risk management practices and the framework for banking supervision. As mentioned above, credit risk and liquidity risk regulation are the most important centers of attention²⁵.
- (iii) To promote mechanisms for pragmatic implementation of its principles.

The Committee's decisions have no legal force²⁶.

2.1.3. Organization

In the 1980s, there were only 12 Basel Committee countries. Currently, there are 28 members, who must have direct banking supervisory authorities and central banks²⁷. Some countries are invited to become observers as well^{28,29}.

The internal organizational structure of the BCBS comprises in (BCBS 2013):

- (i) The Committee, which is the ultimate decision-making body of the BCBS with responsibility for ensuring that its mandate is achieved.
- (ii) Groups, working groups, and task forces³⁰.
- (iii) The Chairman, who directs the work of the Committee.

The Committee's Secretariat is located at the Bank for International Settlements (BIS) in Basel, Switzerland. However, the BIS and the BCBS remain two different entities (Marrison 2002).

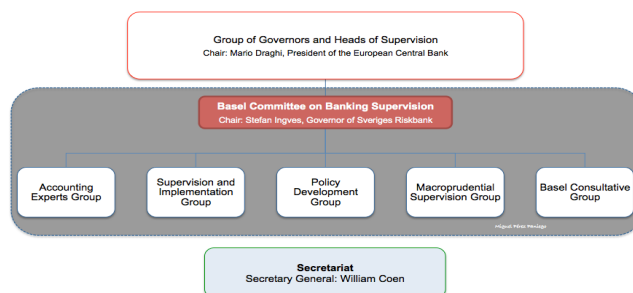


Figure 4. BCBS Organizational Chart.
Source: BIS web page.

²⁵ But they are not the exclusive ones. The Basel Committee activity embraces credit, market, operational and liquidity risks regulation (Penikas 2015).

²⁶ Supervisory standards, guidelines and recommendations are formulated in the expectation that individual national authorities will implement them (BCBS 2015).

²⁷ These members are Argentina, Australia, Belgium, Brazil, Canada, China, the European Union, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.

²⁸ At this moment, the country observers are Chile, Malaysia, and United Arab Emirates.

²⁹ Spain was invited to join the Basel Committee on 1 February 2001 (Tarullo 2008, p. 41).

³⁰ Task forces do not form part of the permanent structure of the BCBS.

2.2. THE BASEL ACCORDS BEFORE THE FINANCIAL CRISIS OF 2007

2.2.1. Basel I

2.2.1.1. *Origins and objectives of the Accord*

As early as 1980, the G10 central bankers reported the importance of capital adequacy (Reinicke 1995). Competitive considerations were given, but so was the fear of a financial crisis arising from deteriorating capital ‘buffers’³¹. The annual reports of the Committee in the early 1980s consistently mentioned the supervisors’ concern over the erosion of capital levels worldwide (Tarullo 2008).

The BCBS (1988) identified ‘two fundamental objectives’: (1) ‘strengthening the soundness and stability of the international banking system’ and (2) ‘diminishing an existing source of competitive inequality among international banks’.

2.2.1.2. *Elements of the Accord*

The accord addressed only credit risk, despite acknowledging that banks must prevent other kinds of risks as well³² (BCBS 1988).

The accord created two minimum capital ratios: (1) a bank’s core capital, called ‘tier 1’ capital by the Committee, which was to be at least 4% of risk-weighted assets, and (2) a bank’s total capital, which included so-called ‘tier 2’ components and was to be at least 8% of risk-weighted assets (Tarullo 2008). It was not possible to recommend one single, generally accepted definition of capital. But the use of two separate capital ratios maintained a focus on core capital while adapting many peculiarities resulting from distinctive national capital structures, political pressure from banks, or both (Tarullo 2008).

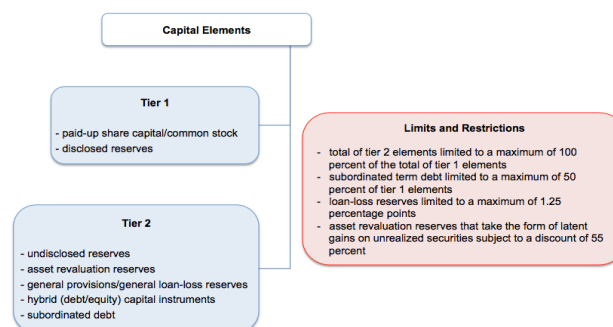


Figure 5. Definition of capital in Basel I.

Source: BIS.

³¹ Capital buffers refer to the amount of capital that is required to cover banks’ risks.

³² The committee highlighted that the accord had addressed *country transfer risk* as an incident as well (Tarullo 2008). *Transfer risk* arises when there is a lack or shortage of foreign currency or foreign currencies in which the external debt is contracted (Iranzo 2008)

The accord consolidated the movement toward risk weighting of assets³³. This assignment was chiefly based on the generic nature of the borrower, rather than the borrower's distinct financial features or credit history³⁴ (Tarullo 2008). The framework of weights was kept as simple as possible and only five weights were used – 0, 10, 20, 50 and 100% (BCBS 1988). The inclusion of OBS items in the total assets of a bank for purposes of capital calculations was one of the enduring contributions of the accord³⁵.

Under the *Amendment to the capital accord to incorporate market risks* (BCBS 1996)³⁶, banks that held securities³⁷ on their 'trading book'³⁸, would substitute the capital charge generated by the market risk amendment for the capital charge generated by the original Basel I (Tarullo 2008).

2.2.2. Basel II

2.2.2.1. Negotiations

After Basel I amendment in 1996, banking supervisors were already aware of many of the weaknesses of Basel I. Tarullo (2008) maintains that some of these weaknesses resulted from compromises necessary to secure international agreement; another was that, even after the market risk amendment, important bank risks were not subject to capital regulation³⁹.

In 1999, the Committee issued the First Consultative Paper (CP-1), where the Committee indicated its intention to extend capital charges to operational risk and, for banks whose interest rate exposure was significantly above average, to that risk as well (BCBS 1999). The Committee placed all the quantitative capital requirements in the context of 'three pillars'. Besides, one additional risk bucket was created: a 150% risk weighting (Tarullo 2008). The two most relevant subjects discussed in CP-1 were: (1) the proposal to use rating from 'external credit institutions'⁴⁰ and (2) the proposal to use internal credit ratings⁴¹ (IRB).

