Reviewing the current practice in implementing Basel III

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Abstract

Due to a lack of capital and liquidity in banks and poor (portfolio) management, many banks failed causing a chain reaction throughout the world toward the financial crisis. To solve this problem, the Basel Committee on Banking Supervision delivered the final Basel III framework in 2010. In essence, Basel III aims to increase the quality and quantity of capital that banks are holding and requires banks to be able to sustain stress scenarios in the event of future financial crises. However, these new requirements are also affecting the costs and availability of lending/credit. This affects entrepreneurship and innovation, where commercial banks are the main suppliers of working capital for SMEs. Banks are, under the Basel III requirements, limited in their recapitalisation, the type of investments they can do, and products they can offer, limiting their flexibility in earning profits. In implementing Basel III, regulators aim at limiting the risks of system-wide financial distress, that is systemic risk. However, the literature stressed that there is a lack or gap in the definition of systemic risk as there is currently no single definition. Therefore, this research paper attempts to provide a proposal of a systemic risk definition through the review of the current definition. It will further suggest the creation of an international independent supervisory body, an international college of supervisors.

1. Introduction

The 2007-2009 financial crisis, labelled by the IMF as the 'worst crisis since the Great Depression'[1], was caused by financial institution defaults, such as Lehman Brothers and CIT Group. Such defaults resulted from deficiencies in capital adequacy, liquidity buffers and poor risk management. In 2010, the Basel Committee on Banking Supervision (hereinafter the 'BCBS') proposed Basel III, a non-obligatory regulatory framework, to replace the 2007 Basel II since it did not address the risks and other problems properly. This new regulatory framework will be implemented by financial institutions, such as commercial banks, forcing upon them new capital requirements to address the absence and insufficiency of capital reserves and liquidity. This comes as the BCBS found that banks did not hold sufficient capital to cover their liabilities and assets, leading to their defaults, forcing states to deliver bailout packages from the tax payers' money, since 'too-big-to-fail' firms threatened the real economy and general public. The motivation behind strengthening the capital requirements is therefore to ensure that financial institutions such as commercial banks and those systemically significant can sustain a future financial shock based on stress variables.

The new requirements will inevitably lead to an increase in commercial banking costs since commercial banks will have to adapt, modifying their structures and reducing their ability to lend, as they try to avoid risky assets, which will affect borrowers. Furthermore, according to economic theory, an increase in cost will be transferred to the clients and end consumers of a product; however, since in corporate lending market prices are sensitive, banks might not be able to transfer the increase in costs to the borrowers, hence reducing profitability.[2] In this view, many fear that a reduction in profitability of certain products and instruments will lead to less capital being allocated to these, affecting credit and lending availability. The problem then is that this will create a disadvantage to small business owners (i.e. SMEs), acting contrary to the general goal of promoting entrepreneurship, and contrary to the inner goal of Basel III (i.e. Basel III attempts to strengthen the financial institutions to allow more credit). In fact, the European Commission

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[1] Stewart, H., 'We are in the worst financial crisis since Depression, says IMF', The Guardian, Thursday 10 April 2008.

[2] McKinsey and Company, Basel III and European banking : Its impact, how banks might respond, and the challenges of implementation', November 2010.

assessed that nearly 80% of European SMEs have their external finance supplied by bank loans.[3]

Why is lending to SMEs, among others, important? While larger companies can easily have access to credit, as they represent a lower risk for financial institutions, SMEs represent higher risks and might have insufficient collateral to secure a loan or credit. Entrepreneurship, as presented in the literature, is an important factor for the economy, and a lack of entrepreneurship can also lead to financial crises. The OECD-Eurostat Entrepreneurship Indicators Programme (EIP) defines entrepreneurship as 'the phenomenon associated with entrepreneurial activity, which is the enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.'[4] It has been acknowledged that entrepreneurship manifests itself through the economy by, for example, creating financial wealth, increasing employment, tackling inequalities or even tackling environmental issues.[5] In order to be able to start businesses or grow them, entrepreneurs need working capital, and commercial banks are known to be the most widely used financial intermediaries by the 'average individual'.[6] They are the ones to channel the funds between those who have a surplus of funds (depositors) and those who need more capital than they have to finance certain activities such as buying a house, a car, and starting a business. Since both entrepreneurship and innovation are important for the economy to create value, employment, enhance competition in the markets, to benefit consumers, it is of primary importance to maintain commercial access to capital and the liquidity of banks to promote not only entrepreneurial activity, but also to keep it at a low and efficient cost.

As banks serve as intermediaries between those who need money (borrowers) and those who have an excess of it (depositors), they typically try to make their profits from lending. Such instruments will have certain terms attached to them, i.e. maturity date, interest rate, premium, etc. These terms are usually linked to the economic situation of the

[3] European Commission, 'Impact Assessment: Proposal for a Regulation of the European Parliament and of the Council on European Venture Capital Funds', SEC(2011)1515.
[4] OECD, Entrepreneurship at a Glance 2011, p.5
[5] Idem.
[6] Mishkin, F.S., 'The Economics of Money, Banking and Financial Markets', 9th Ed., Global Edition, Columbia University, Pearson, 2010, p.7

bank and of the country in which it operates (e.g. interest rates). Now, the instruments and terms that banks can offer are limited by Basel III. This, it is expected, will lead banks to find ways to cut costs (usually through the elimination of costly or unfavourable instruments) or to try to circumvent the rules altogether (which will be difficult and costly). Since the goal of Basel III is to address the (reckless) behaviour of financial institutions, it makes sense to address the missing elements of the current regulatory framework. It is clear that an increase in cost will be problematic for the promotion of entrepreneurship and innovation within a country, the question that needs to be tackled is how commercial banks, especially multinational banks, can mitigate the increase in costs so as to neutralise the adverse impact of Basel III. Most member countries of the Basel Committee will be implementing to a certain extent the new capital requirements in their banking systems at different paces. Since banks will need to abide by these new requirements, their costs will be increasing through their restructuration, affecting their capital costs, liquidity costs and long-term funding costs.[7]

National policies will also play a crucial role, partly because governments regulate the financial system in order to increase the information available to investors and to ensure the soundness of the financial system itself.[8] Other national organisations are responsible in the conduct of monetary policy and the most important one is the central bank, as it is responsible for the national monetary policy through the management of money and interest rates. In creating national legislation toward monetary policy or the banking industry, policy-makers need to strike the right balance, without undermining efficiency or stifling innovation, usually through a microprudential or macroprudential approach. The behaviour regulators will try to limit is reckless behaviour, through the creation of a sounder risk management system. However, as national authorities attempt to implement Basel III in their national legislation, two important problems remain: there is a lack of systemic risk definition and there is no efficient supervisory process in the banking industry. Systemic risk should be defined properly in order to create the appropriate system to manage such risks. This paper will attempt to provide a proposal for these two problems.

[7] McKinsey and Company, Basel III and European banking : Its impact, how banks might respond, and the challenges of implementation', November 2010.
[8] Mishkin, F.S., 'The Economics of Money, Banking and Financial Markets', 9th Ed., Global Edition, Columbia University, Pearson, 2010, p.46

This research will start from the work that has been done on the implementation of Basel III and its consequences by agencies such as Moody's and Standard and Poor's, the BIS, the European Commission, and the United States Congress. The first section will present the challenges that financial institutions will be facing in implementing the new regulatory capital requirements. It will address the implementation within banks and how this is expected to occur. While there are several methods that could be directly undertaken by banks, this paper aims at providing regulators with suggestions that could possibly reduce the burden for banks directly from the top. The third section will look at how jurisdictions and banks will be implementing it by looking at their options and opportunities. The final section will propose a definition of systemic risk and an international supervisory body, different from that of the BIS or World Bank.

2. Challenges imposed by Basel III upon financial institutions

In order to be able to propose a way in which regulators can create tools to mitigate some of the challenges that banks will be facing, this chapter will present the main challenges and costs that are being imposed upon banks. It will further consider some problems that are usually left out of the literature or barely considered, as they are likely to become important in the future. The banking industry is composed of three main business segments: retail, corporate, and investment banking. In all three, Basel III will have an impact on capital costs, liquidity costs and long-term funding costs (through the regulatory changes). Costs that are often left out of researches, but that should be considered nonetheless, are for example transaction costs (i.e. costs from dealing with multiple regulators) and agency costs (i.e. from the increasing burden on shareholders).

Since banks are profit seekers, they will attempt to rearrange their financing structure and business strategies in a way that will earn as much profit as possible and be as cost efficient as possible. Understanding the changes to bank capital structures and manipulation of instruments is important since banks play a major role in channelling funds to borrowers, and regulators want to avoid reckless behaviour and excessive leverage. This is why the G-20 leaders proposed some reforms after the 2007-2009 financial crisis, including some key elements to respond to the banking problems, such as: enhanced transparency and disclosure; higher prudential and liquidity standards; a new system of macro prudential oversight; credible and effective resolution regimes for large financial institutions; a broader scope for regulation and oversight spanning all systemically important financial institutions, markets and instruments; stronger infrastructure for key financial markets; and measures to promote adherence to international prudential regulatory and supervisory standards.[9]

First, a brief overview of the past two capital requirements frameworks will give a good representation of the state of bank regulation. Basel II, which was adopted in 2007, assigned capital for three types of risks: credit risk, market risk, and operational risk. Now, Basel III focuses on the introduction of a stressed value-at-risk requirement, the liability of financial institutions through a new definition of capital and new liquidity standards, the management of the trading book (market discipline), and the management of risk. Actually, Basel III is divided into three pillars. The first pillar covers capital, risk coverage and leverage, the redefinition of banking instruments, as well as the methodology used to calculate the minimum capital requirements for commercial banks. The second pillar pertains to risk management and supervision. Finally the third pillar oversees market discipline. In the end, all of Basel III requirements aim at the survival of financial institutions during stress periods and it is meant to measure with more sensitivity and accuracy the risks of lending. As is already established, these requirements come as banks could not cover the liabilities that appeared on their balance sheets due to a lack of capital and insufficient liquidity. However, these pillars, as solid as they seem, do not address some important elements that, if properly addressed, could reduce the costs imposed on banks.

2.1. The management of risk and finance

The financial crisis made it clear that banks needs to strengthen their risk coverage. Indeed, the 'too-big-to-fail' firms took upon themselves too much risk that they could not cover; financial institutions could not even cover their insurance claims. The BCBS further argued that a core problem banks faced in the crisis was the poorly managed portfolios and incompetent credit risk management. Therefore, the BCBS proposes some ways to improve risk management and governance, transparency and disclosures through mechanisms such as more shareholder rights, modifying banks' capital structures, reviewing the way in which

[9] Macklem, T., 'Global financial reform: maintaining the momentum', G20 Workshop, 2010.

trading books and securitisation exposures are being managed, and the amount of capital needed to cover those risks. The risk coverage of financial institutions will absolutely need to capture the on and off-balance sheet risks and the derivative related exposures, as these were key destabilisers in the crisis.[10] However, properly covering risk cannot be done without a proper definition of systemic risk.

Concept of risk

The concept of risk is at the core of the literature on the Basel III as the framework revolves around limiting risk taking activities by financial institutions, especially multinational banks. According to the literature, Basel II did not capture all risks, as total risk was divided into two categories non-business related (i.e. credit risk, market risk and operational risk) and business related (i.e. risk from strategic decisions and reputation risk), the proper management of risk has become a policy goal of Basel III.[11] Basel III attempts to address risks such as liquidity risk, credit risk, market risk, and operational risk. This is done on the basis of three pillars. Pillar 1 is for a standardisation of the risk calculation with increased capital charges, cash value added, capital structure and buffers, liquidity coverage and non-sufficient funds ratios, and a new leverage ratio.[12] The second pillar is the supervisory review process where Basel III enhances firm wide stress testing, where the required data to be included in stress testing increases, through reverse stress testing and contingency planning.[13] Finally, the third pillar is on public disclosure with Basel III enhancing the disclosures for capital, requiring more frequent reporting and new disclosure requirements for securitisation.[14]

Prior to the financial crisis, the problem laid in the poor management of risk, partly because the definition of (systemic) risk is not harmonised throughout the different sectors or jurisdictions. In this regard, Borio et al. propose that a possible policy response would be for national authorities to promote a common understanding of risks in order to avoid future misperception of risks, through formulating a single definition of systemic risk. The

[10] Bank for International Settlements, 'VII. Macroprudential policy and addressing procyclicality', 2010.
[11] Hull, J.C., 'Risk Management and Financial Institutions', International Edition, 2nd Edition, Pearson, 2010.
[12] FRSGlobal, 'Basel III Solution: The opportunity to get it right', Wolters Kluwer.
[13] Idem.
[14] Idem.

definition of systemic risk is crucial as it were especially the 'too-big-to-fail' firms that were problematic and that had an adverse effect on smaller banks. However, before attempting to formulate such a definition, the current definitions and concepts underlying risk will be presented.

According to the literature, there are three most frequently used definitions or concepts of risk. In its broadest form, risk is the uncertainty related to an asset, for example the uncertainty whether a long-term loan will be repaid. It is the 'threat to an organization that reduces the likelihood that the organization will achieve one or more of its objectives'.[15] This limits risks to the negative aspects of possible events that can occur and so the International Standards Organisation states that 'risk is the effect of uncertainty on objectives'.[16] On the one hand, there is a macro definition which argues that it is a 'big shock or macroshock that produces nearly simultaneous, large, adverse effects on most or all of the domestic economy or system'.[17] This definition also includes the fact that such an event would have an impact on the entire banking, financial or economic system, rather than on an individual or a few institutions.[18] Frederic Mishkin defines it as the 'likelihood of a sudden, usually unexpected, event that disrupts information in financial markets, making them unable to effectively channel funds to those parties with the most productive investment opportunities'.

Another concept focuses more on the micro level of risk, and the transmission of shock and potential spill over from one organisation to another. In this definition of risk, systemic risk is the risk of a chain reaction of falling interconnected dominos. [19] This micro level concept includes the risk of shocks or contagion, where small shocks that initially affect one or few institutions, or a sector of the economy, will spread by contagion to the rest of the financial sector leading to infecting the larger economy through a transmission chain.[20] This is founded on the claim that sectors of the banking industry are interconnected and so

[15] Van Daelen, M., and van der Elst, C., 'Risk Management and Corporate Governance: Interconnections in Law, Accounting and Tax', Edward Elgar Publishing.
[16] Idem.
[17] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to it?', The Independent Review, v. VII, n.3, Winter 2003, ISSN 1086-1653, 2003, pp.371-391.
[18] Idem.
[19] Idem.
[20] Allen, F., Gale, D., 'An Introduction to Financial Crises', The International Library of Critical Writings in Economics, Edward Elgar, August 14 2007.

they affect one another, since for example as one sector suffers this can mean a loss for another sector because of the fall in value.[21] According to some literature, the trend in lending behaviour of multinational bank affiliates is affected by shareholder-affiliate manager delegation and precautionary motives, which leads to either contagion (i.e. loan volume will follow that of the parent bank country shock) or performance-based reallocation of funds (i.e. substitution), all depending on the liquidity of the parent bank and the level of manager delegation in the affiliate firm.[22]

The BIS adopts a micro level type of definition of risk: 'the risk that the failure of a participant to meet its contractual obligations may in turn cause other participants to default with a chain reaction leading to broader financial difficulties'.[23] Individual institutions are pressured to measure as accurately as possible the changing risky nature of their borrowers, over the period of time that the loan is being admitted, whereas in the system wide setting the concept of risk extends to the correlation among individual firms arising from their exposure to common factors (i.e. the financial/business cycle of the economy as a whole).[24] Borio et al. establish in their paper that financial system problems usually do not arise from contagion but rather from individual firms underestimating their exposure to a common factor, as we will see later.

Systemic risk can be caused either by rational/information-based (directly or indirectly) or irrational/noninformation-based, random or 'pure'.[25] Rationally caused systemic risk assumes that investors (depositors) can differentiate among solvent and insolvent parties on the basis of their fundamentals, whereas randomly caused systemic risk is based on the actions of uninformed agents and it does not differentiate the parties involved, which will affect all participants, and so systemic risk is more likely to be broader

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[21] Allen, F., Gale, D., 'An Introduction to Financial Crises', The International Library of Critical Writings in Economics, Edward Elgar, August 14 2007.
[22] Derviz, A., Podpiera, J., 'Lending Behavior of Multinational Bank Affiliates', Risk Governance & Control: Financial Markets and Institutions, Virtus Enter Press,Vol. 1, Issue 1, Winter 2011, p.19-36.
[23] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to it?', The Independent Review, v. VII, n.3, Winter 2003, ISSN 1086-1653, 2003, pp.371-391.
[24] Borio, C., 'Implementing a macroprudential framework: Blending boldness and realism', Bank for International Settlements, July 22nd 2010.
[25] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to it?', The Independent Review, v. VII, n.3, Winter 2003, ISSN 1086-1653, 2003, pp.371-391.

and more difficult to contain.[26] There is also what Kaufman refers to as direct knock-on contagion, which knocks over both solvent and insolvent banks. A common-shock contagion will immediately affect solvent banks during its sorting-out period, and it is up to the investors and depositors over time to sort out the solvent banks from the insolvent ones.[27] However, regarding solvent and insolvent firms, the literature argues that there is a gap in defining what firms are solvent or insolvent, and this is especially problematic in transnational insolvency matters. Rational and irrational contagion depends, according to Kaufman, on the time-varying aspect of systemic risk. These concepts of systemic risk require that parties be connected directly or indirectly, usually through interbank deposits, loans, payment-system clearings (i.e. directly) and through servicing the same or similar deposit and loan markets (i.e. indirectly).[28] These connections form the basis of the common factors to which financial institutions are subject.