³³ *The Committee believes that a risk [weighted] ratio has the following advantages over the simpler gearing ratio approach: (1) it provides a fairer basis for making international comparisons between banking systems whose structures may differ, (2) it allows off-balance-sheet exposures to be incorporated more easily into the measure; (3) it does not deter banks from holding liquid or other assets which carry low risk* (BCBS 1988).

³⁴ For example, all loans to non-banking corporations were risk-weighted at 100%, regardless of whether the borrower was a powerful solid firm or just a startup firm with no proven cash flow.

³⁵ In 1986, the Committee published *The Management of Banks' off-balance-sheet exposures*.

³⁶ For market risk definition, see page 7.

³⁷ A security is a financial instrument that represents an ownership position in a publicly-traded corporation (stock), a creditor relationship with governmental body or a corporation (bond), or rights to ownership as represented by an option (*Farlex Financial Dictionary* definition).

³⁸ The trading book means 'the bank's proprietary positions in financial instruments [...] held for short-term resale and/or [...] taken on by the bank with the intention of benefiting in the short-term [...]' (BCBS 1996, p.3). It is opposed to the 'banking book'.

³⁹ Operational risk being the most important one.

⁴⁰ Such as Moody's or Standard & Poor's

The Second Consultative Paper (CP-2), issued in 2001, set forth the IRB approach⁴², whose essence was that qualifying banks could use their own estimates of the probability of default of each of its exposures⁴³ (BCBS 2001).

After a Third Consultative Paper (CP-3), the Committee officially released in 2004 Basel II, called *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*. This publication focused primarily on the banking book, so the Committee published in 2005 a document governing the treatment of banks' trading books under the new framework (BCBS 2015). The new text was integrated with the 2004 text in a comprehensive document released in 2006: *Basel II: International convergence of capital measurement and capital standards: a revised framework – comprehensive version*.

2.2.2.2. The three pillars of Basel II

- (i) 'Minimum capital requirements', which sought to develop and expand the set of rules agreed in Basel I. This first pillar was surely the most complex one, as it included several measures to combat:
 - Credit risk, through a standardized approach and the new IRB approach, each of them having new features.
 - Securitization exposures⁴⁴, also through a standardized approach and an IRB approach. The insertion of special rules for calculating capital requirements for securitization exposures was due to regulatory arbitrage⁴⁵, which was performed through the use of non-traditional financial instruments, mostly through securitization (Meyer 1999).
 - Operational risk, with a basic indicator and two approaches.
 - Market risk.
- (ii) 'Supervisory review of institutions'.
- (iii) 'Effective use of disclosure' to strengthen 'market discipline' and foster good banking practices.

⁴¹ The Committee devoted several pages to narrating the benefits, drawbacks, and challenges of an internal rating-based (IRB) approach to capital regulation.

⁴² The CP-2 was a package of over 450 pages. It was not just long but technically complex, characteristics that the final version of Basel II has conserved.

⁴³ Banks were intent on having an IRB foundation for their regulatory capital requirements, since they expected the required capital levels to decline (Tarullo 2008).

⁴⁴ *Securitization* is a sophisticated process of financial engineering that allows global investment to be spread out and separated into multiple income streams to reduce risk (Smick 2008). Jobst (2008) defines securitization as 'the process in which certain types of assets are pooled so that they can be repackaged into interest-bearing securities'. This means that 'the interest and principal payments from the assets are passed through to the purchasers of the securities'.

⁴⁵ *Regulatory arbitrage* refers to 'financial transactions designed specifically to reduce costs or capture profit opportunities created by different regulations or laws' (Partnoy 2007, p. 22)

3. THE GREAT RECESSION OF 2008-2009

3.1. THE GLOBAL FINANCIAL CRISIS

3.1.1. First approach to the crisis

In 2009, after the crisis burst, Mohan, Deputy Governor of the Reserve Bank of India, declared (Mohan 2009):

The fall out of the current global financial crisis could be an epoch changing one for central banks and financial regulatory systems. It is [...] very important that we identify the causes of the current crisis accurately so that we can [...] think of the longer-term implications for monetary policy and financial regulatory mechanisms.

By the time Mohan's speech was given, it was already clear for the international community that new regulatory mechanisms were going to be necessary: 'many observers, including ourselves, view the crisis first and foremost as a regulatory failure and are convinced that the current regulatory architecture [...] is in need of repair' (Acharya, Cooley, Richardson and Walter 2011).

3.1.2. Causes

According to Payne (2013), the fundamentals of the financial crisis trace back to 1997, when the Asian Financial Crisis occurred. This crisis was caused by 'hasty and imprudent financial liberalization [...] allowing free international flows of short-term capital without adequate attention to the potentially potent downside of such globalization' (Bhagwati 2004).

Most economists and policy makers agreed that the collapse of the American housing market had caused the financial crisis of 2008 (Unger 2009). As Payne said, this was not the only cause of the financial crisis, which was a very complex phenomenon, but it sheds some light on why the focus is on the US market when trying to unveil the outbreak of the crisis.

From Payne's point of view, in spite of the complexity of unraveling the causes of the global financial crisis, it is possible to arrange them in six main instigators:

3.1.2.1. Deregulation of Financial Markets

Both Sherman (2009) and Orhangazi (2014) have studied the deregulation of financial markets in the US in the years preceding the crisis⁴⁶.

⁴⁶ This argument might seem a little inconsistent with the Basel regulatory waves, but the reality is that Committee's decisions have no legal force and that US banks to be associated with the source of crisis did not adopt Basel II (Penikas 2015).

Reich (2007) proves that since the 1970s, many regulations were removed. In 1980, commercial banks and savings and loans institutions were allowed to determine their own interest rates on deposits and loans. In 1999, the Glass-Steagall Act⁴⁷ was demised (Payne 2013).

3.1.2.2. *Failure to update regulations to keep up with the tremendous pace of financial innovations*

Among the numerous financial innovations that contributed to the financial crisis were securitization⁴⁸ and hedge funds⁴⁹ (Payne 2013). Another financial innovation was credit derivatives, which were bets on the creditworthiness of a particular company, like insurance on loan. There were two types of credit derivatives (Partnoy 2008): credit default swaps and collateralized debt obligations, both transferring the risk away from banks⁵⁰.

3.1.2.3. *Excessive compensations*

A mercenary culture developed among corporate executives (Partnoy 2008).

3.1.2.4. *Low interest rates*

A fundamental cause of the crisis was the easy availability of too much money on a global scale (Payne 2013). The U.S. Federal Reserve, led by Alan Greenspan⁵¹, the European Central Bank and the Bank of Japan reduced interest rates to record lows.