Therefore, it is important to determine, through their connections, the common factors that consist of threats at the international level and that hinder the activities of multinational banks. A crucial element of risk is the uncertainty it poses. For example, multinational banks face the ambiguity of uncertainty, as it is incalculable, and in compliance with disclosure requirements must report on the material uncertainties they face – firms must attempt to identify, quantify, measure and eventually remedy such risks. One of the most difficult aspects of systemic risk is its time-varying nature. Time-variation makes firms vulnerable to changes in, for example, government, policies (e.g. interest rates), and currency (e.g. exchange rates). All scholars stress the importance of this aspect; however, even with Basel III, there still is no measure that can accurately measure this. It is partly due to the business cycles in which banks find themselves, and it is why Basel III proposes certain measures that attempt to influence business cycles (i.e. procyclical and countercyclical) as they are believed to be linked to financial crises (e.g. from bank runs). The instability in the financial/business cycle is the more costly in terms of deadweight output. Next to that, scholars have demonstrated in analysing cases that prior to the crisis, the levels of risk taking had not been properly identified by board of directors and that

[26] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to it?', The Independent Review, v. VII, n.3, Winter 2003, ISSN 1086-1653, 2003, pp.371-391.
[27] Idem.
[28] Idem.

many risks, especially in the financial sector itself, had been underestimated.[29]As we will see in a later section, this came from ineffective reporting, from inefficient management and preventive actions, or poor assessment of the actions that needed to be taken. Risks related to cross-border trading and transactions, those that could adversely affect bank operations, and through contagion affect other firms or sectors of the economy. For example, transaction costs (i.e. time and money spent in carrying out the financial transactions) can be problematic, also termed Herstatt risk to describe cross-border settlement risk for banks.[30]

Properly capturing risks posed by systemic banks has been the central focus of national regulators for the past months. For example, one of the questions as we will see in a later section, is whether supervision should extend to the non-bank sector, as they might also be systemically relevant. In April 2012, U.S. regulators have finally approved a rule/criterion that would identify the non-bank financial firms that would require scrutiny from the Federal Reserve.[31]The purpose was to create, through Dodd-Frank, a proper mechanism that would extend transparency oversight and prudential supervision to the shadow banking system, which can also be an important source of credit and a potentially important source of risk in times of crisis.[32] The definition is largely reliant on certain threshold that it has set regarding leverage, liabilities on derivatives contracts, gross notional credit-default swaps outstanding, ratio of short-term debt to assets. The type of risks that financial firms represent is largely based upon the type of operations and credit activities they enter into. In the face of risk, deposit taking institutions are covered by insurance, which according to the literature eliminates some of the market discipline that aims at limiting the risk taking activities of financial institutions. The literature argues that the excessive reliance on such insurances and government safety-net measures has been

[29] Van der Elst, C., Vermulen, E., 'Regulatory Supply and Market Demand of Risk Management: Match or Clash?', Risk Governance & Control: Financial markets & institutions, Vol. 1, Issue 1, Winter 2011.
[30] Mishkin, F.S., 'The Economics of Money, Banking and Financial Markets', 9th Ed., Global Edition, Columbia University, Pearson, 2010. And Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?', The Independent Review, v. VII, n. 3, Winter 2003, ISSN 1086-1653, 2003, pp. 371-391.
[31] Hopkins, C., 'U.S. Regulators Approve Rule to DesignateNon-Banks Systemic', BloombergBusinessWeek, April 03, 2012.
[32] Idem.

costly and is sometimes more counterproductive than helpful.[33] Indeed, in most countries banks do not need to protect themselves against a 'one n a hundred years' shock because they will be covered by their governments' deposit insurances, de jure or de facto, or by other form of guarantee arrangements that actually free banks from the pressure of depositors (i.e. through bank runs).[34]

In conceptualising systemic risk, risk factors as mentioned in Regulation S-K (503(c)) in the United States should be developed. 503 (c) requires management to report on the most 'significant factors that make the offering speculative or risky' and it must be adequately described. As we will see in the section on disclosure, Basel III and Dodd-Frank are requiring a more accurate and expansive reporting standard. The flexibility of what may be included in a firm's report on risk is quite broad, as may be noticed from the wording used (e.g. 503 (c) 'the risk factors may include'), even though it is subject to the materiality principle, still leaves some discretion for banks to determine what risk is to be reported. Such an open-ended requirement might be the problem with systemic risk and the lack of proper management. According to this 503(c) risk factors include among other things the lack of operating history, the lack of profitable operations in recent periods, the financial position of the firm, the business or proposed business, the lack of a market for securities.[35] In the European Union, there is the European Transparency Directive which requires of firms to include in their report 'a description of the principle risks and uncertainties that it faces'.[36] Firms are therefore obliged to install a system that will identify the risks and uncertainties that they might face, and these must include firm-specific or securities specific risks.[37] Yet again, regulators fail to properly define the systemic risks that should be captured by bank management, which can be problematic once a penalty system is put in place for banks that do not comply.

Clearly, there is a need to create a common understanding and common perception of risks across the globe, at a macro level, since financial systems are interconnected and

[33] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?', The Independent Review, v. VII, n. 3, Winter 2003, ISSN 1086-1653, 2003, pp. 371-391.
[34] Idem.
[35] Regulation S-K, Section 503 (c), http://taft.law.uc.edu/CCL/regS-K/SK503.html
[36] Van der Elst, C., Vermulen, E., 'Regulatory Supply and Market Demand of Risk Management: Match or Clash?', Risk Governance & Control: Financial markets & institutions, Vol. 1, Issue 1, Winter 2011.
[37] Idem.

can adversely affect one another. As scholars argue, risk governance requirements need to strike the balance for their decision making process while still fostering entrepreneurship.[38] However, the question will then be whether defining risk should be done as a rule or guideline. This will be addressed in a later section. Interconnection between firms and jurisdictions, as we see in the European Union, is a policy goal addressed at the EU level rather than in each member state. If we consider the different jurisdictions being regulated at the European level, for regulators and supervisors to properly assess the regulatory needs of the financial system, a proper definition of systemic risk is necessary, which would include the factors and elements that need to be addressed by bank management.

Financial restructuring

Since 'the strategic aim of a business is to earn a return on capital, and if in any particular case the return in the long run is not satisfactory, then the deficiency should be corrected or the activity abandoned for a more favourable one,'[39] banks are expected to behave or adapt in a way that will increase profits, ROE, etc. This means that considering the costs of some of the products or business that banks offer, they will allocate their funds to the most profitable ones, possibly cutting some of their products that could be most beneficial to consumers (i.e. that would benefit entrepreneurship and innovation) but not to banks. In fact, it is expected that banks will be restructuring their capital and business structures to get a more favorable treatment under the new requirements. For example, the literature expects that profits and losses, as well as limited revenue will probably be restructured, such as balance sheet. In view of restructuring, the new calculation method of credit risk needs to capture the various risks that banks are causing. Banks, depending on their characteristics, pose different risk on the real economy.

As risks were not properly captured, due to a lack of risk definition and proper risk management system, banks will be tempted to restructure their capital and management structure around the new capital definition. Such restructurings might affect the type of risks that banks are willing to take, which affects the availability of credit. Multiple studies

[38] Van der Elst, C., Vermeulen, E., 'Regulatory supply and demand of risk management: match or clash', Risk Governance & Control: Financial Markets & Institutions, Volume 1, Issue 1, pp.100-110.
[39] Grant, R.M., 'Contemporary Strategy Analysis', United Kingdom: Blackwell Publishing Ltd., 2008.

on the impact of Basel III on banks conclude that banks will be tempted to exit their least profitable and attractive businesses. Such businesses are typically those that are price sensitive to the point that they are simply not attractive to maintain since they do not generate enough profits. The research[40] used a dataset of bank- and time-varying capital requirements for a large sample of UK banks prior to the financial crisis and examined the role played by capital requirement in determining a bank's internal target capital ratios, and how banks manage their assets (including loans) and capital in their efforts to move towards capital targets brought about by a change in regulatory minimums or a shock to actual capital ratios.[41]

Banks structure their capital and management around the type of operations they conduct and the funds they raise. One of the first sources of funds for banks is the non-transaction deposits, which is the money deposited at the bank. These sources of funds are liabilities, which are the focus of Basel III. The investments that banks make with these funds are considered assets (which were the focus of Basel II). Banks can also obtain funds through borrowings, by issuing securities and by issuing loans/bonds. These assets give the possibility for banks to charge a certain interest rate depending on the riskiness of the investment. These are income earning assets. The bank's capital (total assets – total liabilities) can be raised by selling new equity (stocks) or from incorporating retained earnings. However, Basel III will be changing the nature of equity and retained earnings. The trading revenues, which make up a significant part of the total operating income of banks, fell during the financial crisis which led to markdowns on the structure of finance portfolios.[42] The main type of financing could shift, as for example burden of default moves from the taxpayers and the public purse to banks' shareholders. Indeed, as we will see later, during the financial crisis taxpayers' money and the public purse were used to bailout banks, the BCBS has created the NVCC rule, which requires that all non-common capital instruments must contain features that require these instruments to be converted into

[40] King, M.R., 'Mapping capital and liquidity requirements to bank lending spreads', BIS Working Paper, No. 324, November 2010.
[41] Francis, W.B., Osborne, M., 'Capital requirements and bank behaviour in the UK: Are there lessons for international capital standards?', Elsevier B.V., Journal of Banking & Finance, 2011.
[42] Ferrarini, G., Chiodini, F., 'Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework', Law Working Paper No.158/20 10, May 2010.

common equity if the institution becomes non-viable.[43] In the United States, Dodd-Frank has created a stronger consumer support system which aims at protecting consumers and tax payers against defaults.

Bank's operations give rise to many risks, such as credit risk and operational risk.[44] Central Bank regulators require banks to hold a certain amount of capital (i.e. capital buffer), sufficient enough to cover their unexpected risks. An example is the failure of Washington Mutual Inc., considered the largest bank failure in American history. Washington Mutual Inc. focused on low-income borrowers and so they accumulated assets which were of course risky, because of the long-term maturity date and the uncertainty of return, and therefore in the downturn of the housing market in 2007 (i.e. housing bubble), they suffered significant losses.[45] The bank's executives were accused by the Federal Deposit Insurance Corporation of reckless lending before the crisis, and this was followed by an 'escalating public pressure to hold bankers accountable for actions leading up to the financial crisis'.[46] As this paper will study later in the new shareholder rights, this issue of banker accountability is at the core of the Basel III goals in addressing reckless bank behavior. A problem here, as discussed in the literature, is the deposit insurances that cover financial firms. These deposit insurances, although beneficial for depositors and some other stakeholders, remove the market discipline that should actually serve as stopper for excessive risk-taking.

The restructuring of balance sheets usually revolves around the balance between debt and equity. Banks typically restructure in a way that will provide revenue for their investors/shareholders. This is usually done by cutting their assets (i.e. cutting loans and other such assets), so as to avoid raising equity, which could dilute the shareholder/investor positions in the bank. This also reduces the share price by the increase in the supply of such banks' shares. Short-term loans are more profitable to banks, however if all banks cut the same risky assets, then the economy as a whole will suffer and the benefits of Basel III are lost. Some fear that such erosion of the balance sheet, resulting from restructuring, could lead to a reduction of asset quality over time. This is mostly because through their

[43] Davis LLP, 'The Implementation of the New Non-Viability Contingent Capital Requirements of the Basel III Rules', Davis LLP Banking & Financial Services Bulletin, May 22nd 2012.
[44] Hull, J.C., 'Risk Management and Financial Institutions', International Edition, 2nd Edition, Pearson, 2010, p.34.
[45] The New York Times, 'Washington Mutual Inc.', Business Day, December 14 2011.
[46] Idem.

restructuring, banks will be tempted to leave out the risky assets (i.e. investments, loans, mortgages, etc.) and this will influence the balance sheet. To encourage banks to raise equity rather than cut on their assets, some jurisdictions offer tax deductible equity and interest (i.e. it serves as a key driver for issuance).[47] The literature so far stressed the importance of liquidity in the balance sheets, as this was proven to be the main problem for small domestic banks (i.e. those that had a weak structural liquidity), whereas the larger banks (i.e. those operating across borders) were more prone to solvency risk related to excessive leverage (i.e. excessive leverage requires a smaller shock to impact the bank).[48] Since systemic banks are the main concern, as they have a direct impact on the real economy, some research done on 11,000 banks in the US and Europe has shown support for Basel III, but that authorities should focus more on the excessive leveraging done by systemic firms.

Restructuring and managing balance sheets can become an area of concern, especially in the light of creating a macroprudential framework. Indeed, some argue that we can expect banks to maintain their profitability by restructuring their balance sheets in a way that will further restrict lending.[49] The financial structure that a bank will choose to adopt is mostly dependent upon its costs. For example, short-term debt is usually cheaper than long-term one. Therefore, even though building up a capital buffer to sustain crises seems like a more sensible path, banks will rather benefit from cheap debt.[50] In fact, this does not internalize all costs since such a structure degrades the collateral value of its assets in common with another bank.[51] Risks related to the market are the type of risk arising from a bank's trading operations.[52] It is the risk related to the possibility that the instruments appearing on the bank's trading book will decline in value. In their assessment of the market discipline needs, the BCBS believes that it can, as long as it is accompanied by an appropriate public disclosure regime, be an effective complement to supervisory efforts to

[47] McNelis, S., 'An Overview of Basel III: An evolving framework for banks', HSBC, November 16th 2010.
[48] Vazquez, F. & Federico, P., 'Bank Funding Structures and Risk: Evidence from the Global Financial Crisis', International Monetary Fund working paper, WP/12/29, 2012.
[49] McKinsey&Company, 'Basel III and European banking: Its impact, how banks might respond, and the challenges of implementation', McKinsey Working Papers on Risk, No. 26.
[50] Hanson, S., Kashyap, A.K., Stein, J.C., 'A Macroprudential Approach to Financial Regulation', Journal of Economic Perspectives, July 2010.
[51] Idem.
[52] Hull, J.C., 'Risk Management and Financial Institutions', 2nd Ed., International Edition, Pearson, 2010.

encourage banks to asses risk, maintain capital and develop and maintain sound risk management systems and practices. Furthermore, as argued by Ferrarini, current European legislation does not allow for multinational banks to grasp the full benefits of the subsidiary structures and it does not make them internalize the costs because of the branch structure.[53]

Operations management

Many of corporate failures and financial institutions defaults were caused by poor procedures, implementation and management. Banks need to reconsider their operations based on the new capital definition and regulatory requirements/standards. There are three key drivers behind how banks price lending: cost of funds; cost of risk and capital; and administration costs. All of these, according to the impact studies of Basel III, are going to be affected by the new regulatory framework, since banks' capabilities to lend are limited due to the requirement to maintain high quality instruments and liquidity. Also, Dodd-Frank Act in the United States restricts the possibilities of American banks to invest in certain businesses. These restrictions are affecting not only American banks, but also for example Canadian banks, among others. Higher capital requirements bring an increase in banking's funding costs, which will be passed on to customers.[54] In many instances, authorities try to limit the transfer of costs to end consumers by creating rules to this effect or some kind of programme. In the case of banks, the new market point of view could be beneficial. Indeed, banks should be considered as operating on two-sided markets (i.e. they act as intermediaries between two parties that would otherwise have difficulty to transact together), hence it is possible for the bank to pass on some of the costs on one of the sides, not necessarily both. Though sometimes this brings issues in terms of competition law, it can be beneficial if the one side taking the costs can afford it and is the best side to consider the costs. Since this is beyond the scope of this research paper, it will not be further discussed.

[53] Ferrarini, G., Chiodini, F., 'Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework', Law Working Paper No.158/20 10, May 2010.
[54] OECD, Macroeconomic Impact of Basel III, ECO/WKP(2011)13.

Banks already have in place mechanisms to calculate both regulatory capital and 'economic capital' (i.e. the components are market risk, credit risk, operational risk, business risk).[55] The economic capital represents the amount of capital the banks calculate they need using their own calculation method (i.e. internal method) which differs per bank, rather than the regulatory capital which is calculated by a prescribed calculation method. Economic capital should correspond to the estimate of the worst possible decline in the amount of capital at a specified confidence level (usually 99%) within a certain time horizon (usually one year).[56] Banks need to maintain their economic capital above the regulatory capital in the forms prescribed by the regulators, which will affect the lending possibilities. Banks, in the face of Basel III, have planned to reduce their risk-weighted assets by reducing the denominator of capital ratio rather than increasing equity (hence cutting loans and other such assets). According to the literature, focusing on this could be problematic in that it underestimates the importance of liquidity, which should be maintained on both sides of the balance sheet.

In terms of financing, the Financial Times reported that in the coming year approximately €250 billion of bank funding will reach maturity, and so banks need to find sufficient funds in the event that the bank funding will not be renewed. According to news articles, banks are currently facing the need to find high-yield investments to raise their funds[57], however since this is risky, it will increase the risk perception of the banks' assets, hence their capital holding requirements will increase. On the other hand, they could find low-risk-weight assets with some return, since these assets can be leveraged much higher than risky assets. For example, lending to AA-rated sovereigns still carries a risk-weight of zero. Some argue that as a result of Basel III, banks could be encouraged to increase their lending to sovereigns at the margins of zero-risk-weight status. However, another problem here is the excessive leverage that was done by systemic firms. When leverage of those banks is too high, then the firm becomes too risky and typically clients will run on the bank, leading to its failure. As the literature demonstrates, regulators and supervisors should find a way to address the excessive leveraging without destabilizing the market.

[55] Hull, J.C., 'Risk Management and Financial Institutions', 2nd Ed., International Edition, Pearson, 2010, p.35.
[56] McKinsey&Company, 'Basel III and European banking: Its impact, how banks might respond, and the challenges of implementation', McKinsey Working Papers on Risk, No. 26.
[57] Porter, K., 'Firms face a struggle to raise finance', World of finance, November-December 2011, p. 54.

The introduction of new leverage ratios will be important in determining the bank's financing structure and its possibilities to meet its financial obligations, especially that the RWA framework cannot be arbitraged[58]. This will of course have an impact on the calculation of its required minimum capital. The way the leverage ratio is calculated, i.e. the variables that are taken into account, will give a different outcome, a different point of view of the bank's activities. Banks should focus on the cost-income ratio, which illustrates the rate at which costs are changing compared to income – this should provide banks with a reasonable idea as to the efficacy of the instruments they want to create to raise funds. It further reflects the changes in the cost-asset ratio. It is usually used to benchmark a bank's operational efficiency. Sufficient literature demonstrate that efficient banks generate more profits, hence the regulatory framework needs to focus on bank efficiency and not become a burden. Next to that, a proper definition of risk will readjust calculation, since the calculation methods are usually internal based on the risks of each individual bank. If the calculations are too stringent, then definition of relevant risk must consider banking structures of relevant banks.

Furthermore, the type of restrictions imposed on banks might make it too difficult to come up with new instruments that circumvent the new regulations, especially as regulators attempt to mitigate pro-cyclicality through increasing the capital ratios in regards of the amount of risks taken by banks. This could very well require that banks lend less during recessions, which from an economic point of view could make it worse for the economic downturn. Banks might have to come up with products that would still do well in a downturn, which would need to be beneficial for them and customers. This is where the Dodd-Frank Act can come in useful regarding consumer protection. Basel III is rather a paradox. By increasing the quality of banks' assets, Basel III might at the same time decrease the ability of banks to lend to SMEs.

As the deposits banks receive from clients are insured by the government or an insurance company. This, in turn, creates a serious problem for the accountability. The question then becomes, to whom should banks be accountable to and who should have the responsibility to monitor and to impose penalties? Since the government is not the one

[58] McNelis, S., 'An Overview of Basel III: An evolving framework for banks', HSBC, November 16th 2010.

issuing insurance to the banks, some authors argue that it might be best to transfer some authority in maybe a minor form to insurance companies. The accountability in the face of insurance is not in the right place. In the United States, the Fed deposit Insurance Corporation's authority had been limited because it had stretched too far. Again, in the past financial crisis, they have extended their authority to decide how to lend to the failing banks.

Stressed value-at-risk

The introduction of the stressed value-at-risk capital requirement is based on a continuous 12-month period of significant financial stress.[59] Although a 12-month period is the customary time horizon, according to Borio et al. it is not sufficient to be properly representative of the time varying aspect of risk. Indeed, as the BCBS already argued, the poorly managed portfolios and risks were party due to a poorly estimated time varying risk. Still, the BCBS attempts to find prudential tools for certain risk exposures. One of these tools is the introduction of a single rule trading book. The trading book review comes as some of the significant losses of banks occurred in the banks' trading books. The BCBS still allows banks to use their own internal models for risk calculation but proposes the IRC to be measured at a 99.9% confidence interval over a 12-month capital horizon. The IRC must include in its calculation all positions except those whose valuations depend solely on commodity prices, foreign exchange rates or the term structure of default-free interest rates (e.g. debt securities, equities, securitisations, collateralised debt obligation and other structured credit products).[60] The charge has to capture default risk, credit migration risk, credit spread risk and equity price risk.[61] Some broader range of risks should be included in the calculation of the capital that is credit rating migration, the spread widening and the equity prices.[62]

Securitisations

Over the past decades, the popularity of securitisation as a process of raising low-cost financing has increased. As it consists of creating a special purpose vehicle (i.e. a

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[59] Porter, K., 'Firms face a struggle to raise finance', World of finance, November-December 2011, p. 54.
[60] Sawyer, N., 'Basel Committee releases revised inremental risk charge proposal', Risk Magazine, August 1st 2008.
[61] Idem.
[62] Idem.

separate legal entity) which issues securities to investors with a right to payments supported by the cash flows from a pool of financial assets that are held by the SPV.[63] Securitisation is beneficial for the economy since it increases the availability of credit by converting non-tradable financial assets into securities which can then be traded on the capital market. The payment rights are divided into tranches and so they are paid into specific order and supported by credit-enhancement mechanisms, such as internal credit enhancement (e.g. credit tranching, excess spread, collateralisation, reserve account) and external credit enhancement (e.g. surety bonds, letter of credit, cash collateral account).[64] Guarantees often are used as a form of credit enhancement. In the transmission chain of systemic risk, in absence of such guarantees, units will want to protect themselves.[65] To do so, banks typically raise the interest rates they charge on risky investments and require more collateral from counterparties. However, according to multiple articles the credit enhancing mechanisms lost their credibility during the crisis as credit ratings were not accurate.

The problem stemming from the securitisation is that banks recklessly used this mechanism as a way of raising finance. Prior to the financial crisis, the market for subprime mortgages was overdrawn in that banks were lending carelessly to risky borrowers. These borrowers relied on the much expected increase in housing value, and this trend stopped when the housing prices dropped and so borrowers could not repay their mortgages. The current models used in securitisation might be flawed in that it can create moral hazard problems (e.g. the originate-to-distribute model). Therefore, one of the current goals of the G20, the FSB and other international organisations and national governments is to create a more sustainable securitisation market. This is especially true, as we have seen with credit lines being frozen, since securitisation provides credit to consumers and hence improve consumers' access to funding. Next to that, there is a multiple jurisdiction aspect to securitisation, this is important especially for multinational banks that operate in multiple jurisdictions. The group will now be busy trying to better understand the market

[63] Basel Committee on Banking Supervision, 'The Join Forum: Report on asset securitisation incentives', Bank for International Settlements, July 2011.
[64] Hull, J.C., 'Risk Management and Financial Institutions', International Edition, 2nd Edition, Pearson, 2010.
[65] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?', The Independent Review, v. VII, n. 3, Winter 2003, ISSN 1086-1653, 2003, pp. 371-391.

expectations of how the securitisation markets are likely to respond to the financial crisis and the new regulatory framework.[66]

At this moment, the focus is to understand the incentives of the key participants involved in the process of securitisation. The same incentives are expected to have contributed to a loss of confidence in securitisation. Therefore, the regulatory proposals are expected to impact these incentives. In order to properly do so, regulators need to assess the role of securitisation in the financial markets especially as regarding the amount of risk investors are willing to take. Over the past years, the demand for low-risk products (both in emerging economies and developed economies), partly due to the introduction of prudential standards, has led to a rapid growth in the world volume of international reserves.[67] The BIS study demonstrates that the pressure on the supply of low-risk and liquid assets translated into higher prices for them, which resulted in a fall in return on fixed-income assets such as corporate debt. As a consequence, investors sought higher returns from such fixed-income assets and so securitisation was perceived as the mechanism to produce such assets with low-risk and high yields. By pooling into one single fund, securitisation permitted the diversification of risks and the mitigation of individual-loan idiosyncratic risk.[68]

Many scholars stress that banks should adopt a more proactive management toward risks and crisis, rather than a reactive, as banks should be able to foresee some of the risks that could be considered as obvious. Once again, it would be more feasible if these risks and common factors that are affecting multinational banks were used in order to define risks. Banks need to protect their organization, their stakeholders as well as the real economy, the country in general. There are some types of crises that cannot be foreseen, however, banks should have in place some procedures that should become active whenever their numbers and assessments are showing dangerous outcomes, and a change in economy is occurring. The procedures that banks should adopt, is to concentrate on the position of the bank in the area where it is operating.

[66] Basel Committee on Banking Supervision, 'The Join Forum: Report on asset securitisation incentives', Bank for International Settlements, July 2011.
[67] Idem.
[68] Idem.

In the end, because of the past problems brought on by securitisation, there will be a higher capital requirement for the resecuritisations in the banking and trading books, as well as more disclosure requirements. The standards of Pillar 2's supervisory review process and the disclosure requirements of Pillar 3 will be strengthened, as we will see in a later section. Of course, this is affecting the way in which banks will be constructing their capital structure in order to raise funds, and is increasing the costs of banking, affecting the availability of funds for entrepreneurship and innovation.

Corporate Governance

'Corporate governance systems reflect public policy choices. Countries pass laws that shape incentives, which in turn shape governance systems.'[69] Financial failures of large firms, be it corporations such as Enron and Ahold or large financial institutions such as Lehman Brothers (investment firm) or banks like Dexia, always lead to reconsider our understanding and views of corporate governance, the way in which organisations are built, procedures and so on. Once regulators spot a corporate governance problem, they try to solve it through more regulation and so the focus on the different corporate governance issues shifts. Nowadays, corporate governance policies are facing the issues of risk management. In the banking industry, we need to consider the underlying structures of corporate accountability that we find in the industry and if these can be improved. If so, we need to assess how this can best be done. Since corporate governance includes the authority and influence of firms, it is at the core of the most important issues of society, as it can determine the welfare of the public in general, an important consideration in Basel III. Nowadays, two trends are affecting the corporate governance of the banking industry: internationalisation (i.e. cross-border operations and ownership of business and banks) and an increasing demand for good corporate governance.[70]

In terms of governance, the literature stresses that organizational and governance requirements (i.e. better risk and liquidity management and recovery plans) need to be reviewed. Indeed, some papers on corporate governance argue that better corporate

[69] Peter A. Gourgevich & James Shinn, 'Political Power & Corporate Control: The new global politics of corporate governance', Princeton and Oxford: Princeton University Press, 2007, p. 2.
[70] Gup, B.E., 'Corporate Governance in Banking: A Global Perspective', Cheltenham, Northampton: Edward Elgar, 2009.

governance could have avoided certain problems during the financial crisis. One of the problems linked to globalization of the banking industry is that, like for risk, the definition of banks, their permissible activities and their stakeholders vary across jurisdictions. Since good corporate governance is important, and that management was the issue that led to defaulting banks, it is important to formulate good organizational structures for the soundness of banks. In the UK, codes stress the maintenance by boards of the various systems that are in place to cover important controls, such as financial controls, operational controls, compliance controls, and risk management.[71]The board and management need to work closely together to properly assess, manage and take actions regarding risks.

Since corporate governance structures decide who has a claim on the cash flow of the firm, it would make sense to reconsider the corporate governance model of banks. For example, Canada has adopted the Final Advisory on Non-Viability Contingent Capital (i.e. based upon the NVCC requirements of Basel III), which requires that all non-common Tier 1 or Tier 2 instruments (including those that classify as liabilities on the basis for accounting purposes) instruments issued by an internationally active bank, as of January 1st 2013, satisfy the requirement. This means that in Canada, the supervisory body (i.e. the OSFI) has the authority to trigger the change for uncommon shares based upon a set of principles (e.g. Principle 3: lists triggering events to be included in contractual terms). It is now obligatory that all non-common Tier 1 and Tier 2 capital instruments include a provision that states that, upon the OSFI's declaration of the bank's insolvability or other events, these shares will be immediately converted (permanently) into common equity in order to provide for liquidity in the event of default and bank runs. This will inevitably affect the types of shares that will be issued by banks, since these non-common instruments might become less attractive to investors.

In fact, such a clause aims at transferring the burden of default/insolvency to the shareholders of the financial institutions rather than the public money and taxpayers through bailout packages. [72] Given the views on corporate governance development, the

[71] Van der Elst, C., Vermulen, E., 'Regulatory Supply and Market Demand of Risk Management: Match or Clash?', Risk Governance & Control: Financial markets & institutions, Vol. 1, Issue 1, Winter 2011.
[72] See Clark, S.D.A., Kashif, Z., and Graham, V., 'OSFI Releases Final Advisory on Non-Viability Contingent Capital', OSLER, August 18 2011. And Keefe, B., 'Basel Committee Requires Non-Common Capital Instruments to Be Convertible into Common Shares', Torys, 2011.

new regulations brought by Basel III, especially the introduction of the NVCC clause, among other things, will inevitably lead to changes in governance and shareholder rights. In the business literature, shareholder rights are still an issue (e.g. shareholder rights to add to the agenda, regarding management and directors, etc.). The question remains to what extent their rights should be extended and developed; and especially what impact it would have on the management process and incentives. In the United States, the Dodd-Frank Act is changing the rights of shareholders, extending them. Indeed, shareholders will now have a say on directors' pay. The compensatory incentive that used to be used to bind the director's to the welfare of the firm and shareholders, though not stakeholders, will now be in the hands of the shareholders. This should increase the pressure put on bank supervisors and directors.

Regarding the increased financial responsibility of bank default in the European Union, the Commission proposes in a draft a hierarchical allocation of losses. They are first to be allocated to the bank shareholders, and then to a hierarchy of other creditors, with the subordinated ones first. As these are exhausted, only then will senior unsecured creditors be involved. [73] Altogether, this will probably have an impact on corporate governance, since investors will probably want to monitor better or have better access to the banks' information, management, and so on. In the same way, accountability issues in the banking industry will need to be reconsidered. In the history of corporate governance, stakeholders are a group that usually do not have much protection. The BCBS and the OECD published the 'Enhancing corporate governance for banking organisations', which is a set of principles in corporate governance for banks that aims to address issues such as the protection of depositors' funds, ineffective governance, and so on. Although these serve as principles and states can start from there and implement their own corporate governance rules, with the new development of Basel III we could expect that shareholders' rights will be reconsidered. In the business literature, shareholder rights is a hot topic and it is still not resolved, so perhaps the new situation in which shareholders are finding themselves in the banking industry will lead to the same questions.

[73] Connaghan, C., 'EU to Push Nation's Powers Over Weak Banks', Wall Street Journal, June 3 2012.

Will this not lead investors towards the most reliable banks, carving out smaller, less known or less trusted banks? And could this also reduce the supply side of the banking industry? This might also affect the competition between banks and eventually be disadvantageous to consumers. In the light of this requirement, banks will need to review their risk management and business strategies, another reason to develop a more standardised or harmonised definition of risk. Now, banks are facing a problem where they adopt a separation of powers between those responsible for finance and those who manage the risks.[74] In his book on strategy analysis, Robert M. Grant argues that for an organisation to be properly managed there should be a stronger coordination and cooperation between, in this case, the finance people and the risk managers. The separation of the two does not allow an efficient assessment and identification of the situation, its risks, the state of the bank, and so on. Therefore, as argued by Moody's, the current framework used by banks regarding their risk management and finance management should evolve towards a more comprehensive one.[75]

Reconsidering the management structure of banks can be disadvantageous in jurisdictions where the legislation does not allow banks to benefit from certain structures, like in the EU, where centralised group management and consolidated supervision are not permitted for European multinational banking groups with a subsidiary structure.[76] Furthermore, this new NVCC requirement is left to the discretion of each jurisdiction, but at the same time in the cases of subsidiaries there is a special process to be followed and countries need to closely cooperate.[77] Monitoring is increasingly being regulated by giving more power to the national authorities to intervene in banks that are failing. Indeed, the European Commission will be proposing legislation that will give the power to national authorities to intervene when a bank is about to default, powers including forcing out management and imposing losses on unsecured bondholders.[78] This is the way of the European Union to deal with transferring the burden/cost of bank failure from the taxpayers

[74] Chabanel, P.-E., 'Implementing Basel III: Challenges, Options & Opportunities', Moody's Analytics, White Paper, September 2011.
[75] Idem.
[76] Ferrarini, G., Chiodini, F., 'Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework', Law Working Paper No.158/20 10, May 2010.
[77] Clark, S.D.A., Kashif, Z., and Graham, V., 'OSFI Releases Final Advisory on Non-Viability Contingent Capital', OSLER, August 18 2011.
[78] Connaghan, C., 'EU to Push Nation's Powers Over Weak Banks', Wall Street Journal, June 3 2012.

to investors. With this increased investor responsibility, what effects will this have on corporate governance? What will this mean for investors? Will investors need to be QIBs now?

The United States has seen in the past a wave of overlap in corporate governance and bank regulation. Indeed, the 1930's have seen an increase in regulatory restrictions applying to corporate governance, where shareholders were protected from failure and bank profits were salvaged by the competition in the market being suppressed.[79] Gup also argues that a role for corporate governance has emerged since deregulation produced large and complex banking organizations, with widespread ownership. Managers then had the possibility to follow their courses of action independently from shareholders.[80] This crisis however has proven that this type of manager freedom will now be restricted as shareholders are once again gaining some more rights and more say in the ownership of banks.