3.1.2.5. *Subprime Loans*

Rising real state values led to lenders taking more risks⁵².

3.1.2.6. *Speculation*

As prices continued to rise, even the most cautious people became speculators.

⁴⁷ The Act of 1933 prohibited commercial banks from underwriting or marketing securities.

⁴⁸ In 2009, \$8.7 trillion of assets were globally funded by securitization (The Economist 2009).

⁴⁹ A hedge fund can be defined as an actively managed, pooled investment vehicle that is open to a limited group of investors and whose performance is measured in absolute return units.

⁵⁰ Parties involved in a credit default swaps (CDSs) agreed that one would pay the other if a particular borrower, a third party, could not repay its loans. A collateralized debt obligation (CDO) is a security that repackages individual fixed-income assets into a product that can be chopped into pieces and then sold on the secondary market.

⁵¹ Commonly known as as one of the persons responsible for the financial crisis of 2007-2008.

⁵² According to Bianco (2008), '[s]ome experts believe that Wall Street encouraged this type of behavior by bundling the loans into securities that were sold to pension funds and other institutional investors seeking higher returns'.

Many homeowners were included in this category. Payne points out that in addition to low-interest loans and financial innovations in the housing market, political pressures to reduce taxes, including real estate taxes contributed to the housing boom, which was at the epicenter of the global financial crisis⁵³.

3.1.3. Consequences and global responses

3.1.3.1. Consequences

The most appreciable results of the global crisis were, according to Payne:

- (i) Foreclosures, connected with high levels of unemployment all around the world. This unemployment has persisted so far, and has prompted debate about the structural and cyclical nature of unemployment, mostly in Europe (Arpaia, Kiss and Turrini 2014).
- (ii) Decline in manufacturing and trade.
- (iii) Global Power Shift, with merging global powers like Brazil, Russia and India enhancing their strength⁵⁴.

3.1.3.2. Global responses

Reactions ranged from passing stimulus packages⁵⁵ to developing austerity politics⁵⁶. However, the regulatory issue popped up after the crisis and great part of the international community agreed on putting efforts in order to develop better regulatory policies. This mindset evidently led to Basel III⁵⁷.

3.2. THE FINANCIAL CRISIS IN THE EUROPEAN UNION

3.2.1. The Crisis in the European Union

3.2.1.1. Particular factors concerning the EU

All the factors involved in the global financial crisis affected the European economy as well. Although most of the causes of the crisis are shared with the US, there are some particular aspects of the European idiosyncrasy that brought intense discord in the region, even making some question the sustainability of the EU and suggest the secession of individual Member States from the Union (Spiegel 2013).

⁵³ The Taxpayer Relief Act of 1997 exempted profits from taxes gained from selling one's home if the home was owned and used as a principal residence for two of the last five years.

⁵⁴ The Indian government was right to favor banking regulations before 2007 (Bajaj 2009).

⁵⁵ The Congress in the US passed a \$787 billion stimulus package.

⁵⁶ Which fit better with the European point of view, driven by Germany.

⁵⁷ For some people, the level of complexity that international regulation has reached is far from being beneficial. Professor Caprio (2013), for example, argues that '[...] increasing complexity, endogeneity, and the differences in countries' institutional environments [mean] that the Basel Committee is playing a game [...] that they cannot win and should not be attempting to play.'

An analysis conducted by Harvard University declares that these aspects are:

- (i) The monetary policies became one.

Before the euro, Northern countries in Europe generally sought low inflation, while the Southern countries sometimes used inflation to pay off debt and/or devalue the external cost of their exports. The common monetary policy of the European Central Bank, always focused on keeping inflation low, has fueled unstable trade balances for southern economies⁵⁸.

- (ii) Common market and common currency.

Because of the reduced barriers to trade within the free economic area, the Northern nations were quite directly impacted by the Southern nations' economic 'woes' because the single currency was directly affected.

- (iii) The human and social elements.

Kupchan, in an article published by the *Washington Post* in 2010, discussed about the persistence of stereotypes about national attitudes that impede collaboration and communication within the European framework.

3.2.1.2. The difficulties

Both high rates of unemployment and the sovereign debt crisis have shackled the European Union, with the peculiarity that the latter contributes to the former (Draghi 2014). Furthermore, the sovereign debt crisis is creating a 'democratic malaise' illustrated by the Greek referendums (Reho 2014)⁵⁹.

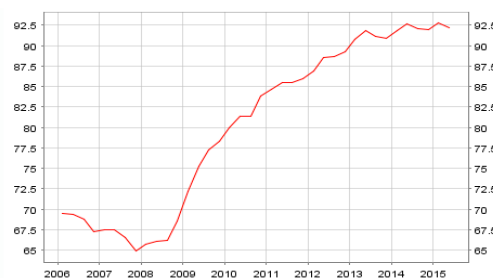


Figure 6. Total government debt in euro area (as a % of GDP).

Source: Eurostat.

⁵⁸ The ECB defines price stability as 'a year-on-year increase in the Harmonized Index of Consumer Prices (HICP) for the euro area of below 2%' (Delivorias 2015).

⁵⁹ Reho says: [a]t the height of the debt crisis some leaks to the press signaled the existence of reserved memoranda on a Euro break-up circulating in several European chancelleries, most notably the German one [...] the existence of such memoranda has never been confirmed but their inexistence would indeed deserve bigger headlines than their existence.

However, the issue of government debt can be controversial. Governments are usually interested in having a low debt⁶⁰, but the International Monetary Fund (Ostry, Gosh and Espinoza 2015) has recently maintained in a new paperwork that 'paying down the debt' might not be the most sensible approach, since the governments could take advantage of low interest rates to invest⁶¹.

With regards to unemployment, the following chart shows us an overall trend of increasing rates of unemployment since the last financial crisis:⁶²

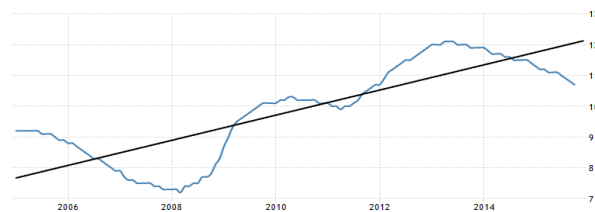


Figure 7. EU unemployment rate.
Source: Eurostat.