All in all, it seems that corporate governance will need to adapt to the new policies, especially since shareholders will be responsible for the losses incurred by banks. In reviewing the corporate governance structures/framework, will need to be considered the way in which benefits are being conferred. The fact that their preferential shares will automatically turn into common shares when the bank becomes insolvent raises some corporate governance questions. The literature argues that 'finance theory provides a sophisticated model of how players within the firm interact with investors outside the firm to strike governance bargains that accommodate their mutual interests'.[81] This refers to the manager-shareholder relationship and in the case of the banking industry, this is likely to change. For example, to what extent will shareholders be able to decide on managers? At the moment, the supervisors have the capacity to remove the managers and to place a manager of their choice. But if shareholders have such an increased financial responsibility, should their rights not be extended? Furthermore, accountability to shareholders should be addressed, from the research it appears that accountability mostly occurs toward

[79] Gup, B.E., 'Corporate Governance in Banking: A Global Perspective', Cheltenham and Northampton: Edward Elgar, 2009.
[80] Idem.
[81] Gourevitch, P.A., & Shinn, J., 'Political Power & Corporate Control: The New Global Politics of Corporate Governance', Princeton and Oxford: Princeton University Press, 2007.

consumers and insurance agencies. But now that shareholders are financially responsible for the financial institutions failing, will managers become accountable to the shareholders? What will be the development of corporate governance? This would be an interesting topic for further research as it might help develop a cost-efficient structure for banks.

Extending Basel III to the shadow banking system

The manipulation of assets (i.e. regulated and unregulated instruments) is also done in an area of the banking industry known as the shadow banking system, an area that is currently being considered to fall within the Basel III requirements in some jurisdictions since it is only a minor regulated area. The shadow banking system usually is simply referred to as nonbank financial companies. In the United States, Dodd-Frank Act now extends the regulatory authority of the Federal Reserve to those institutions if it considers that such an institution would have negative effects on the financial system or if its activities threatening the financial stability. The way in which the shadow banking system will be addressed will be crucial, as Basel III aims at increasing transparency and accountability, so is Dodd-Frank, then the financial institutions and practices that remain outside the scope of the authority will need some way of becoming accountable, to protect investors and consumers. Therefore, since investors and consumers are in need of a better position, Dodd-Frank makes credit rating agencies accountable to those who rely on their ratings to make their decision. The shadow banking system should be subject also to the Basel III requirements, as some of the entities involved in OTCs did not hold sufficient collateral against potential claims. As seen in the United States, this led to the default of the insurance company AIG, as they did not have sufficient capital to cover the claims.

Regulators should also extend the scope of application of Basel III to the shadow baking system, even if they do not get deposits from consumers. Since these banks are in any case participating in the market, and can have an adverse effect on the economy, it makes sense to include them in the scope of Basel III. This would not lower their operating costs as they would also have the compliance costs, but in the long-term, since they could also not behave in a reckless way, it can avoid future financial downturn. The level playing field of the banking industry could therefore be levelled so that all players have an equal footing, with multinational banks restricted and regulating more strictly. This would also be beneficial for the competition market, since banks being firms, it is important that banks can compete, thereby facilitating innovation and the lending market, since as we have seen banks, in order to cut costs, will want to reduce their assets (i.e. cutting their loan supplies).

2.2. Supervisory process

Since banks hold depositors' funds, they are a regulated industry and need a license in order to be operable. Banks are supervised through the national supervisory authority, which has the authority to monitor whether banks are in compliance with the national regulation. It can impose penalties and revoke the bank's license. According to the literature, policies are a way of communicating to investors the trust they can have in the banking institutions in which they invest. Investors expect industries to be clear and transparent regarding their management and capital/trading books, usually through disclosure and transparency, which is something done through regulation as otherwise banks might not be compelled to do so. The key consideration is the implication of Basel III on the bank margins, which shall be the starting point, since banks seek to adjust to the new regulatory framework by maintaining profitability. Banks are also likely to move their operations to jurisdictions that are more favourable to them, and since supervision is left to each jurisdiction, we have seen during the crisis that it has been an inefficient process.

Scholars such as Guido Ferrarini found a mismatch between national banking supervision and international banking groups. Indeed, he argues that the supervisory architecture should be devised in a more centralized way (i.e. there should be less discretion regarding supervision, especially regarding multinational banks) and that it should develop cooperation and coordination mechanisms between the different authorities, resolution plans and enter into agreements to share the burden.[82] He gives the example of EU cross-border supervision in respect of branch and subsidiary structures of multinational banks, which is inefficiently regulated and does not allow banks to benefit from such structures, which could be a way to reduce banking costs now that banks need to restructure because of the new capital requirements. He goes on to explain that although the amendments to the CRD directive strengthens the framework for cooperation and coordination among

[82] Ferrarini, G., Chiodini, F., 'Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework', Law Working Paper No.158/20 10, May 2010.

member states, it does not reduce the costs imposed upon banks, but rather makes it more costly. We realise in Europe the importance of cooperation and coordination between member states as European institutions attempt to maintain the internal market. Since cross-border banking is predominant in such a globalised world, it would make sense to improve coordination and cooperation between countries, and this could help improving the supervisory institutions of developing countries.

At the national supervisory level, many scholars have proposed to reconsider the way in which banks are being supervised, since there are two traditional systems of supervision: either the government supervises or an independent body. There has been very good arguments in favour of both these methods, however, with the current state of the economy and the increasing globalisation, creating a separate supervisory entity is increasingly favoured, primarily at the national level. The movement of regulation/supervision toward the aim of governance seems to be parallel to the movement of governance toward regulation (e.g. Sarbanes-Oxley Act deriving its content from banking law).[83] The movement toward protection of shareholders and stakeholders (i.e. customers, employees, creditors, etc.) is similar across the United States and Europe. For consumers, the Dodd-Frank Act moved towards the creation of a separate entity (i.e. The Consumer Financial Protection Bureau) which examines and enforces regulations for banks and credit unions that have assets of over $10 billion and all mortgage-related businesses, lenders (e.g. student lenders), and large non-bank financial companies.

The question of supervisory authority is often problematic where it has not yet been given the recommended independence. For example, in the European Union, it is argued that this phenomenon could be because it has not yet been developed in concrete terms, which could allow a uniform implementation in national law and European legislation.[84] A current debate regarding the regulation of banking institutions is about whether there should be a single authority or two at the national level. In its text, the Dodd-Frank Act explains that the creation of single entities (e.g. the consumer protection bureau)

[83] Gup, B.E., ‘Corporate Governance in Banking: A Global Perspective’, Cheltenham, Northampton: Edward Elgar, 2009.
[84] Masciandaro, D. and Quintyn, M., ‘Designing Financial Supervision Institutions: Independence, Accountability and Governance’, Cheltenham, Morthampton: Edward Elgar, 2007.

strengthens the accountability of one agency to a certain group and makes it clearer who is responsible. The creation of a single entity also aims at reducing the problems arising from uncertainty for consumers. In the European Union, there are talks about the creation of a 'regional banking union with common deposit guarantees and a more powerful EU supervisor'.[85] However, this is raising concerns whether doing so, which would increase the burden taken by creditors, would further elevate the bank-funding costs.

Furthermore, authors distinguish between different areas forming the banking literature, such as monetary and supervisory policy. According to this distinction, the implementation needs for supervisory policy are different than for monetary policy, but monetary policy can be used to influence other sectors. Therefore, the role given to these different policy mechanisms needs to become clear and linked to the risk they should cover/monitor. Hence, a new policy question is what role and responsibilities should be given to supervisory bodies. Most importantly however, is whether such regulation or supervision should best be done at national or international level, and through what mechanism (e.g. centralised data management). There is much consideration that should be given to the type of banking activities and the size of banks, as this could impact the risk definition which can be used to define the role and responsibilities of supervisory bodies. In this sense, as we will see in the next section, leaving implementation to jurisdictions is sensible to the extent jurisdictions are best able to assess the needs of their systems; however it also leaves room for regulatory arbitrage (i.e. firms will exploit the differences in market differences to get more advantageous prices, rules, financial instruments). Next to that, regulators and supervisors often consider whether the different businesses of the banking industry (i.e. investments, deposits) should be kept separated when being regulated and supervised. This can increase the costs of regulation and supervision, but including in one body would probably lead to inefficiency and a higher risk of certain things (e.g. risks) being undetected. If centralisation is done at the banking level, perhaps this would be more efficient, but this would imply integrating the banks' businesses into one central data centre.

The focus should be on finding the appropriate criteria that would be applied to the independence of the supervisory authority so that it is properly accountable for its activities.

[85] Connaghan, C., 'EU to Push Nation's Powers Over Weak Banks', Wall Street Journal, June 3 2012.

An example would be to define what makes a supervisory body independent and efficient. In the European Union, there is a lack of proper supervisory body and accountability, since some countries' supervisory bodies lack the sufficient independence. According to the literature, it is important to set common standards in order to properly guide the legislative reforms as regards supervisory authorities.[86] One such standard should be, among other things, a more harmonised definition of risks and accounting standards. As a criterion, the supervisory authorities need to be staffed with experts, since the instruments that banks are coming up with are increasingly becoming complex, as they try to circumvent costs and rules.

One of the reasons that an independent supervisory body is beneficial, is that it could circumvent the problem related to the government mandate, also a time-varying element.[87] The literature argues that it can be problematic if the promises and commitments of the supervisory authority are directly linked to the government of the moment. This is also true regarding the short-run optimal policies and long-run optimal policies, which could be simply forgotten ex post. The literature points out that a problem related to the involvement of government in the financial sector is the policies it adopts can allocate credit, among other things, to favoured participants or borrowers, undermining certain sectors of the economy; this can severely affect the ability of a firm to properly manage its risks.[88] Restrictions that are sometimes adopted by governments can also lead to an undiversified portfolio, such as restricting the type of investment and lending that banks may enter into.

In the financial crisis, the use of derivatives had been abused and it led to significant financial losses. For example, J.P. Morgan Co. suffered over $2 billion trading loss. In response to such behaviour, regulators in the United States instituted the Volcker Rule. This rule aims at separating the different branches of finance. It further aims at minimizing the conflict of interest between banks and their clients, for example they are not allowed to hold at the same time an advisory and credit role. This rule followed the crisis when Wall

[86] Masciandaro, D. and Quintyn, M., 'Designing Financial Supervision Institutions: Independence, Accountability and Governance', Cheltenham, Morthampton: Edward Elgar, 2007.
[87] Idem.
[88] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?', The Independent Review, v. VII, n. 3, Winter 2003, ISSN 1086-1653, 2003, pp. 371-391.

Street banks had been accused of accumulating an excessive amount of risk and unfair business practices, which regulators could not properly monitor. This new rule is adding to the distinction made by the Gramm-Leach-Bliley Act on permissible combinations of financial services and the distinction between banking and commerce activities. The monitoring position of regulators is becoming increasingly relevant for regulation. In the United States, in 1991 the Federal Deposit Insurance Corporation Improvement Act aimed at regulating the behaviour of regulators since they should not abuse of their powers.

2.3. Different jurisdictions, different implementation, different requirements

Since the implementation of Basel III is left to the discretion of each country, there will not be any level playing field across the globe just yet. Some countries (e.g. Russia, some Latin American countries, some Asian states, and some African states) will still be busy implementing Basel II and III at their own pace, usually later than 2013, which is the implementation year for North America, Europe, most Asian states, Australia and New Zealand, Brazil and South Africa. This will have an impact on the standards Group 1 banks (i.e. those operating across borders) will be implementing and inevitably their costs. Multinational banks will be tempted to find the most optimal geographical distribution of their business that will minimize their capital and funding requirements.[89]

One of the problematic areas of Basel III is the introduction of measures to strengthen the capital requirements vis-à-vis counter party credit risk exposures, which arise from banks' derivatives and securities financing activities. Such a measure aims at stimulating the capital buffers amount of banks to back their risk exposures, and this amount is determined using stress inputs. These areas are complemented with some restrictions on the dealings permitted by banks across borders. With the new Basel III regulations, tranched and nth-to-default credit default swaps will not be eligible as counterparty credit risk charge. The calculation of the counterparty credit risk is being done on a portfolio as a whole and not on an individual basis, and the capital charge must be consistent throughout the calculation. Whenever a bank is unsure of something it should consult with supervisors. The frequency of calculation, for example, must be discussed with

[89] McKinsey and Company, Basel III and European banking : Its impact, how banks might respond, and the challenges of implementation', November 2010.

the national supervisor. For banks that are operating in multiple jurisdictions, they will be required to deal with different supervisors, which will translate into an increase in the agency costs bore by banks.

Importantly, research has demonstrated that one of the reasons for bank instability has been the hindrance to diversification and geographical diversification.[90] As it has been stressed by the policy makers, financial stability is one of the drivers of the new regulations; therefore it would make sense to focus on the possibilities for banks to diversify their portfolio. However, as we have seen in the past years, portfolios were poorly managed. With the need to review the way in which portfolios are being managed, instead of focusing on restrictions to building portfolios (e.g. Dodd-Frank Act imposes many restrictions on this matter), national authorities should focus on developing a method that will properly monitor the way in which portfolios are being managed and the amount of risk associated to them. As we have seen, portfolio management is important in a jurisdiction considering the interconnection between the various firms within the jurisdiction.

Basel III raises more concerns than just the increase in costs for commercial banks. One of these concerns is that countries are facing the possibility of judicial arbitrage. Although the operations of banks in acquiring, managing and using their funds are quite similar throughout the world, the implementation of Basel III standards are not done on an equal level.[91] Everywhere, banks are financial intermediaries in the business of making profits. In most countries, four or five large banks typically dominate the banking industry.[92] These banks usually operate across borders through branches and subsidiaries, which means that they are dealing with multiple jurisdiction requirements. Despite the international nature of Basel III, the implementation of the capital requirements is very different among the different jurisdictions, which could lead to judicial arbitrage, a concern voiced by the United States Congress. Congress argued that this will lead to countries implementing the new capital requirements in such a way as to try and keep the soundest and most profitable financial institutions. Such a method might lead to degradation in the

[90] Peter J. Wallison, Why do we regulate banks? Banking and Finance, Winter 2005-2006
[91] Mishkin, F.S., 'The Economics of Money, Banking and Financial Markets', 9th Ed., Global Edition, Columbia University, Pearson, 2010, p. 281.
[92] Idem.

financial system and financial instruments, since banks will tend to focus on profitable instruments, which could lead once more to banks using the same strategies which were the problem in the first place. In this sense, it could be that the competitive environment of the banking industry is negatively affected by the new requirements, as some banks could be disadvantaged due to their size or to different jurisdictional requirements. As we will see later on, it is very difficult because of such inequalities, and the unwillingness of jurisdictions to give up some of their authority, to create a one-size-fits-all framework. However, by focusing on practice first and foremost, it might be possible to find a way to define systemic risk from the standpoint of multinational banks.

Certain jurisdictions, such as Russia, most states in South America, Africa and Asia, are still implementing Basel II in their system, and are planning to move to Basel III at a later stage. One of the reasons could be that most of these are developing economies and cannot afford to implement such stringent rules right away. Also, such jurisdictions will not offer the same regulatory trust and certainty that investors might increasingly rely upon (even though such jurisdictions are cheaper for banks). A potential problem arises between small financial institutions and larger ones since the capability to implement Basel III will create some disadvantages for the smaller institutions. Or the implementation of Basel III itself is going to be done unequally, distorting competition between banks and the level playing field, as argued by the US Congress, at the domestic and international level. Since specific provisions as to the way in which and the extent to which Basel III requirements are to be implemented in national monetary policy is left to national authorities. The limitations on derivatives activities and new restrictions on non-traditional operations in bank institutions imposed by the Volcker Rule (as part of the United States' new regulatory measure Dodd-Frank Act) may for example lead banks to divest some businesses.[93] New rules will likely lead to substantial increases in regulatory compliance and costs, which may have more dramatic impact on smaller banks.[94]

On the other hand, the consolidation of traditional banking institutions may continue in order to take advantage of scales and synergies. Larger banks will probably be interested

[93] Basel Committee on Banking Supervision, 'Basel III: International framework for liquidity risk measurement, standards and monitoring', Bank for International Settlements, December 2010.
[94] Idem.

only in purchasing financial institutions that will benefit their strategies: build up their franchise, products and geographic market.[95] Still, multinational banks especially are very limited in becoming large. In Europe, there is a lot of regulation applied to financial institutions, and most of the financial regulation comes from the EU itself and then applied in the member states. For example, 80% of the Netherlands' financial regulation (i.e. Dutch Financial Supervision Act) originates from EU law. The reason for this is the conservation of the internal market, and the fact that it needs to adapt constantly to developments.

One of the goals of Basel III was to discourage multinational banks from becoming too big, which is understandable under the premise of creating a sound economic environment and avoid future crises. However, the extent to which banks are being monitored and restricted in conducting certain businesses differs per jurisdictions where, for example, in the United States financial institutions are strongly restricted in the type of instruments they can issue or can invest in. These new restrictions aim at containing the reckless behaviour that Wall Street adopted prior to the crisis. From a competitive point of view, Moody's argue that a rapid implementation would contribute to the bank's competitiveness by delivering better management insights in the business which would allow it to take advantage of future opportunities.[96] Concerned with how competition in the industry is going to be now, but also what it will become in the future, resource scarcity should engender ambition from regulators and supervisors, since they should find a way in which banks can operate at a lower cost, giving them the incentive not to create instruments that could be detrimental to the economy and society. It is clear it seems that the problems banks are facing should be addressed at its roots, meaning that the national supervisor could take the responsibility to create some sort of principles based or regulation based direction for banks.