3.2.2. The Crisis in Spain

Spain's biggest problems are also the huge debt growth and the uncontrolled growth of unemployment (Carballo-Cruz 2011 and Sacht 2015)

Spain's public debt has already reached 100% of its GDP. The European Commission estimates that it will continue to increase during the next year. Yet, the main concern in Spain is unemployment. According to Eurostat, Spain is the second country in terms of unemployment in the EU (21,6 %), only surpassed by Greece (24,6%). In terms of youth⁶³ unemployment, Spanish rates are the highest in the EU (almost 50%), as shown in figure 8:

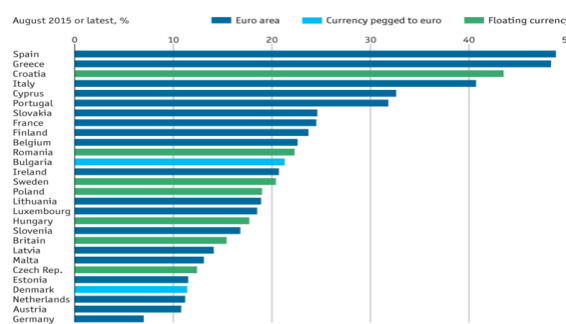


Figure 8. Youth unemployment rate in the EU sorted by countries.
Source: Eurostat.

⁶⁰ Basically, because they do not need to impose unpleasant taxes to citizens.

⁶¹ The limit of this debt would depend on an 'upper limit' calculated by Moody's, a rating agency, beyond which action would need to be taken to avoid default.

⁶² However, it is undeniable that these rates have been decreasing since 2013 and that the trend is now favorable to employment.

⁶³ The Eurostat adheres to the United Nations' definition of youth (15 to 24 years old).

4. REGULATORY RESPONSE TO THE CRISIS: BASEL III

4.1. MOTIVATION FOR BASEL III REFORMS

After several attempts to strengthen the Basel II framework⁶⁴, the Committee issued a new capital and liquidity reform package in 2010: *Basel III*.

The Basel III introductory part accepts that '[t]he Committee's comprehensive reform package [Basel III] addresses the lessons of the financial crisis' and that '[t]o address the market failures revealed by the crisis, the Committee is introducing a number of fundamentals reforms to the international regulatory framework' (BCBS 2010).

Walter (2011) affirmed that motivations for reforms were:

- (i) Damaging effects of banking crisis: '[a] destabilized banking system affects the provision of credit and liquidity to the broader economy and ultimately leads to the lost economic output'⁶⁵.
- (ii) Frequency of banking crisis: Laeven and Valencia (2012) talked about the largest wave of banking crisis ever seen since the Great Depression.
- (iii) Benefits of tighter regulation through Basel III exceeded the costs.

Barrel, Holland and Karin (2010), in an article entitled *Tighter Financial Regulation and its Impact on Global Growth*, expressed that stronger regulation would help. This view was common throughout the international community.

4.2. THE CURRENT INTERNATIONAL REGULATORY FRAMEWORK FOR BANKS UNDER BASEL III

4.2.1. The Liquidity Framework

The new liquidity framework is one of the most noticeable innovations that Basel III has introduced. Through Basel III, the Committee tried to strengthen its liquidity framework by developing two minimum standards for funding liquidity:

4.2.1.1. The Liquidity Coverage Ratio (LCR)

This standard aims to ensure that banks have an adequate stock of unencumbered⁶⁶ high quality liquid assets (HQLA), which consist of cash or

⁶⁴ In July 2009, the Committee introduced a package of measures to strengthen the 1996 rules governing trading book capital and to enhance the three pillars of the Basel II framework, called *Enhancements to the Basel II framework*.

⁶⁵ The OECD (2013) alludes to the pivotal role banks play in the financial system and notices that 'where lending is affected [because of a dysfunctional banking system] small and medium-sized businesses (SME's) find it hard to finance inventory and other investments.'

assets that can be converted into cash at little or no loss of value in private markets to meet liquidity needs for a 30 calendar day liquidity stress scenario.

$$\text{LCR} = \frac{\text{Stock of HQLA}^{67}}{\text{Total net cash outflows over the next 30 calendar days}^{68}} \geq 100\% \text{ not under stress}$$

4.2.1.2. The net stable funding ratio (NSFR)

The net stable funding ratio (NSFR) is one of the Basel Committee's key reforms to promote a more resilient banking sector (BCBS 2014a).

The NSFR is intended to address maturity mismatches over the entire balance sheet. The NSFR, which will become a minimum standard by January 2018, 'will require banks to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities' (BCBS 2014a). In accordance with the BCBS's statement, this ratio is designed to decrease the probability that disruptions to a bank's regular sources of funding will affect its liquidity position in a way that would increase the risk of collapse and potentially lead to deeper systemic stress. It has a medium/long-term approach and complements the LCR.

$$\text{NSFR} = \frac{\text{Available amount of stable funding}^{69}}{\text{Required amount of stable funding}^{70}} \geq 100\%$$

The International Monetary Fund has analyzed some cons of this ratio, as it could be 'potentially intrusive' and 'harm investment activity and economic growth' (Gobat, Yanase and Maloney 2014).

⁶⁶ An asset that is free and clear of any encumbrances such as creditor claims or liens.

⁶⁷ According to the BCBS (2013c), HQLA are comprised of Level 1 and Level 2 assets. On the one hand, Level 1 assets are typically of the highest quality and the most liquid, and there is no limit on the extent to which a bank can hold those assets to meet LCR. Level 1 assets include cash, central banks reserves, and certain marketable securities backed by sovereigns and central banks, among others. On the other hand, Level 2 assets are comprised of Level 2A and Level 2B assets. Level 2 assets may not in aggregate account for more than 40% of a bank's stock of HQLA. Level 2B assets may not account for more than 15% of a bank's total stock of HQLA.

⁶⁸ The total net cash outflows is the *total expected cash outflows*, minus the *total expected cash inflows*, in the specified stress scenario for the subsequent 30 days. *Total cash inflows* are subject to an aggregate cap of 75% of total expected cash outflows, thereby ensuring a minimum level of HQLA holding at all times (BCBS 2013c).

⁶⁹ The amount of available stable funding (ASF) is calculated by first assigning the carrying value of an institution's capital and liabilities to one of five categories. The amount assigned to each category is then multiplied by an ASF factor (100%, 95%, 90%, 50% or 0%), and the total ASF is the total sum of the weighted amounts.