Another problem linked to the multiple jurisdictions and their national financial regulation is, according to the banking literature, that there is a serious valuation problem. The current reporting model, according to some analysts, is now obsolete and should adapt

[95] Chabanel, P.-E., 'Implementing Basel III: Challenges, Options & Opportunities', Moody's Analytics, White Paper, September 2011.
[96] Idem.

to today's 'rapidly changing global economy'.[97] Some international agencies, such as the International Accounting Standards Board (IASB), are trying to set up accounting standards that would be followed globally. This would be beneficial since for multinational banks. The parent bank, on the one hand, has to follow the accounting standards and requirements of the jurisdiction where it is located. Some jurisdictions require that the parent bank's subsidiaries abide by the same standards. However, these branches and subsidiaries are also compelled to follow the requirements and standards of the jurisdiction in which they are located. This increases inefficiency and costs. Though there are already international data reporting standards (IFRS), the requirements of jurisdictions should reconcile somewhere. The variety of requirements and standards that multinational banks have to abide by are too vast to be cost-efficient. Rather, it creates an incentive to avoid as much as possible the strict regulations and to move towards the least regulated areas. Some argue that regulatory arbitrage would be better for hedge funds instead of targeted regulation of bank lending, as a 'hedge against systemic failure'.[98] Creating a global frame of reference could lead to guiding national regulators and supervisors to create a more efficient level playing field for multinational banks. As proposed by Ferrarini, perhaps it could be attempted to extend the idea of centralisation to the supervision of data reporting. Since the volume of the data needed in creating their reports is increasing and the frequency in which these reports are conducted/compiled, it seems appropriate to review the reporting standards.

As it is possible that new agency costs arise from the implementation of Basel III, banks will seek to avoid further transaction costs from dealing with multiple regulators, especially in the case of multinational banks operating in multiple jurisdictions. As we have seen in the past years, the banking industry is becoming increasingly regulated. Their importance for the real economy has led to a strong involvement of the government and/or the supervisory authority of a country. The finance literature stresses the problems arising from the type of regulatory agency a country adopts. In some jurisdictions, the government retains control over the banking industry (i.e. executive, legislative and judiciary), whereas in other jurisdictions, like the United States, a separate entity responsible for the control and monitoring of banks is created (it also has the executive, legislative and judicial powers).

[97] Eccles, R.G., Fletcher, J.K., 'Value and Reporting in the Banking Industry', PriceWaterhouseCoopers.
[98] Kaal, W.A., 'Hedge Fund Regulation via Basel III', 44 Vand. J. Transnat'l L. 389 (2011).

Therefore, with the implementation of Basel III, the question arises as to whether the control and monitoring of banks should remain in the hands of the government or should a separate entity entirely be created and put in charge? Some authors argue that it is best to have independent entities that would have legislative, executive and judiciary powers to act as the central bank authority. These authors argue that creating an independent agency in charge of the banking industry in their jurisdictions (i.e. interest rates, bankruptcy, consumer protection, etc.). This is a method that has been followed by the United States for a long time already, whereas other countries are still unsure about this. Establishing such an agency outside of the control of the government can be seen as constitutionally problematic (i.e. because of the trias politica and the concept of national sovereignty). These authors further argue that the current model needs to be reconsidered and delegate the tasks to the independent agency.

Ferrarini argues that the current cross-border model of banking needs to be reconsidered. According to him, the national fragmentation of regulatory requirements and supervision made the identification and assessment of risks more difficult and, consequently, cross-border crisis management and resolution measures could not be effectively taken.[99] However, as we will see in a later section, in 2011 the IMF proposed a common resolution framework, which is not yet accepted by countries but could be a way to resolve the systemic risks linked to the lack of a resolution framework. This is further supported by research conducted on Basel III and what it lacks in terms of management and crisis resolution. Indeed, many banks are dealing across border, either via branches or subsidiaries. This means that they have to abide by different systems. For example, a bank operating in the United States will need to abide by the regulations set by Basel I and the Dodd-Frank Act, whereas its branch in Canada will have to abide by Basel III, and its other branch in the European Union will need to abide by Basel III and CRD IV. These different requirements unnecessarily increase the costs of banking. Basel III in itself attempts to limit the dealings of large banks, as the purpose is to further avoid that banks become significantly large, to the point that they earn the title of 'too-big-to-fail' institutions, meaning that if they default they will cause damage to the real economy.

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[99] Ferrarini, G., Chiodini, F., 'Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework', Law Working Paper No.158/20 10, May 2010.

The compliance costs related to having branches and subsidiaries in multiple jurisdictions make it unnecessarily costly for banks, especially when they cannot benefit from the efficiency it could have for multinational banks. As we see in the European Union, the goal is to create an internal market, and in order to do so, ESMA has the authority to develop Directive (legislation that necessarily applied to all member states) because the aim is the good functioning of the internal market. However, this only applies to the European Union. I believe it is time to create some common standards regarding accounting and governance. The European Union has tried to converge toward a more centralised supervisory body to deal with cross-border groups of banks.

2.4. Disclosure, transparency, and accountability

Because in the past financial institutions did not disclose everything, sometimes hiding assets in SPVs or through instruments that did not need to appear on their balance sheet, investors among others could not properly assess the value and risks. Therefore, the new Basel III framework is requiring that all banks must comply with stricter disclosure guidelines. Banks are required to ensure that their risk and finance departments have access to clear and accurate data (i.e. showing the bank's market, credit, operation, concentration, impairment and liquidity risk).[100] In the new regulatory framework, disclosure and accountability is becoming increasingly important. This can also be noticed in the Dodd-Frank Act where financial institutions that want to issue 'exotic instruments', requiring data collection and publication through clearing houses, higher standards of conduct, extend the authority of the SEC and CFTC. Disclosure and transparency are important for shareholders to be able to value the balance sheet of banks in order to make a proper assessment of their investment. Banks that have disparate systems, non-reconciled data and unclear data are likely to lead to insufficient business intelligence regarding their instruments and structure and will increase their exposure to risk.[101]

Providing clear, consistent and accurate data regularly will be difficult in a cost-efficient way, especially if the data is dispersed across the various departments of the

[100] Chabanel, P.-E., 'Implementing Basel III: Challenges, Options & Opportunities', Moody's Analytics, White Paper, September 2011.
[101] FRSGlobal, 'Basel III Solution: The opportunity to get it right', Wolters Kluwer.

bank.[102] According to the literature, asymmetric information and poor disclosure can lead to bank runs, and hence financial crises.[103] This is one of the reasons why many scholars argue that the risk and finance management teams should work closer together, coordinate better, and cooperate on a closer level (i.e. centralised information). This is especially true since the data must be 'carefully defined and managed' to ensure that it carries the right ratios calculations every time. Combining these strict standards to the reporting requirements greatly increase the burden on banks.

Accountability of banks is extended to its consumers, especially under the Dodd-Frank Act. In the United States, the Dodd-Frank Act implements certain restrictions regarding transparency and accountability of not only banks, but also for credit rating agencies. It was shown during the crisis that credit rating agencies (e.g. Wall Street) may have sent false signals regarding the value of some securities and commodities, thereby misleading investors and consumers. That is partly why Dodd-Frank includes consumer protection provisions, also to avoid small letter terms. One of the ways in which consumers may be affected is the contracts they will be entering into, the terms attached to the instruments that banks offer. Regarding disclosure in the United States, management is required to report on all risks and threats that their firm may encounter and to address the issues in a 'reliable management's discussion and analysis statement'.[104] In the United States, the events and uncertainties that need to be addressed by management are termed 'material', which means that it is relevant to a sophisticated investor. Management is furthermore required to report/address events and uncertainties that could influence 'liquidity, capital resources, results of operations, off-balance sheet arrangements, and contractual relationships.'[105]

The BCBS presses for the introduction of binding disclosure requirements, with clear remedial actions in the case of non-disclosure. Their argument is sustained by the need to

[102] Chabanel, P.-E., 'Implementing Basel III: Challenges, Options & Opportunities', Moody's Analytics, White Paper, September 2011.
[103] Allen, F., Gale, D., 'An Introduction to Financial Crises', The International Library of Critical Writings in Economics, Edward Elgar, August 14 2007.
[104] Van der Elst, C., Vermulen, E., 'Regulatory Supply and Market Demand of Risk Management: Match or Clash?', Risk Governance & Control: Financial markets & institutions, Vol. 1, Issue 1, Winter 2011.
[105] Van der Elst, C., Vermulen, E., 'Regulatory Supply and Market Demand of Risk Management: Match or Clash?', Risk Governance & Control: Financial markets & institutions, Vol. 1, Issue 1, Winter 2011.

have complementary pillars in the New Basel Capital Accord which are mutually reinforcing. The differences in banking supervisor authority to set disclosure standards authority may create some issues. Multinational banks will be required to comply to both the standards of the country where they are operating and the country of its parent company's country. Depending on the authority given to the banking supervisor, some supervisors might be able to introduce binding regulations while others might only rely on indirect actions by introducing more of a principle-based type of recommendation. Also, the remedial actions to take in the event of non-disclosure vary across countries. That's why Basel Committee is intending on implementing strong principles in order to adopt a more harmonized disclosure regime. This should be helpful for investors that are investing abroad.

The regulator requires banks to publicly disclose financial and other information, and depositors and other creditors are able to use this information to assess the level of risk and to make investment decisions. As a result of this, the bank is subject to market discipline and the regulator can also use market pricing information as an indicator of the bank's financial health. There is a need for market discipline, as it should protect investors, since a lack thereof led to the failure of some banks and savings and loans. Next to that, in the European Transparency Directive, listed entities are required to provide a description of their activities, internal control and risk management system that are in place. This should provide investors with more information to monitor the state of the bank.

Basel III is now incorporating in its framework the idea of stress testing scenarios. These aim at understanding the potential impact of certain market events that are believed to affect the key ratios. In the text, we can see that it requires these tests to be performed more often and including more data. In including more data, banks are faced once again with the difficulty of the data being scattered across different departments. According to Moody’s, this will take longer to deliver; it will require much more effort and is likely to be delivered showing less accurate results. Moody’s propose a model where there would be a data model where all the critical information would be held in a central repository – hence this seems to be the advice to banks, to consolidate all their information in a single central repository. Such a method would allow banks to run a wide array of complex stress tests that would meet the actual needs of the business and hence comply with the regulatory framework.[106]

It is the opinion of many agencies and scholars that Basel III is implementing perhaps too overreaching values to calculate the minimum regulatory capital. Indeed, in one of an analysis conducted by Standard and Poor's, the increase capital requirements for counterparty credit risk will have a significant impact on the derivatives market and financial institutions that are largely made of derivative sales and trading businesses.[107] According to their analysis, the BCBS does not go far enough in terms of the Expected Positive Exposure where the capital charges for the risks in the trading books should be higher. In the United States, the Dodd-Frank Act though its However, in their view the proposed calibration of Value at Risk on Credit Valuation Adjustments are based on stressed events that are not proportional to the losses experiences in the past two years.[108] So, it would seem that the BCBS is not focusing on the data that matters but rather on what seems to be important.

2.5. Integrated approach

The Basel III framework aims at integrating banks in a more effective way. The goal of integration is to enrich firms 'portfolios. According to Moody's, a Basel III management solution has to enable the demands of integration, otherwise it is said that compliance will create higher overhead than would normally be necessary.[109] Overhead means the on-going expense of operating a business. In the European Union, among others, the way in which the crisis was dealt with (through bail outs) was a threat to the process of integration.[110] The new Basel III framework requires of banks a greater integration of the finance and risk management functions, so as to better manage the data and risks of the bank.[111] Resources and capabilities of banks are now limited due to Basel III's new requirements and because of

[106] Chabanel, P.-E., 'Implementing Basel III: Challenges, Options & Opportunities', Moody's Analytics, White Paper, September 2011.
[107] Standard and Poor's, 'Basel III Proposal To Increase Capital Requirements For Counterparty Credit Risk May Significantly Affect Derivatives Trading', Global Credit Portal: RatingsDirect, April 15, 2010.
[108] Idem.
[109] Chabanel, P.-E., 'Implementing Basel III: Challenges, Options & Opportunities', Moody's Analytics, White Paper, September 2011.
[110] Ferrarini, G., Chiodini, F., 'Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework', Law Working Paper No.158/20 10, May 2010.
[111] Chabanel, P.-E., 'Implementing Basel III: Challenges, Options and Opportunities', White paper, Moody's Analytics, September 2011. Also, Moody's analytics

some national regulations, such as the Dodd-Frank Act which limits the proprietary dealings of banks. In one of their working papers, the McKinsey & Company group evaluated the impact Basel III would have on the European and American banking sectors in terms of amount of capital, and that it would be significant. In the EU, it is evaluated that the banking industry will need approximately €1.1 trillion of additional Tier 1 capital, €1.3 trillion of short-term liquidity and approximately €2.3 trillion long-term funding, if no mitigating action is undertaken.[112] In the United States, the group expects the impact on smaller banks to be similar, with different drivers of impact. They estimate the Tier 1 capital shortfall at $870 billion, the gap in short-term liquidity at $800 billion and the gap in long-term funding at $3.2 trillion.[113] Furthermore, the group concludes that bridging these gaps would lead to a substantial impact on profitability. Indeed, implementing Basel III would reduce the ROE for the average bank by about 4 p.p. in Europe and about 3 p.p. in the US.[114] Indeed, such a change in asset quality and quantity strongly affects the bank capital. Depending on the changes done to the assets to cover the requirements, and the type of financial instruments and relationships, they can lead to systemic crises.[115] Systemic issues are a new part of the Basel frameworks, adding to the microprudential elements. The relationship of banks to counterparties, investors, and consumers will now be subject to strict rules.

To resolve this management issue, scholars propose the creation of a single and central 'reporting platform', that would collect and analyse (i.e. stress tests, data reporting, etc.), as this would provide qualitative reports. The data would be readily available from one platform and so management would not have to waste time collecting the data from the various departments of the bank. Indeed, as argued by van Daelen and van der Elst, 'transparency, standardization and attestation rules need to be approached in an integrated way: disclosure of information has not always led to increased transparency and requires content standardization for which appropriated control mechanisms, that is, attestation rules are necessary'.[116] Since one of the goals of Basel III is to improve the disclosure and

[112] McKinsey&Company, 'Basel III and European banking: Its impact, how banks might respond, and the challenges of implementation', McKinsey Working Papers on Risk, No. 26.
[113] Idem.
[114] Idem.
[115] Blundell-Wignall, A., Atkinson, P., 'Thinking beyond Basel III: necessary solutions for capital and liquidity', OECD Journal, Financial Market Trends, Vol. 2010, Issue 1.
[116] Van Daelen, M., van der Elst, C., 'Risk Management and Corporate Governance: Interconnections in Law, Accounting and Tax', Edward Elgar Publishing, p.x.

transparency of financial institutions, it still creates certain risks pertaining to the disclosure of confidential business strategies. The question will be how it strikes the right balance between the necessary amount of disclosure to fulfil shareholder and stakeholder expectations and maintaining the right confidentiality for financial institutions to conduct profitable business strategies. Furthermore, one of the problems that certain financial institutions faced prior to the crisis (e.g. hedge funds) was that the majority of them were involved in similar businesses, therefore skewing the businesses to one side and not supplying enough of other types of businesses.[117]

2.7. Resolution framework

The banking literature proposes that Basel III does not offer a sufficient resolution framework when, for example, (loan) recovery rates are key to the banking practice. The resolution frameworks need to support financial stability and limit moral hazard problems and ensure that creditors and shareholders bear the financial burden of the resolution process.[118] In the European Union, the European Commission has drafted rules regarding the way in which regulators should set out to deal with defaulting banks without resorting to (taxpayer) bailouts.[119] The European Commission proposes the ‘bail-in idea’, which creates a pool of funds and liability held by the bank that will be used when it gets into trouble.[120] In this regard also, there are concerns whether the national authorities have the expertise and should have the power to set the minimums, especially in an EU wide perspective, where the internal market is of course a principal concern. These ‘bail-ins’ will further have an impact on liabilities, since some of them might be exempted from this, such as secured debt, liabilities with maturity of less than a month, and guaranteed deposits, however this is still being debated. The draft further provides for certain instruments, like derivatives, that could be bailed-in in certain circumstances, typically when financial stability is threatened. The proposals include a provision forcing banks to draw up their resolution

[117] Kaal, W.A., ‘Hedge Fund Regulation via Basel III’, 44 Vand. J. Transnat’l L. 389 (2011).
[118] IMF, ‘Resolution of Cross-Border Banks – A Proposed Framework for Enhanced Coordination‘, Prepared by the Legal and Monetary and Capital Markets Departments, June 11 2010.
[119] Connaghan, C., ‘EU to Push Nation’s Powers Over Weak Banks’, Wall Street Journal, June 3 2012.
[120] Idem.

plans (i.e. living wills), which would set out how it would be quickly wound up as if it defaults.[121]

Another resolution proposed by the European Commission for a resolution framework is to set up national resolution funds. These would require banks to set aside a certain amount of cash that would be used if they default. As the European Union strives for integration and internal market fluidity, it would recommend that member states lend some of its resolution funds to another member state if there is a crisis elsewhere in the European Union.[122] The increased power of national authorities to replace management is another resolution mechanism, according to the Commission. In the event that a national authority decides to remove a manager, it can replace it with a special manager that it selects. This provision is especially important for failing systemic banks, since national authorities need the flexibility to properly address the risks that such firms pose to the real economy. Once again, to properly address risks, a proper definition needs to be developed. Hence, as we have seen, an element that needs to be considered is the correlation between the institutions in the economy, since they affect each other (i.e. they also affect each other's activities). A proper resolution framework is especially important in the event of insolvency or near insolvency (also in defining when a financial institution becomes insolvent), as it can avoid losses for depositors.