⁷⁰ The amount of required stable funding (RSF) is calculated by first assigning the carrying value of an institution's assets to one of eight categories. The amount assigned to each category is then multiplied by a RSF factor (0%, 5%, 10%, 15%, 50%, 65%, 85% or 100%), and the total RSF is the sum of the weighted amounts added to the amount of OBS activity, multiplied by its associated RSF factor as well.

4.2.2. The Capital Framework (three pillars)

The capital framework corresponds to the already-existing structure of three pillars before Basel III was published, but there are still some innovations:

4.2.2.1. *Minimum capital requirements*

Under Basel III there has been 'a fundamental tightening of the definition of capital, with a strong focus on common equity' (Walter 2011).

Mahapatra (2012) summarized the new capital requirements. The minimum total capital ratio, made up of Tier 1 and Tier 2⁷¹ has remained 8%, but (1) Tier 1 Capital⁷² will be the predominant form of regulatory capital. Therefore, it will be minimum 75% of the total capital of 8%, i.e., 6%, as against 4% now, i.e. 50% of total capital and (2) common equity will be the predominant form of capital within Tier 1 capital, and it will be minimum 75% of the Tier 1 capital requirement of 6%, i.e., 4.5%, from the existing level of 2%.

4.2.2.2. *Leverage ratio*

Many banks entered the crisis with excessive leverage, which increases the probability of many bank failures (Walter 2011)⁷³. The objective of the leverage ratio is to serve as a back-stop to the risk-based measure (BCBS 2014b). A leverage ratio is a minimum amount of loss-adsorbing capital relative to all of a bank's assets and OBS exposures regardless of risk weight.

$$\text{Leverage ratio} = \frac{\text{Capital measure}}{\text{Exposure measure}}$$

The Basel Committee has proposed a minimum Tier 1 leverage ratio of 3% (33.33 times) to start with as a Pillar 2 measure (Pillar 1 requirement by 2018).

4.2.2.3. *Capital Conservation Buffer*

Basel III has introduced this ratio as a result of the lessons from the crisis that banks were distributing earnings even during the most problematic periods⁷⁴.

⁷¹ Tier 3 has been completely abolished (Mahapatra 2012).

⁷² Tier 1 Capital comprises *Common Equity Tier 1* and *Additional Tier 1*.

⁷³ Pre-crisis, the leverage of some of the internationally active banks was at a high level of about 50 times of the capital, even though such banks complied with capital adequacy requirement (Mahapatra 2012).

⁷⁴ Acharya et al. (2011) argue that dividend payouts during a crisis period are attributable to the short-term nature of bank funding. Since banks are generally funded by short-term debt, a dividend cut might cause a 'run' on rollover debt. The fear of runs leads banks to keep on paying dividends even when it would be cautious from them in the long run to cut dividends.

The capital conservation buffer will be 2.5% of the risk-weighted assets and will need to be built up outside period of stress, so this rate can be drawn down as losses are incurred during these periods of stress. In order to build up the assets, banks can (BCBS 2010) (1) reduce distribution of dividend, (2) share buyback⁷⁵ and staff bonus payments or (3) raise capital from the private sector.

4.2.2.4. Countercyclical capital buffer

The countercyclical capital buffer places restrictions on participation by banks in system-wide credit booms with the aim of reducing their losses in credit busts. 'This will vary between zero and 2.5% of risk weighted assets, depending on [national authorities] judgment as to the extent of the build up of system-wide risk' (BCBS 2010). Banks are required to meet this buffer with common equity Tier 1 capital or other fully loss-absorbing capital (Mahapatra 2010).

Calibration of the Capital Framework			
	Common Equity Tier 1	Tier 1 Capital	Total Capital
Minimum	4.5%	6%	8%
Conservation buffer	2.5%		
Minimum plus Conservation buffer	7%	8.5%	10.5%
Countercyclical buffer range	0-2.5%		

Figure 9. Annex 1 of *Basel III: A global regulatory framework for more resilient banks and banking systems*.

Source: BIS.

4.2.2.5. Enhancements to Pillar 2's supervisory review process and Pillar 3's market discipline, particularly for trading and securitization activities.

These enhancements complete the three-pillar architecture (see Annex I).

4.2.3. Micro-prudential vs. Macro-prudential

Walter underlines that the combination of micro-prudential and macro-prudential reforms is a very important aspect that differentiates Basel III.

According to the BCBS, micro-prudential or bank-level regulation helps 'raise the resilience of individual banking institutions to period of stress'. Conversely, macro-prudential addresses 'system wide risks that can build up across the banking sector as well as the pro-cyclical amplification of these risk over time'.

⁷⁵ *Share buyback* is the act of a publicly-trade company buying its own stock, sometimes at a price well above fair market value (*Farlex Financial Dictionary* definition).

In Walter's opinion, the micro-prudential elements of Basel III are: (1) the new definition of capital, (2) enhancing the risk coverage of capital (measures have been introduced to strengthen the capital requirements for counterparty credit exposures⁷⁶ arising from banks' OTC derivatives⁷⁷, repo and securities financing activities; in addition, banks will be subject to Credit Valuation Adjustment (CVA) capital charge⁷⁸), (3) the leverage ratio⁷⁹ and (4) the international liquidity framework.

With regards to macro-prudential regulation, Basel III includes: (1) the leverage ratio⁸⁰, (2) the capital conservation buffer, (3) the countercyclical buffer, (4) addressing pro-cyclicality of provisioning requirements, (5) addressing interconnectedness, (6) addressing the too-big-to-fail problem (it includes additional capital buckets for global systemic important banks (G-SIBs) and (7) addressing the reliance on external credit ratings.

4.3. TIMELY ADOPTION OF BASEL III STANDARDS

In January 2012, the GHOS endorsed a comprehensive process proposed by the Committee to monitor the timely adoption of Basel III standards and to assess the consistency and completeness of the adopted standards⁸¹. Figure 10 indicates Basel III phase-in arrangements starting in January 2013:

PHASES		2013	2014	2015	2016	2017	2018	2019	
CAPITAL	Leverage ratio	Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015					Migration to Pillar 1		
	Minimum Common Equity Capital Ratio	3.5%	4%		4.5%			4.5%	
	Capital Conservation Buffer				0.625%	1.25%	1.875%	2.5%	
	Minimum Common Equity plus Capital Conservation Buffer	3.5%	4%	4.5%	5.125%	5.75%	6.375%	7%	
	Minimum Tier 1 Capital	4.5%	5.5%		6%			6%	
	Minimum Total Capital					8%			8%
	Minimum Total Capital plus Conservation Buffer		8%		8.625%	9.25%	9.875%	10.5%	
LIQUIDITY	Liquidity Coverage Ratio			60%	70%	80%	90%	100%	
	Net Stable Funding Ratio						Introduce minimum standard		

Figure 10. Basel III phase-in arrangements.