At the international level, the IMF has drafted a resolution framework that would develop a common resolution infrastructure for all member countries. It proposes an enhanced coordination framework for the harmonisation of national resolution rules on four levels: non-discrimination against foreign creditors, appropriate intervention tools, appropriate creditor safeguards and robust rules on depositor priority. Countries that want to participate will be required to have such common rules. As the supervisory process has been, for a while, criticised, this framework stresses the need for a sufficiently robust supervisory body in the home country (the home country of the financial institution is key in this framework). Countries will need to have the institutional capacity to implement any international solution; hence it must have sufficient resources and infrastructures in place to

[121] Connaghan, C., 'EU to Push Nation's Powers Over Weak Banks', Wall Street Journal, June 3 2012.
[122] Idem.

do so. Effective supervision, both at the national level and at the international (i.e. cross-border) level is an essential component to an effective crisis prevention framework.[123]

2.7. Concluding remarks

All in all, in 2010 the view on Basel III was favourable. D&B claimed that the new capital requirements would probably create some barriers to smaller sized enterprises since the credit conditions for these would be reinforced, i.e. they would have more trouble than larger institutions in implementing these new requirements.[124] Closing the gaps caused by Basel III will impact bank profitability, and all other things being equal, it could reduce return on equity (ROE) for the average bank by about 4 percentage points in Europe and 3 percentage points in the United States.[125] The BCBS introduces these changes in a way that aims at minimising the disruption to capital instruments which are currently outstanding, however as we see in Spain, the amount of capital required to provide a minimum buffer is approximated at €40 billion to restructure their banks.[126] Basel III will be affecting the way in which banks conduct business through changing the definition of capital, and the way in which banks can build their trading books. All assets of banks are required to meet the liquidity needs in times of stress within a given time frame, though many requirements are already in place some still have to be reviewed by the BCBS (i.e. contingent capital). Basel III makes the distinction in the risk calculation between small and large banks (i.e. Group 1 and Group 2), as the risk they pose to the real economy is not the same. International banks will be subject to more stringent capital requirements than smaller banks, as their default would have a much larger impact on the real economy.

While banks are busy to find the model that will be most cost-efficient, it would be helpful if regulators created an international concept that would allow mitigating some of the costs banks would have to go through otherwise. The national regulatory framework should not dampen the innovation of bank instruments and business. Rather, it should

[123] IMF, 'Resolution of Cross-Border Banks – A Proposed Framework for Enhanced Coordination', Prepared by the Legal and Monetary and Capital Markets Departments, June 11 2010.
[124] D&B, 'The Business Impact of 'Basel III'', A D&B Special Report, October 2010.
[125] McKinsey and Company, 'Basel III and European banking: Its impact, how banks might respond, and the challenges of implementation', No. 26, 2010.
[126] Basel Committee on Banking Supervision, Basel III: A global regulatory framework for more resilient banks and banking system, December 2010 (reviewed June 2011).

stimulate not only financial institution innovation, but should also stimulate the involvement of banks in venture capitalism. Finally, although some of the international bodies (i.e. IMF, BCBS, World Bank) have studied and drafted some common framework, it seems that a solution for the different implementation of Basel III capital requirements is not sufficiently addressed. Perhaps it would be a good idea to limit the authority of national regulators and supervisors to the extent that their decisions do not harm others, by reinforcing a coordination mechanism. It is time to think in terms of a global market sharing the same risks.

3. Implementing Basel III: Options and opportunities

Since the implementation of Basel III is left to each national regulator, there will be multiple ways and extents to which financial regulation can be implemented. The first section will look at micro- and macroprudential approaches, since they are at the heart of drafting financial regulation. Then, we shall consider the possible ways in which Basel III is implemented by organisations, as proposed by Moody's: by modifying the current legal environment or by creating a new one entirely. Some will argue for a more laissez-faire approach, in that there are already too many regulations, while others argue that banks cannot be left to decide on their own, as can be seen from past experiences, since they will not seek to behave in the best interest of the shareholders, stakeholders and the general economy. Therefore, financial regulation is important because it sets out the methodology banks need to adopt to calculate their capital and manage their assets. According to the literature, bank regulation can be done in three ways: through requirements, restrictions and principles. Each have a different impact on banks: some are imposed and banks may not deviate, whereas others simply give principles, leaving it up to the banks to determine the best way these principles can be implemented in their own institutions. This will lead to looking into rules based versus principles based system.

3.1. Microprudential versus macroprudential framework

While Basel II was more microprudential in nature, Basel III tries to cover some of the macroprudential elements by incorporating them into the capital framework to help contain systemic risks arising from procyclicality (i.e. Basel II was criticized as being too procyclical) and from the interconnectedness of financial institutions (also referred to as correlation).[127] The Lehman Brothers default did show this interconnection between firms across the globe. In Europe, the default of Dexia S.A. and Fortis demonstrated the complexity of ensuring cooperation between the member states regulators when it comes to bailing out banks. In fact, the BCBS encourages the development of macroprudential policy frameworks, since the focus has been for too long on individual firms. This means that national authorities are developing prudential policies to cover their system as a whole rather than starting from individual banking institutions. Macroprudential policies should be seen as the strategies, tools and policies used by the national authorities to improve financial stability across the system. This is defined as a top-down approach. As defined by Borio, 'it means taking explicitly into account the fact that drivers of risk depend on the collective behaviour of financial institutions (are 'endogenous'), and are not something outside their influence ('exogenous').'[128] This approach aims at limiting the risks of episodes of system-wide financial distress with the goal to avoid or contain the costs generated for the real economy (output loss).[129] Actually, macroprudential policies address risks from interconnectedness, common exposures, and procyclicality. In the European Union, there are certain measures (i.e. single license and mutual recognition) that do not consider the risks and negative externalities that can be linked to financial institutions on the host member states. To remedy to this, the European Union proposed certain regulation that would provide more 'convergence of subsidiary and branch structures'.[130]

Understanding the microprudential and macroprudential approach to financial regulation will help in understanding the workings of Basel III and the next steps to take in terms of regulations to mitigate the costs imposed on banks in terms of data reporting/accounting standards. The framework that used to be (before Basel III) applied to financial regulation was more of a microprudential approach. This meant that financial regulation focused on avoiding the costly failure of individual firms (too-big-to-fail firms) rather than the industry as a whole. Since this was insufficient, or was the 'weakness' of the

[127] Borio, C., 'Implementing a macroprudential framework: Blending boldness and realism', Bank for International Settlements, 22 July 2010.
[128] Idem.
[129] Idem.
[130] Ferrarini, G., Chiodini, F., 'Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework', Law Working Paper No.158/20 10, May 2010.

current framework, Basel III is now largely macroprudential in nature.[131] Now, regulators recognize the importance of maintaining the system as a whole and tend to adopt a mix between micro- and macroprudential approach. This comes as various studies, many done by the OECD, identified the origins of the problems the world experienced in the banking industry as follows: They identified the 'too-big-to-fail' firms as the core of the problem, since they took upon themselves too much risk; insolvency as a result from contagion and counterparty risk; lack of regulatory and supervisory integration; lack of efficient resolution regimes.[132]

The purpose of using a macroprudential type of framework is to avoid system-wide financial distress. When looking at strategic management theory, the literature stresses the need for specialisation, coordination and cooperation that can be answered through hierarchy, coordination can deal with integration problems and the actions of different individuals. The mechanisms might not necessarily solve some of the coordination problems, e.g. agency problems where different people have different goals, but there should be some incentives and control mechanisms in place. It is left to the national regulators and trend setters to structure the financial regulation that financial institutions will need to abide by, even though international organisations offer their input. The problem of regulating at a macroprudential level, especially regarding systemic risk, is that regulators might actually contribute to systemic risk through their regulation rather than preventing it.[133]

Since the crisis, the question has been what standpoint regulators and supervisors should take towards financial regulation. This will have an effect on the effective supervision of banks, as supervisors might direct their attention to the health and soundness of an individual firm rather than the industry as a whole. The literature has found this to be problematic because if we consider the microprudential approach to restoring capital ratio, it is possible for one bank that is experiencing difficulties to cut back on its assets, e.g. loans. If only one bank is doing this, then the others can simply cover the demand for loans.

[131] Hanson, S., Kashyap, A.K., Stein, J.C., 'A Macroprudential Approach to Financial Regulation', Journal of Economic Perspectives, July 2010.
[132] Blundell-Wignall, A., Atkinson, P., 'Thinking beyond Basel III: necessary solutions for capital and liquidity', OECD Journal, Financial Market Trends, Vol. 2010, Issue 1.
[133] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?', The Independent Review, v. VII, n. 3, Winter 2003, ISSN 1086-1653, 2003, pp. 371-391.

However, this becomes problematic when there is more than one bank cutting back on their assets. In fact, this could cause another crisis as the demand for loans will not be satisfied, especially from an entrepreneurship and innovation point of view. Again, the 80% reliance on bank loans of SMEs could be undermined and cause the bankruptcy of these firms. Therefore, it is clear that regulators and supervisors need to adopt a macroprudential approach. Adopting a macroprudential approach would broaden the scope of authority of regulators and supervisors.[134]

The attempts by governments to limit the impact of bank defaults on the real economy and the public in general can better be done through a macroprudential framework. Indeed, the literature characterizes the macroprudential framework as 'an effort to control the social costs associated with excessive balance-sheet shrinkage on the part of multiple financial institutions hit with a common shock'.[135] With the new capital ratio requirements, which fall within a macroprudential framework, banks have a much higher minimum ratio of equity-to-assets to maintain in good times to sustain 'expected' losses in the bad times.[136] Holding such high ratios in good times is, according to some scholars, inefficient in the sense that banks could be using the capital to generate funds. However, since the expectation of bad times is also uncertain, it makes sense to require banks to hold a higher than normal capital ratio.

As we have seen in the previous sections, banks will be tempted to restructure their organisations in a way that will be cost efficient and profitable. The literature proposes that banks will want to shrink their assets since it makes these banks less risky. However, by shrinking the bank's assets (i.e. cutting their loan provisions), credit will be more expensive and therefore investment and employment will be reduced, leading to a contraction in the economy.[137] If a large number of banks shrink their assets by cutting the same illiquid assets, then the prices of such securities might drop, causing a fire sale.[138] The regulators and

[134] Bernanke, B.S., 'Reducing Systemic Risk', speech at the Federal Reserve Bank of Kansas City's Annual Economic Symposium, Jackson Hole, Wyoming, 2008.
[135] Hanson, S., Kashyap, A.K., Stein, J.C., 'A Macroprudential Approach to Financial Regulation', Journal of Economic Perspectives, July 2010.
[136] Idem.
[137] Hanson, S., Kashyap, A.K., Stein, J.C., 'A Macroprudential Approach to Financial Regulation', Journal of Economic Perspectives, July 2010.
[138] Idem.

supervisors therefore should try and find a way to promote the raising of new capital, rather than shrinking assets, as it is more desirable from a social perspective.[139] One of the ways in which this is done is through tax deductible equity and encouraging banks to issue more Tier 1 hybrids that are more equity-like.[140] However, the debt overhang problem identified by Myers can be even more problematic now, since the new requirements attached to non-common instruments (i.e. that upon trigger these become common instruments) might make it even more difficult to raise equity rather than cutting assets. Indeed, shareholders might request more in terms of return, and could lead to discounts in price of securities. However, banks could issue common equity instead.

There remains a very important problem linked to the banking industry. The deposit taking institutions are obligatorily insured, since depositors need to be protected against the possible reckless behaviour of banks. In fact, their capital ratio is typically calculated in terms of the variation in the deposits they have and that amount cannot be insured. On the other hand, there is what is called the ‘shadow banking system’, which is not subject to insurance. In the literature, a good point is being made in this regard: should the macroprudential framework extend to those financial institutions that are not subject to insurance? Many argue that regulators and supervisors need to extend their scope beyond deposit taking institutions, and to actually cover all the channels through which the actions of financial institutions can cause damage.[141]

There are several ways in which banks build their business strategy, or their capital structure. The most basic form would be traditional banking. These traditional banks provide ‘relationship loans’, offering the monitoring of advantages relative to capital markets, with code deposit funding (where they can pass along the benefit of a sticky price on deposits).[142] Other banks mainly rely on managed liabilities that are priced at market rates. These banks do not have to shift from insured deposits to managed liabilities in

[139] Idem.
[140] McNelis, S., ‘An Overview of Basel III: An evolving framework for banks’, HSBC, November 16th 2010.
[141] Hanson, S., Kashyap, A.K., Stein, J.C., ‘A Macroprudential Approach to Financial Regulation’, Journal of Economic Perspectives, July 2010. and Tucker, Paul, 2010, “Shadow Banking, Financing Markets and Financial Stability,” a speech at a Bernie Gerald Cantor (BGC) Partners Seminar, London, 21 January 2010.
[142] Hanson, S., Kashyap, A.K., Stein, J.C., ‘A Macroprudential Approach to Financial Regulation’, Journal of Economic Perspectives, July 2010. and Tucker, Paul, 2010, “Shadow Banking, Financing Markets and Financial Stability,” a speech at a Bernie Gerald Cantor (BGC) Partners Seminar, London, 21 January 2010.

response to tighter monetary policy. At the margin, loans are already funded with managed liabilities.[143] In the face of the changing regulatory capital requirements, commercial banks will need to consider what type of capital they will want to raise and how to structure their balance sheet. As we have seen, banks will want to either cut their assets or raise equity. For the regulator, this means that its focus should be on leading banks' choice of structure towards raising equity. Over the past months, the discussion on whether this should be a pre-capitalization or a recapitalization of banks was at the centre of national legislation. As we can see in the different national legislations, the current focus of the regulatory agenda is to protect the tax payers, since they were the one that had to pay for the bank defaults. Shifting the risk of default from tax payers to the investors themselves should lead to a more efficient and effective bank monitoring and governance.

The tools developed from a macroprudential perspective will help address the various problems that Basel III did not and contain the risks that are crucial to the soundness of the banking industry. So far, frameworks have been developed by international agencies covering the resolution problem, common capital standards, and so on. However, for banks that operate in multiple jurisdictions, according to their characteristics, it would be more efficient to have a definition of systemic risk upon which they can rely in developing their management system and upon which to base their reporting/assessment of material risk that needs to be disclosed.

3.2. Rule-based versus principle- based supervision

The position and influence of the regulators and supervisors in financial regulation are important as they can create the necessary regulatory framework and national legal environment for banks to develop in. According to the banking literature, there are two ways in which this can be done: on a rules basis or on a principles basis. It is said that the trend is like a pendulum and that it goes from rule-based to principle-based depending on the economic environment and cycle. However, this presentation of two clear-cut different legislative systems is contested by some authors as most systems are a combination of both rule-based and principle-based. This comes as rules can become more principle-like when

[143] Hanson, S., Kashyap, A.K., Stein, J.C., 'A Macroprudential Approach to Financial Regulation', Journal of Economic Perspectives, July 2010.

qualifications and exceptions are added to the rules, and principles can become more rule-like when requirements and best-practice norms are added.[144] The literature presents these two concepts as existing on a continuum and that rather there exist concepts or dimensions to identify where a particular system can be found on the continuum: temporal dimension, conceptual dimension, and functional dimension.[145]

To begin with, a distinction between rule-based and principle-based will be done on a general basis. The rules base approach implies that banks need to follow and behave according to strict rules and guidelines, have little room to manoeuvre and cannot deviate if their situation so requires. On the other hand, principles base is more a 'laissez-faire' type of approach in which principles are drafted and banks implement them according to their situation and needs. The problem with the principles base approach, according to some, is that it leaves too much discretion to banks, and so it happened in the past that they created certain instruments that were detrimental to consumers. A principle-based approach would allow for more restructuring flexibility for banks, as they could do so in a way that should not reduce their supply of finance to SMEs. However, a principle-based approach will require of firms to have a more extensive knowledge of the concepts that are involved in the principles, as well as extensive knowledge of the environment (i.e. the jurisdiction) in which they will operate.

The temporal dimension is said to indicate the time when the content of a regulation is provided. On a rule-basis, this approach defines the boundaries ex ante, meaning before the adoption and implementation. On the other hand, the principle-basis is settled ex post, when compliance is being audited and monitored.[146] From this perspective, the rules-based legislation will provide more certainty since the subject will know that it must be compliant, even though such a system requires more effort from the regulators since they need to know before adopting and implementing rules as accurately as possible what impact it will

[144] Hanson, S., Kashyap, A.K., Stein, J.C., 'A Macroprudential Approach to Financial Regulation', Journal of Economic Perspectives, July 2010.
[145] Burgemeestre, B., Hulstijn, J., Tan, Y.-H., 'Rule-based versus principle-based regulatory compliance'.
[146] Idem.

have on the economy, industries, and sectors. Whereas on a principle-based approach, it is up to the subjects to implement the principles, so the efforts lay with the subject.[147]

Then there is the conceptual dimension, which distinguishes between the general versus specific, abstract versus concrete and universal versus particular of rule-based and principle-based systems. The distinction between the two lies in the information that is provided: clarifications, details, exceptions, limitations. [148] Rules tend to be more specific and less vague than principles, as it leaves less discretion to firms.

As for the functional dimension, it is more oriented toward the discretionary powers that firms have on the basis of rules or principles. Rules barely leave any discretion, as firms are required to behave in accordance to the rules. On the other hand, principles leave a lot of flexibility to firms to structure their operations in the way that suits their business best. However, there is the risk that banks will adopt strategies that are detrimental for the general welfare. An example of a regulation that is in place, but leaves enough flexibility for banks to issue the instruments they wish, the European ESMA came up with a mandatory system of images/icons that illustrate the type of risks allocated to certain instruments, in order to better inform consumers. Banks are required to specify the level of risks that are attached to the instruments they issue. Some argue that regulation is actually the problem, and that the era pre-Dodd-Frank (i.e. allowing advisers to register on a voluntary basis rather than prescribed) was more effective for bank regulation, and these authors propose a trust-based approach, which is based on principles, and that the public would be operating based on such trust without the interference of regulation.[149]

In fact, the same article points out that without so much regulation, banks had the flexibility to issue businesses and structure their strategies in the most profitable way. The problem was that most banks entered into the same strategies and so this led to too much supply of a certain type of business and too little supply of other types, leaving a gap in the availability (also the variety) of products and liquidity. The views of self-regulation, based on principles, vary greatly. Some argue that banks cannot be left to self-regulation as they will

[147] Burgemeestre, B., Hulstijn, J., Tan, Y.-H., ‘Rule-based versus principle-based regulatory compliance’.
[148] Idem.
[149] Kaal, W.A., ‘Hedge Fund Regulation via Basel III’, 44 Vand. J. Transnat’l L. 389 (2011).

not be able to perceive the risk they are facing, like what happened prior to the 2007-2008 crisis, where banks did not have a proper management in place to evaluate the risks. Then again, the problem was that banks, especially the large ones (i.e. systemic banks, multinational banks), did not have a common perception of what consisted of risk. Because of this, banks did not evaluate their risks in the same way, leaving aside some risks that should have been considered, as banks calculate their risks internally.

According to the literature, regulation and macroeconomics are other factors that can impact capital structure decisions for firms.[150] Indeed, regulated firms tend to have more stable cash flows and lower expected costs of financial distress, since they cannot behave in a reckless way. Furthermore, the more the banking industry is regulated, the less discretion managers have. This reduces agency problems and reduces the need for debt as a disciplinary device.[151] Leading up to the crisis, supervision of banks was done on a principle basis, but when in 2008 the collapse happened, we shifted to a regulation basis because the goals of regulators and supervisors changed. After realising the problems, and determining who needed most protection from the reckless behaviour of banks, regulators and supervisors made use of regulation to limit the extent of the damage. A regulatory basis is necessary whenever financial firms become a serious threat to the real economy and the general public, and considering the current state of the world economy, enhancing the current global system could lead to a less costly restructuring for multinational banks, if the right approach is used. Striking the right balance between regulation and principles is always necessary in creating the legal environment. At the international level, it is rarely a regulatory base since implementation is left to jurisdictions.

The literature presents the advantages of rule-based regulation as requiring less interpretation to be implemented, leading to more legal certainty. On the other hand, principle-based leaves the implementation to the firm that must implement the guidelines. Principle-based regulation needs to first identify control objectives and then design a system of control measures (i.e. internal controls).[152] Implementing principle-based policies might require the necessary legal knowledge (also of the different legal environment in which

[150] See Erel, I., et al., 'Macroeconomic Conditions and Capital Raising', 2011.
[151] Baker, Martin, 'Capital Structure and Corporate Financing Decisions', United States of America: Wiley, 2011.
[152] Burgemeestre, B., Hulstijn, J., Tan, Y.-H., 'Rule-based versus principle-based regulatory compliance'.

multinational banks operate) and the necessary expertise of the domain in which they operate.[153] Also, in adopting a certain principle may lead to a trade-off with another principle.[154] Finally, the literature presents that,

3.3. Enhancing or restructuring the organisation

From the banks' perspective, in implementing Basel III into their organisation, they consider the time and costs of doing so. According to Moody's, a rather cost-effective way that banks will be adapting to the changes is by enhancing their current business structure (or legal environment) that is based on Basel II and gradually implement the new requirements. They can do so by adding new 'modules' or pillars to handle these new requirements (i.e. leverage and liquidity management, stress testing, data warehousing, reporting), therefore building upon their old structure.[155] By enhancing their current structure, organizations will be able to adopt the requirements and standards at the pace that suits them best without disrupting their business. In this way, it is the regulatory environment that is shaped around the business needs and considerations rather than shaping the business around the legal environment, which makes it more costly to restructure the business. This also allows banks to recapitalise on their current investments, and for some organizations it might be the least costly and least disruptive approach for complying.[156] However, banks are still facing an implementation date by which they must have implemented the new standards within their organisation. For firms it is inevitable to conform to the standards and requirements in the jurisdictions in which they are operating. If they do not, regulators and supervisors will devise penalties for banks that are not conforming or that are deviating from the regulatory standards.

The issue raised by the literature is that banks absolutely must have a clear idea of how the regulatory environment is to be configured, which at the moment is quite a challenging task as some of the Basel III requirements and standards are still being reviewed. Regulators and supervisors also still need to build a resolution framework, either in

[153] Idem.
[154] Idem.
[155] Chabanel, P.-E., 'Implementing Basel III: Challenges, Options & Opportunities', Moody's Analytics, White Paper, September 2011.
[156] Idem.

cooperation or on an individual basis. Hopefully, it will be based upon the proposals of the IMF, as this will harmonise resolution across borders and should lessen the burden on multinational banks. Linked to this is the problem of operating in multiple jurisdictions, which increases the costs and burden imposed on multinational banks. Next to that, such an enhancement could be difficult to implement in a business environment that has been in place for quite some time already. The literature proposes to conduct a gap analysis in the business organisation, find out what gaps need to be filled, and once the targeted (legal) environment has been defined to identify the areas that need reviewing. In doing so, banks will need to make sure that all functional gaps are filled, that the integration between different applications is applied consistently, and make sure they clearly understand the regulations of the jurisdiction(s) in which the bank operates to ensure that it meets them.[157]

In some instances, it might be necessary to create a new legal environment that could bear the needs of creating macroprudential frameworks. Creating a new legal environment can be more costly than to enhance it, as banks will have to completely restructure their business and legal environment. Others propose that banks consider some exit strategies, thereby reducing the array of activities they are involved in and the products/instruments they offer to their clients. In the face of Dodd-Frank in the United States, banks (i.e. foreign banks with subsidiaries, branches or agencies in the US) that have worldwide assets of over $50 billion will be treated as SIFIs, since the US is now adopting an approach that will consider banks' assets on a worldwide basis rather than on a US or domestic basis.[158] Some banks will be reconsidering their geographical diversification as some jurisdictions will not be profitable anymore, so they might decide to move their operations elsewhere. This can be done through merging some of their affiliates or creating new ones. Then, they should provide the necessary incentives for their clients to move to the entity that will minimize banking costs.[159] The problem in creating a new environment that is to be implemented parallel to the old one is that it has a significant scope of error, and it is difficult for the organisation, in building a completely new structure, to get it right

[157] Chabanel, P.-E., 'Implementing Basel III: Challenges, Options & Opportunities', Moody's Analytics, White Paper, September 2011.
[158] PricewaterhouseCoopers, 'A closer look: The Dodd-Frank Wall Street Reform and Consumer Act Protection', September 2011.
[159] McKinsey and Company, Basel III and European banking : Its impact, how banks might respond, and the challenges of implementation', November 2010.

the first time since it will not be able to rely on historical facts, whereas an organisation building upon its already existing structure can compare to past experiences.[160]

A recent example, to demonstrate how costly this can be, is that of Spain. As reported by the Financiële Dagblad, after stress tests being conducted, the IMF now foresees that Spain needs approximately €40 billion (which recently increased to €100 billion) for some of its banks to make sure that they can withstand the economic crisis. These Spanish banks would need this capital as a buffer for the restructuring of their organisations and the losses they have incurred in terms of loans.[161] In fact, the news article indicates that Spain would actually need at least €80 billion to stabilise its economy and for banks to make it out of the crisis. This is just one example to demonstrate the impact that implementing Basel III's capital requirements has on banks that need to restructure their organisation around the regulations and requirements. This is not a call from Spain to receive funds; it would be a prudential calculation (i.e. prevention). In any case, we can see that the way in which banks will be adapting to the new regulations will be costly for banks and for agencies that need to provide the funds to cover the buffer/losses.

4. Reviewing the current practice

It is difficult to create a uniform one-size-fits-all framework or common frame of reference that would apply to all financial institutions at the international level as they are fundamentally unique through their operations, structures, and strategies. Also, proposing a global framework implies that jurisdictions need to give up a part of their (supervisory) influence and responsibility to possibly an independent body, which means that interpretation (e.g. of risk) could change in a jurisdiction. Many countries are reluctant to relent some of their supervisory powers to a different body. This is especially so for the banking industry since authorities have growing concerns over the stability and fiscal costs that would result from bank failures.[162] However, there have been multiple attempts at creating common frames of reference in some areas (e.g. Resolution Framework, common

[160] McKinsey and Company, Basel III and European banking : Its impact, how banks might respond, and the challenges of implementation', November 2010.
[161] Eikelenboom, S. or de Groot, G., 'IMF: €40 mrd nodig voor Spaanse banken', Financiële Dagblad, June 9th 2012.
[162] PricewaterhouseCoopers, 'A closer look: The Dodd-Frank Wall Street Reform and Consumer Act Protection', September 2011.

contract terms), but the problem remains that few countries ratify such proposals. In some cases, countries request that there is the possibility to opt-in or opt-out of certain provisions, making the framework redundant. However, considering the importance of risk management, opting-out should not be an option. Furthermore, as financial institutions do not rely in the same way and to the same extent on the financial market, since they have different capital structure and risk exposures, the potential for market discipline will vary across countries and within a jurisdiction.[163] It becomes clear that in proposing an international approach to the challenges, the right balance must be struck by international authorities, in terms of rules and principles, and in terms of how strict such a system should be. This is especially important to avoid creating policies that distort the market and prices, and lead to deadweight loss. As we have seen in this paper, from all the challenges faced by banks, coming up with the right definition for systemic risk and the proper management of risk appear to be the crucial elements that need to be dealt with. Hence, the aim of this chapter is to propose a definition of systemic risk that could be used, applied and monitored by colleges at the international level (i.e. creating a body composed of colleges of supervisors of different countries).

Regulators, supervisors and financial institutions have a common goal: to implement the new capital requirements by a strict deadline in order to avoid the failure of systemically relevant banks in the future; reduce the losses of depositors and deposit insurers; and to ensure the financial stability through capital requirements that provide a better equity cushion to banks. A recurring problem that regulators and supervisors face is that there is no real definition of systemic risk; at least the definition can be different to everyone. There is no real definition because of the differences among jurisdictions and among the different financial institutions, the fact that banks are unique and that financial systems are different from one another. The lack of definition for systemic risk is problematic because, in order to develop tools and mechanisms to properly manage these risks, it needs to be defined. Since systemic risk can be domestic or transnational[164], here I will focus on systemic risk at the transnational level as, at the domestic level, it makes sense for the national authority to evaluate the type of risks arising from domestic firms that will affect the real economy.

[163] Basel Committee on Banking Supervision, Pillar 3 (Market Discipline)', January 2001.
[164] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?', The Independent Review, v. VII, n. 3, Winter 2003, ISSN 1086-1653, 2003, pp. 371-391.

However, at the transnational level, since multinational banks operate across borders, multiple jurisdictions are involved and affected, and the interconnection between firms and jurisdictions is nothing short of predominant, 'transnational systemic risk' needs to be defined using common factors that affect multinational banks. Hence, the focus should be on defining systemic risk from an international and multidisciplinary approach.

First of all, as we have seen there are a few elements that have been proposed and that can be useful in defining terms such as systemic risks. The literature has presented financial institutions as portfolios. On the one hand, these can be considered on an individual basis. On the other hand, the portfolio can be the system as a whole in which each financial institution represents a security. It has already been argued that Basel II focused too much on the micro level risks (i.e. firms on an individual basis) rather than the macro level, and that this led to the problems of the financial crisis. Basel III is more macro level oriented in that in its redefinition of capital, it requires additional data to calculate the risks that banks are imposing upon the economy. In the past, the Basel frameworks have not captured all risks mostly because the risks could not be defined. The main concern is the effect of systemic firms, as they are the greatest risk in the real economy. Systemic firms have been the focus of regulators' attention, especially in late times. According to some literature on risk management, various sectors are interconnected when it comes to determining risks (also systemic risk). Risks can be approached from an accounting perspective, business, financial and from a tax law perspective; as these fields are interconnected and require from firms particular behaviour.[165]

Kaufman presents evidence that contagious systemic risk (i.e. its probability, strength and breadth) is greater in the banking sector than in other sectors when the bank experiencing the shock is large and significant enough. Since internationalisation is predominant in the case of systemic firms, it would appear more sensible to extend the definition to contain international risks. Most definitions limit themselves to defining systemic risk as the collapse of the national economy. However, because of the correlation between banks across borders and the domino effect they can have on each other (i.e. risk of a chain reaction), it seems more relevant to wrap the definition of systemic risk around

[165] Van Daelen, M., and van der Elst, C., 'Risk Management and Corporate Governance: Interconnections in Law, Accounting and Tax', Edward Elgar Publishing.

cross-border factors. Also, Kaufman demonstrates that the definition of systemic risk is crucial in assessing the occurrence of bank failures. The most frequently criticized aspect of Basel III and related legislation is the lack of definition of crucial terms such as what systemic risk consists of, the implication of time-variety in the calculation, procyclicality, and other variables that impact the banking industry. For example, some experts argue that regulators are applying certain terms and notions in a too broadly, consequently not capturing all risks and the possibility for banks not to report everything. It was indeed argued that the flexibility of banks being able to calculate their internal ratios and deciding the way in which it is done allowed banks to omit certain risks from the calculation. Still, defining systemic risk is necessary to properly manage them. A broad definition of systemic risk tends to notice systemic risk more often, whereas a narrow definition (i.e. common-shock systemic risk) which focuses on the short-term systemic risk will be more frequent. Next to that, defining what it means for a bank to be solvent or insolvent will also be an important factor to defining systemic risk, especially now that the state of being insolvent is at the core of some of Basel III's new capital requirements (i.e. NVCC clause). According to Kaufman, the definition of solvent/insolvent banks is not sufficient yet, and since provisions such as NVCC clauses will affect subsidiaries (the OFSI advisory on the NVCC extends to subsidiaries operating in other jurisdictions), defining what it means to be insolvent, rather than leaving it to the discretion of the OSFI to decide when a firm is insolvent, will lead to more certainty for banks.

As we have seen, the transmission of shock from adverse risks will be dependent upon the characteristics of banks, as well as the shock itself. As Kaufman evidenced, problems at one bank are transmitted almost exclusively to other banks that were subject to the same shock and that have the same or similar portfolio-risk exposures. Therefore, in order to properly capture the risks posed by certain systemic banks, a categorization could be efficient to define the types of risks that such banks pose. The BCBS already distinguishes between Group 1 banks (multinational) and Group 2 banks (domestic) in applying certain restrictions. Starting from there, authorities (i.e. regulators and supervisors) could redefine these groups in more distinct groups according to the type of risks they pose, based on their common factors. Such a redefinition could provide the distinction between groups and the possibility to create certain restrictions and principles that do not need to apply to all the banks of Group 1 for example, but to those that conduct certain activities. It seems, with the importance of Group 1 banks (i.e. multinationals), more sensible to create a body where national authorities could report on the systemic risks they uncover. This could facilitate the understanding and perception of risk, especially for banks that have branches and/or subsidiaries in other countries, where they are required to implement different standards/requirements. It could make the foreseeability of risks more efficient. As authorities are trying to prevent banks from becoming too big, establishing a threshold beyond which stricter restrictions and requirements would apply could help.

Defining systemic risk is important in the macroprudential context since multinational banks are interconnected and can have an adverse effect in other jurisdictions in which they may have a subsidiary or branch. Furthermore, a proper definition of risk can avoid some adverse side effects of some regulations and policies taken by governments in response to crises. Therefore, defining common elements that would make 'transnational systemic risk' is especially important for banks operating across borders. Such a definition should serve as a basis for multinational banks to develop a better risk management and internal controls in accordance with the systemic risks involved in operating across borders. To do so, the factors that are common to multinational banks in the same category should serve as minimum standards for the definition of systemic risk that needs to be contained. Factors that are commonly faced at the international level are variation in sectors depending on the banking industry. For example, prices of oil, real estate, and sectors such as agriculture can affect bank viability. The health of the economy of a subsidiary country or of the parent bank's country can also adversely affect the parent bank or its subsidiaries. In dealing with systemic risk, regulators must be careful with the actions it takes to limit these risks as they might undermine or reinforce the private-market incentives.[166] As argued by Kaufman, strong attention from regulators is important in that they need to create safety nets that do not stifle the liquidity of capital, the availability of capital to entrepreneurship and innovation.