Source: BIS web page.

⁷⁶ Segoviano and Singh (2008) define the counterparty risk as the 'cumulative loss to the financial system from a counterparty that fails to deliver on its OTC derivative obligation.

⁷⁷ An over-the-counter (OTC) derivative is a security that is not traded on an exchange market (*Farlex Financial Dictionary* definition).

⁷⁸ The CVA is a measure of diminution in the fair value of a derivative position due to deterioration in the creditworthiness of the counterparty (BCBS definition).

⁷⁹ The leverage ratio has both micro-prudential and macro-prudential elements. At the micro level, it serves the purpose of containing excessive risk, as a supplement to the risk-based capital ratio (Mahapatra 2012).

⁸⁰ At the macro-level, it has the objective of protecting against system-wide build up of leverage.

⁸¹ This process has resulted in the *Regulatory Consistency Assessment Programme* (RCAP).

5. EU IMPLEMENTATION OF BASEL III

5.1. RELATION BETWEEN THE BASEL ACCORDS AND THE EU

5.1.1. Sources of EU Member States banking regulation

Balin (2008) claimed that Brussels has enthusiastically adopted Basel norms in recent years, for the very presence of Basel rules has undoubtedly served to expand the role of EU law in coordinating banking law convergence in Europe⁸².

The implementation path of Basel III reforms within the European Union (EU) has been undertaken through the so-called *Fourth Capital Requirements Directive and Regulation* (CRD IV)⁸³.

Although not all the European banking legislation is Basel-based⁸⁴, a significant part of it has Basel roots. It goes without saying that Basel has been used to support and legitimate Brussels-level exercise of competency in harmonizing Member State bank regulation. Atik (2014) studied the several sources EU State Members have in terms of banking regulation:

- (i) EU regulation implementing Basel norms that are directly applicable, like that part of the CRD IV that takes the form of a regulation.
- (ii) EU regulation requiring Member States to undertake implementing national legislation, like the provisions of CRD IV that comprise a directive⁸⁵.
- (iii) Member State regulation in a residual discretionary zone, which may be substantially reduced due to the convergence towards a Eurozone banking union.

5.1.2. Frictions between the EU and Basel III

Europe has traditionally implemented Basel standards in a faithful way (Dierick et al. 2005). However, Atik analyzed some of the EU 'departures' from the Basel III undertakings, which proved that the implementation of the current Basel III was a break from the past. These 'departures' can be explained because Basel III incorporated concessions from the European community to the views and demands of the other states participating in the Basel process. This had both advantages and disadvantages for the EU:

⁸² Basel 'law' serves to guide national implementation, whose form is left to national discretion.

⁸³ Comprised of the Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (CRD IV) and the Regulation (EU) no. 575/2013 on prudential requirements for credit institutions and investment firms (CRR).

⁸⁴ A good example is the Second Banking Directive (SBD), a central piece of EU banking law.

⁸⁵ *Regulations* are addressed to all Member States and are directly applied in full. *Directives* are addressed to all Member States as well, but national authorities must draw up legislation in order to conform with the directive within a certain time frame.

- (i) The advantages were that Basel III reflected Europe's important role in hosting and supporting the global financial system.
- (ii) The disadvantages were that Basel III contained approaches, solutions and innovation without any European support, making the progress of implementing legislation problematic.

The CRD IV implementation process revealed three important debates:

- (i) As Véron (2012) wondered, should CRD IV be a source for a common minimum standard for EU member states or should it provide one-size-fits-all mandatory rules? The latter approach has largely been adopted, and this EU's implementation choice is called *Single Rulebook*.
- (ii) Does Basel III permit selective implementation? Europe appears to be exercising some selective practices, which Atik calls *Basel à la carte*. Europeans politicians argue that it is the 'spirit' of Basel III that needs to be implemented, not the Basel III accord in its entirety.
- (iii) Can CRD IV incorporate norms outside scope of Basel III, even when they were specifically rejected during the deliberation process? These norms would constitute what Atik calls *Basel III Plus*. An example of *Basel III Plus* could be the restrictions to bankers' remuneration.

5.2. FOURTH CAPITAL REQUIREMENTS DIRECTIVE AND REGULATION LEGISLATIVE PACKAGE

5.2.1. EU's implementation as a *Single Rulebook*

The core content of CRD IV was for the first time expressed in a regulation, thereby directly binding on the more than 8000 banks⁸⁶ operating within the EU and without requiring any national legislation being implemented by EU Member States. This eliminated the differences and gaps that were common to previous Capital Requirements Directives⁸⁷. In general, it is possible to affirm that there has been a re-orientation of EU banking law because, as a regulation, the EU capital requirements were uniform (a *Single Rulebook*)⁸⁸.

5.2.2. EU's implementation *à la carte*

For example, the issue of the treatment of *bancassurance*⁸⁹ was a major Basel III problem. This business model is quite common in Europe, especially in

⁸⁶ Not only internationally active banks.

⁸⁷ Which, in contrast, were always regulated through directives.

⁸⁸ However, CRD IV permits Member States to impose optional additional capital requirements.

⁸⁹ The *bancassurance* model means that a bank can provide insurance. It is somewhat controversial; critics contend that allowing banks to sell insurance gives them too much control over the financial services sector. As a result, some countries prohibit it.

France⁹⁰, but Europeans were unable to protect *bancassurance*'s interests in Basel. Therefore, Germany and other EU Member States joined France in eliminating the Basel III provision with respect to *bancassurance* in CRD IV.

CRD IV's capital adequacy rule included a reduction in the risk weights of loans to small and medium size enterprises (SMEs), which is a reflection of the influence of the European Parliament.

5.3. BASEL III IN THE SCENARIO OF THE EURO CRISIS

Because of the great influence Europe enjoyed during Basel III negotiations, 'one might have expected the passage of the CRD IV [...] to be largely a technical exercise', in Atik's words. However, the complex European legislative process coincided with the sovereign debt crisis⁹¹.

Mody and Sandri (2011) talked about a sovereign-bank loop taking place between the failing banks in Europe and the troubled countries charged with their supervision. From Schoenmaker's (2015) point of view, this 'vicious circle' contributed to the crisis. The sovereign-bank loop works two-way (Battistini, Pagano and Simonelli 2014). First, banks would carry large amounts of bonds of their own government on the balance sheet. So, a deterioration of a government's credit standing would automatically worsen the solvency of that country's banks. Second, a worsening of a country's banking system could worsen the government's budget because of a potential government-financed bailout⁹².

This sovereign-bank loop not only put the over-indebted countries at risk, but also the possibility of the euro to continue as a common currency. 'The euro should be now recognized as an experiment that failed' said Feldstein, American Economist and Professor of Economics at Harvard University, in 2011.

5.4. THE EUROPEAN BANKING UNION: PRESENT AND FUTURE

5.4.1. Grounds for a closer union

Academics such as Folkerts-Landau and Garber (1992) and Vives (2001) have argued for a long time that the increasing intensity of cross-border banking would need European banking supervision and resolution⁹³. However, it was

⁹⁰ France's *Société Générale* and *Crédit Agricole* are two prominent examples.

⁹¹ See page 18.

⁹² Schöler (2011) and Erce (2015) provide evidence of interdependence between government and bank credit risk during the crisis.

⁹³ Cross-border banking in Europe has been thoroughly studied in Allen, F; Beck, T; Carletti, E; Lane, PR; Schoenmaker, D & Wagner, W 2011, *Cross-Border Banking in Europe: Implications*

the intensifying euro sovereign crisis that suddenly moved Europe towards a Banking Union (Véron 2011; Pisani-Ferry et al. 2012).

Hence, the *rationales* for a Banking Union are two (Schoenmaker 2015):

- (i) A short-term reason: to break the sovereign-bank loop, whose argument relates to the euro area.

National central banks cannot issue money and buy government bonds without limit because the ECB is in charge (Micossi 2015). Therefore, it is necessary to move the responsibility for banking rescues to the euro-area level. Schoenmaker and Goodhart (2009) maintain that if *ex-post* rescues are organized at this level, *ex-ante* supervision should also be moved.

- (ii) A long-term reason: cross-border banking.

Schoenmaker (2011) demonstrates that the three objectives of financial stability, cross-border banking and national financial policies cannot be achieved at the same time, so ‘one has to give’. While the sovereign bank-loop is related to the euro area, cross-border banking affects the European Union as a whole. The Banking Union is a stuck compromise between these two goals, as participation is mandatory for euro-area Member States and optional for non-euro area Members (Hertig, Lee and McCahery 2010).

5.4.2. Overall governance framework for supervisory and resolution in the national setting

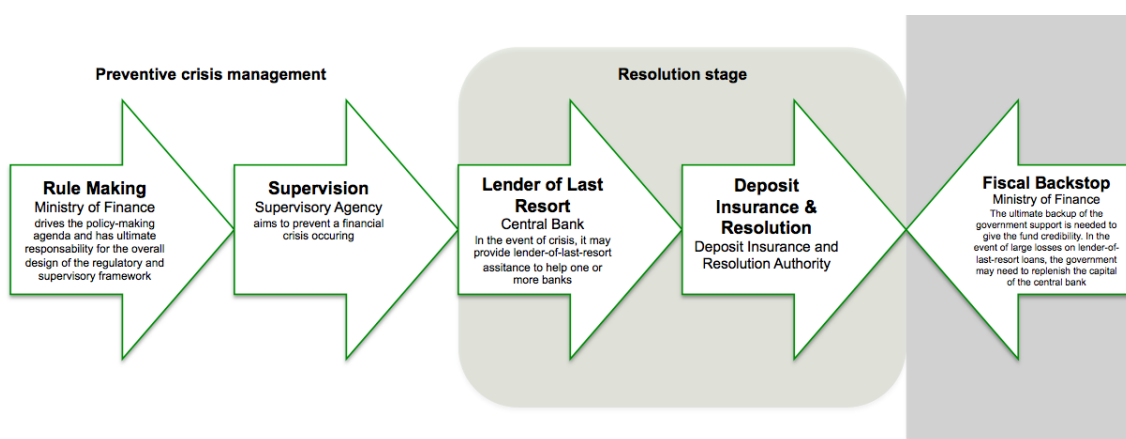


Figure 11. Governance framework with generic agencies in charge of each function in the national setting.

Source: Schoenmaker (2015)

5.4.3. Current governance framework in the Banking Union

This theoretical model could be applied to the European Banking Union and illustrated in a similar graphic:

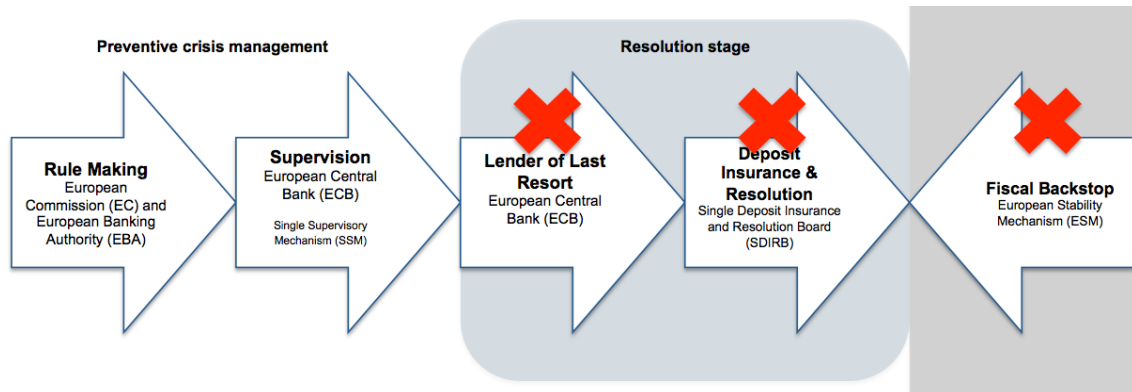


Figure 12. Governance framework with EU agencies in charge of each function in the European setting.

Source: Schoenmaker (2015)

As shown in figure 15, the project of the European Banking Union, started several years ago, is not finished yet. In order to complete it, there are a number of absences that need to be taken into consideration:

- (iii) At this time, the lender-of-last-resort responsibility still rests with the national central banks (NCBs), although NCBs need approval from the ECB to provide emergency liquidity assistance.
- (iv) Deposit Insurance still remains at the national level, so the SDIRB only comprises the Single Resolution Mechanism (SRM), with a Single Resolution Board (SRB) and a Single Resolution Fund (SRF)⁹⁴.
- (v) The ESM is exclusively aimed at indirect recapitalization. From Schoenmaker's perspective, the ESM should be enabled to provide direct bank recapitalization without first waiting for a country to go bankrupt.

The future of the scheme will depend on the ability to integrate the governance framework for banking supervision and crisis management in a single package (Schoenmaker 2015). Meanwhile, the *Single Rulebook*, which is the result of Basel III implementation, provides the foundation of the Banking Union, laying down capital requirements for banks, ensuring better protection for depositors, and regulating the prevention and management of bank failures, as stated on the official website (European Commission 2015).

⁹⁴ On 14 November 2015, the European Commission proposed a euro-area wide deposit insurance scheme (EDIS) for bank deposits.

CONCLUSIONS

In the light of the above, there are several conclusions to be drawn:

1. Banking regulation has always been instrumental in guaranteeing financial stability and efficiency, as well as protecting banks' depositors and consumers. Despite the risk of 'intrusive practices', it is usually well worth designing a regulatory program, followed by proper supervision. In this sense, the globalization process has made international banking regulation gain prominence among traditional forms of national regulation.
2. The global financial crisis partially originated from inadequate banking regulation. Contrary to what some authors have argued, Basel II was not an instigator but a potential prevention against the financial crisis. The Committee's regulatory decisions have no legal force, so most of the banks involved in the burst of the crisis had not adopted Basel II. Having said that, it is also true that Basel II, though extremely long and complex, proved to be insufficient to stop the financial disaster, which was caused by a wide variety of factors.
3. Basel III is a direct result of the most recent financial crisis, and it represents the efforts of the international community in order to prevent such a catastrophe from happening. Banks' illiquidity levels and others symptoms of instability during the years of the crisis have been addressed. The regulatory package assumes long-term implementation, but at the same time it is aware of the importance of assessing its effective adoption.
4. The EU implementation of Basel III seems to be opportunistic, since the corresponding legislative package does not entirely match the international commitment. This decision can be beneficial for the European banking system because it allowed the European parliament to adapt Basel III norms to the peculiarities of the European economy, but in the long run it will turn out to be a wrong choice, as levels of trustworthiness of Europe in international dealings will probably decline, and therefore its legitimacy to defend own interests.
5. Basel III has led to the European Banking Union, which is undoubtedly an ambitious project, but which needs to be finished. Political opinions differ in relation to this higher level of European integration, under no circumstances should this process be stuck in the middle of nowhere.

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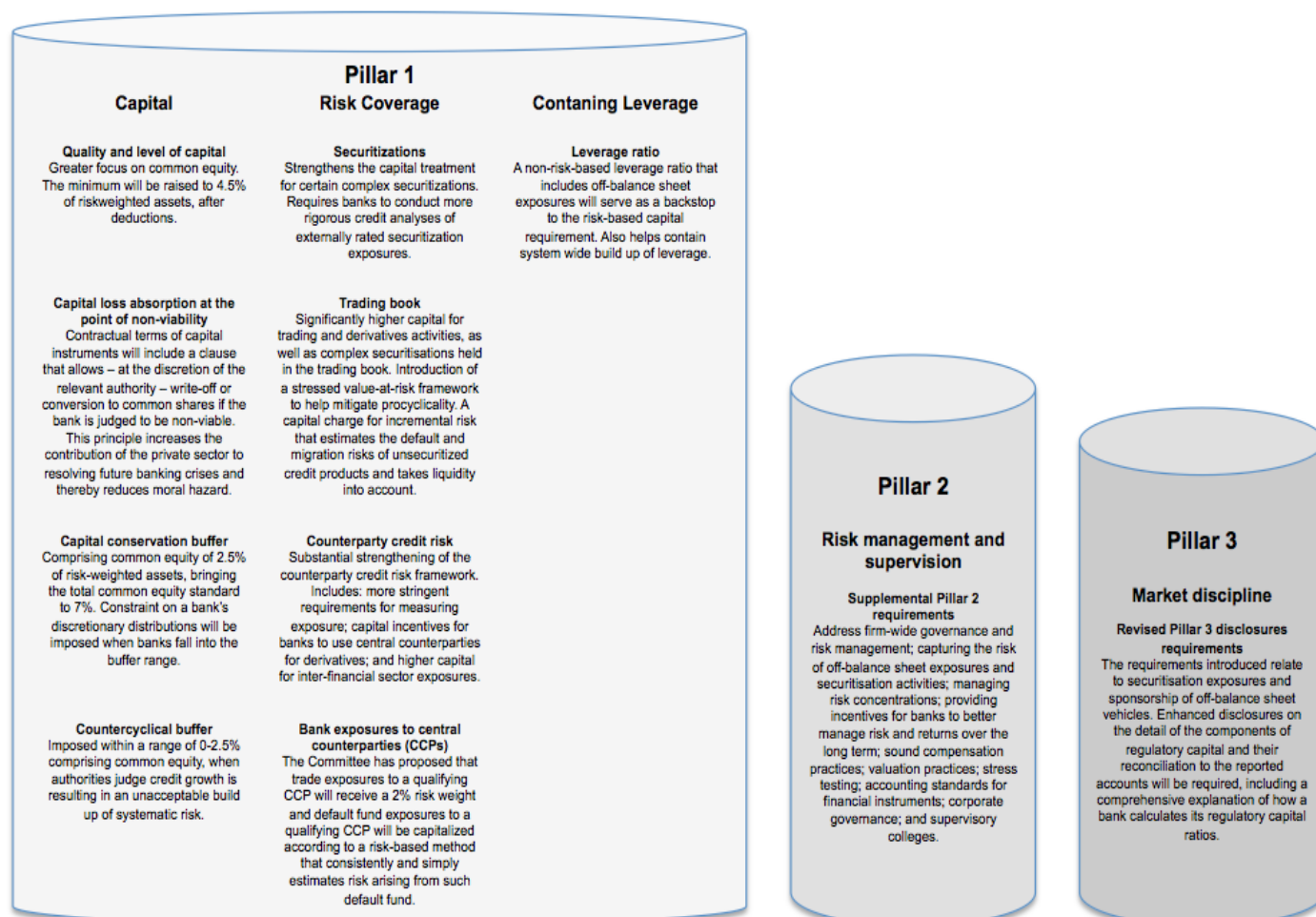
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ANNEX I: Outline of Basel III Accord (without the liquidity framework)



Source: BIS web page.