Defining risk will most likely depend upon the type of information participants will require from multinational banks. Among others, Basel III requires that banks adopt a global

[166] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?', The Independent Review, v. VII, n. 3, Winter 2003, ISSN 1086-1653, 2003, pp. 371-391.

transparency system of their risk across the enterprise. Banks are required to report according to the reporting standards of the jurisdiction in which they operate. In having to report according to multiple methods, it can be more costly than if there was a single method, however this is beyond the scope of this paper. Furthermore, the BCBS stresses that banks have to be able to understand and articulate their appetite for the level of risk (i.e. 'amount of risk, on a broad level, an entity is willing to accept in pursuit of value')[167] in which they choose to operate. Most importantly, they must demonstrate that they have control over the risks and regularly report on them, to the regulators and shareholders. The problem with reporting on those risks is that bank management only has a vague concept of 'material risk', as we have seen in the second section, to rely upon in writing its report. The problem with international portfolios (i.e. from multinational banks) is to determine the extent to which firms within countries are linked and so to what extent international markets are integrated or segmented.[168] Also, the literature pointed out that the overall risk presented by portfolios is not only the sum of the risk of individual institutions but it also depends on the connection that exists between them.[169] This connection is based upon the factors that systemic firms share and these factors need to be determined and categorized according to banks' characteristics.

Bordo et al. and Allen & Gale[170] have studied the way in which financial crises happen through history, in order to attempt to create a model that would help in preventing financial crises in the future. One event that stands out is the worst financial crisis, that of the Interwar Years (1919-1939), since the Great Depression affected most countries. In my opinion, such findings stress the need to find some common elements regarding systemic risks at the transnational level, as this is what the BIS is trying to regulate and internationalisation is increasingly important in the banking industry. As we have seen in this research, creating an independent body or enhancing the current regulatory body at the national level would be a good place to start. Indeed, in doing so, it would give the

[167] Van Daelen, M., and van der Elst, C., 'Risk Management and Corporate Governance: Interconnections in Law, Accounting and Tax', Edward Elgar Publishing.
[168] Grinold, R., Rudd, A., Stefek, D., 'Global factors: Fact or Fiction?', The Journal of Portfolio Management, Fall 1989, http://www.msci.ru/research/articles/barra/globfact.pdf
[169] Van Daelen, M., and van der Elst, C., 'Risk Management and Corporate Governance: Interconnections in Law, Accounting and Tax', Edward Elgar Publishing.
[170] Allen, F., Gale, D., 'An Introduction to Financial Crises', The International Library of Critical Writings in Economics, Edward Elgar, August 14 2007.

possibility for a clearer break between the government and the financial regulatory body. As the literature has shown, a clearly independent body is more efficient and can better assess the actual needs of the national economy and its participants, as well as the national welfare situation. Furthermore, an independent body might be able to work better with international agencies to create a more harmonised view of aspects that proved problematic during the financial crisis, such as the definition of systemic risk, corporate governance principles, and so on. Indeed, the BCBS stresses the need for an effective supervisory framework and adequate public disclosure, since the current one is not efficient and does not capture all risks. Next to that, bank supervisors do not necessarily have the legislative power or infrastructure to ensure that all incentives for market discipline are in place. The literature further argues that banks cannot efficiently be subject to market discipline from fully insured depositors who have nothing at risk, who have no motive to impose discipline upon banks, and who are subject to bank runs. Accountability therefore is increasingly important with the new capital requirements and new standards, the current accountability will probably be changing in the same way as corporate governance will change, since responsibility is shifting from one party to the other.

The other important problem that partly caused the financial crisis was the lack of a proper and efficient supervisory body and process. In the European Union, as pointed out by Ferrarini, the problem lies in the steps already taken by the EU bodies as they are not sufficient to properly address the supervisory issues. Indeed, Ferrarini suggests regulating crisis management and resolution for multinational banks. It seems however that in order to be able to notice that a crisis might be emerging, and hence might need to be managed, the process will start from the data collecting, testing, and reporting. In fact, in the European Union, the CRD IV amendments, e.g. Article 131(a), propose the centralisation of information and power by making it mandatory for all banks and banking groups having significant cross-border subsidiaries and/or branches to have a college of supervisors, which is responsible of the provision of a framework to the relevant authorities to perform certain tasks.[171] This aims at enhancing the cooperation and coordination between the Member States of the European Union, as it should enhance information exchange, delegation of

[171] Ferrarini, G., Chiodini, F., 'Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework', Law Working Paper No.158/20 10, May 2010.

supervisory responsibilities, supervisory examination programs based on risk assessment of the group, and so on.[172] At the international level, the closest we find to such an organisation is the Basel Committee on Banking Supervision which consists of 'more than 5,000 senior executives and officials from central banks and supervisory agencies'[173] who meet every year. However, in my opinion such meetings should include members of the colleges of supervisors, which would consist of actual multinational bank members, those directly involved in the bank management. The responsibilities of such an international college of supervisors would need to be defined. Since the goal of Basel III is to create a sound financial system across the globe, it would seem appropriate that such a college has the responsibility to create sound corporate governance standards upon their banks, with the cooperation of the BIS. Such a college should have the responsibility to assess the current market risk that multinational banks are facing.

The current practice is that standards and requirements are left to the discretion of national authorities. As a consequence, it means that each jurisdiction is left to create its own framework to implement the Basel III rules. From a regulatory point of view, the banking industry might be too heavily regulated since the flexibility of banks to recapitalize and develop tools and mechanisms is restricted. Some argue that it should be left to banks to recapitalize in the way they see fit, while others will argue that this could possibly lead to banks not attempting to innovate in their recapitalization. If banks stop innovating or if they adopt the same strategies (because of the restrictions), this will once again lead to financial crises. The literature stresses that the role played by regulators is often not sensitive enough towards the private actors of the financial sector and that it undermines their incentives. The compliance burden that now presses upon multinational banks can have adverse effects; as such banks are now prevented from becoming too big, leading them to cut some of their unprofitable assets. In my opinion it makes it more likely that banks will once again adopt the same strategies, and the literature on the financial crisis amply points out that this was very problematic in the first place. Next to that, as we have seen in this paper, certain jurisdictions are not yet implementing Basel III, they are either still working on implementing Basel I or II, or like the United States they already adopted their own national

[172] Idem.
[173] Bank for International Settlements, 'BIS activities'.

legislation (sometimes conflicting with the Basel III requirements). In operating across borders, multinational banks must abide by these different rules which explain why experts expect banks to move their operations to jurisdictions that are more profitable and that are less restrictive. Next to that, experts pointed out that banks are using an obsolete model for their data storage because of the new requirements, and that it is not efficient enough since data used to be stored in the many departments in a bank. Since banks will need to gather more data and to conduct more stress tests, it is proposed that they move toward a centralized data storing system. As many regulators have pointed out, they fear that the fact that they are implementing Basel III earlier than other jurisdictions will lead banks to move some of their businesses to other jurisdictions, where the costs of operation would be lower and so more profitable for them.

Most importantly, the literature[174] on the banking sector has shown that multinational banks are correlated across borders, which means that they are interconnected in that they affect one another and hence can have spill-over effects in other jurisdictions. Indeed, Kaufman presented that transnational banks connect jurisdictions through insolvency matters especially. When considering the fact that a lack of proper risk management has led to the crisis, it seems more efficient for the future to attempt to create a transnational concept of systemic risk that could be used by multinational firms in recapitalizing, in order to avoid the erosion of risk management systems and costly restructuring based on a vague concept of systemic risk. As we have seen, the current regulatory and supervisory processes and bodies need to be reconsidered, as they were inefficient during the crisis and they failed to properly take actions against systemic risks. To remedy to that, I propose to attempt to establish a kind of international supervisory body, which would be a sort of institutionalisation of Basel III, and which would consist of members of national colleges of supervisors (as proposed in the EU).

5. Conclusion

[174] See Ferrarini, G., Chiodini, F., 'Regulating Multinational Banks in Europe: An Assessment of the New Supervisory Framework', Law Working Paper No.158/20 10, May 2010. And Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?', The Independent Review, v. VII, n. 3, Winter 2003, ISSN 1086-1653, 2003, pp. 371-391.

A recurring question is whether it really is beneficial to regulate banks or if we are simply creating a more burdensome environment, in any case increasing their operational and agency costs. The justification behind regulating banks is that on the one hand many market participants rely on them (i.e. government, businesses, and individuals), and these should be protected, especially the depositors and creditors. Next to that, regulation aims at restricting the capacity of governments and related agencies from lending to too many insolvent banks. It aims at protecting the Central Banks when they lend to insolvent banks. The BCBS's response to the financial crises was to update Basel II in 2009 (also referred to as Basel 2.5), but as Basel II was not sufficient and did not capture all the risks that banks imposed, Basel III was proposed in 2010. As we have seen in this paper, Basel III imposes a lot of challenges to financial institutions, since capital requirements are much higher than they used to be, and some consider these calculations to be too high compared to the actual risks that these banks are posing.

Next to that, the regulatory framework is being implemented at a different pace across the world, with most developed countries implementing Basel III by 2013, and developing countries still implementing Basel II. Such an unequal implementation disrupts the level playing field and can cause concerns to some jurisdictions, since it will most likely lead to regulatory arbitrage. Depending on the views of the regulators, regulatory arbitrage can be either a negative or positive thing. On the one hand, regulators fear that banks will move to less regulated and so less costly jurisdictions. On the other hand, authors argue that banks would be more efficient in a principle-based environment, where common factors affecting systemic firms would be addressed through principles. Such an approach would leave enough flexibility to banks to structure their business and strategies. However, Basel III has already been proposed, and so banks are now facing an increase in their operating costs since they are limited in the type of instruments they can issue, they are facing costly restructuration of their financial structure, management structure, and are facing costly agency costs from subsidiaries in different jurisdictions. Mitigating the costs of Basel III should be done in a way that will not only create a sound economic basis, but it should foster job growth, entrepreneurship, innovation, the protection of investors and consumers, strengthen the accountability of financial players, and of course to prevent any future crisis.

From this research, it became apparent that although Basel III is most likely to be beneficial in the long-term, banks are still facing very high compliance costs through their losses on investments, changing their capital structure, restructuring their business and organisation, and so on. The question remains whether the sole focus on capital requirements is the most efficient way to deal with financial institutions and if not, what are the problems that are left that should be addressed. One of the main challenges that banks, regulators and supervisors are still facing is the definition of risk. Similarly, in proposing Basel III, the definition of capital changed in a way to limit the type of capital that banks may hold and may consider as Tier 1 or Tier 2 capital. Risks need to be defined since they are at the core of the regulatory framework, the framework aims at mitigating those risks and creating a legal environment in which banks are forced to monitor the type of risks they face.

The main issue in defining systemic risk is that Basel III is left to the discretion of jurisdiction, since systemic risk can be domestic or transnational, which means that each jurisdiction might assess the risk posed by their systemic firms differently. Different jurisdictions also mean that firms are facing multiple requirements and standards that they must abide by and thus multinational banks have high compliance costs. In order to avoid any clash between national legislation and international rules (e.g. Dodd-Frank v. Basel III), some common or harmonised elements that would be part of the systemic risk definition in the case of multinational banks, would make the banking industry more efficient. It has been shown that multinational banks are interconnected and that they can affect the environment in which they operate[175], not only the country where the parent bank is located. Research showed that there is high correlation and clustering of bank failures in one country, in multiple countries or throughout the world.[176] There has also been evidence that systemic risk can occur in other parts of the financial sector (e.g. securities markets). Therefore, it is important that regulators and supervisors develop the proper tools and mechanisms that would allow for more cooperation and coordination among the jurisdictions based on a transnational systemic risk definition, rather than multiple definitions or one too broad single definition that would apply to all systemic banks.

[175] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to it?', The Independent Review, v. VII, n.3, Winter 2003, ISSN 1086-1653, 2003, pp.371-391.
[176] Idem.

Different implementations and interpretations of capital requirements lead to different concepts of risk and different ways to capture risk. However, an element that seems to be often ignored is that globalisation is increasingly predominant in the health of financial firms. As we have seen, some researches have shown that within a jurisdiction financial firms are interconnected, acting as dominoes when one fails, but they are also interconnected across borders. Indeed, firms are interconnected through their subsidiaries and the type of operations they conduct (e.g. deposits, securities, payment systems). The way in which firms are interconnected is through the common factors they must face in the real economy (e.g. variation in prices, variation in currency, time-variation). One common risk element is the capital banks need to keep in order to properly provide for their buffer and cover the risks they are taking. Although all banks are unique, they still face some similar risks according to their characteristics. Therefore, defining categories of banks would be a good start for a systemic risk definition.

The BCBS already categorises banks under Group 1 (multinational banks) and Group 2 (domestic banks). Since it is not feasible to develop a single definition for all banks, the focus should be on the factors that transpire across borders (i.e. that jurisdictions share) and categorizing systemic banks according to their characteristics, the risks they share (perhaps based on their type of balance sheet, strategies, operations management, and so on), and setting thresholds between the categories. In the same way as the literature expects banks to restructure in order to get a more favourable treatment under the new requirements, this might provide for banks to adopt certain businesses in order to fall under a certain category. Instead of creating rules to restrict banks in the type of instruments they can issue. Flexibility in restructuring opportunities should allow lending to SMEs. The definition of systemic risk needs to be useful for risk management purposes, it should be an objective criterion based on the actual factors that multinational banks face and that affect the systemic risk. Many systemic risks are difficult to point out because of their uncertain nature (e.g. asset bubbles), and their connection to certain jurisdictions. This is another reason why banks need the knowledge and expertise of other jurisdictions in which their subsidiaries or branches operate. Finally, once the definition of systemic risk is properly defined, management of financial firms as well as investors (through proper disclosure of the systemic risks that firms are facing) should be better able to recapitalise banks, develop a sound management model/system, and continue with a good assessment of risk (through a proactive type of management).

Another major problem that financial firms faced, and that regulators are still facing, is the lack of a proper management model and supervisory process. Although Basel III aims at avoiding that banks become too big, multinational banks remain an efficient organisation and since they are in large numbers and they are posing the most risk to the financial system, it seems appropriate to consider an international body, which in some way would be institutionalising Basel III. A potential hindrance in doing this is that all countries and banks are different from one another (i.e. from a political perspective, historical perspective, and economic perspective), and countries might be reluctant to give part of their sovereignty to a separate independent body. Regulations often tend to be too burdensome upon banks as they require very stringent standards. In response, banks will try to arbitrage rules away or to find other ways to avoid such regulations, leading to distortion in costs and more problematic financial crises. In order to avoid such behaviour, regulators and supervisors could develop more effective tools through cooperation and coordination, as argued in strategic management literature. This can be done through the creation of an independent supervisory body at the international level, to deal with transnational systemic risk.

As Ferrarini argued in his paper, the European Union’s Article 131(a) on colleges of supervisors is an efficient body in Europe. In my opinion, such colleges of supervisors should be considered at the international level as well. As we have seen, the BIS is a body consisting of members of central banks, but not of banks themselves. If banks have their colleges of supervisors, whom are directly involved in evaluating and managing risks (on the basis of a transnational definition of systemic risk), and capital of their financial firms, they seem to be the best ones to assess the position of their firms and to redefine if necessary transnational systemic risk. Furthermore, historical analysis of financial crises have demonstrated that the main causes for bank failures lay in local financial distress, but as the literature has shown, jurisdictions are interconnected through the spill-over effects of multinational banks. Therefore, colleges of supervisors could cooperate well together in order to assess the proper (proactive) steps that should be taken together with national/international agencies when financial distress is emerging. If there is a proper cooperation system in place, bank management might be better able to deal with the reaction of participants to bad news about banks. Indeed, since participants will tend to verify the risk exposure of banks after hearing bad news of particular banks.

Therefore, an international college of supervisors that would consist of one or a few members that are part of the lower colleges of supervisors (i.e. as set by Article 131(a) in the EU), with clearly defined responsibilities, could work in close cooperation with regulatory bodies (i.e. BIS, World Bank, etc.). Indeed, it seems that such a mechanism would be more efficient, as it would allow colleges from all countries governed by Basel III to come together and exchange their assessments and might be able to better monitor the risks in the economic cycle. If some fear that such an independent body would be too risky, it could be that the international college of supervisors would merely have the responsibility to properly assess risks, prevent any contagion and domino effect that could result from one or a group of multinational banks, and to transfer their assessment/report to the BIS, IMF and so on for them to assess what legislative steps they can take (also from a principles-based approach). The reports would be on their risk management system and the way in which their internal controls are operating, which would be in line with the requirements of Basel III. Furthermore, they could easily report on the data and stress tests that are being conducted in banks in order to calculate the appropriate amount of capital. It would be efficient since those colleges, being directly involved in their banks, would have direct access to data (which should become centralised in the bank itself) and information to make the stress tests and other calculations necessary to evaluate risk. Although such an independent body might have strict corporate governance principles to abide by.

Such cooperation and coordination among banks and supervisors has proven useful in the European Union where multiple jurisdictions need to work together to maintain the internal market. Even though the international arena is not the same as the internal market of the EU, the predominance of internationalisation pushes us towards adopting more global concepts and frameworks in order to maintain a healthy financial system. An example, as we have seen, is the recent proposal of the IMF to create a more harmonised and cooperative resolution framework among countries. Such a framework is more principle-based than rule-based as it is not obligatory; however the minimum standards that each jurisdiction would need to implement resemble rules. The goal is to have a body that would have the responsibility to assess the risks in order to avoid the closing of banks, which can have negative impact in national economies, social welfare, and certainly entrepreneurship and innovation. The involvement of the regulatory agencies should remain limited in adopting monetary and fiscal policies to produce or moderate macroshock, as this can be very negative for countries that are rather undiversified, and this can lead to another financial downturn.[177] This is why I propose to keep a more principle-based approach to regulating banks and to rather focus on developing definitions that are concrete and an international body involving bank colleges of supervisors since they are more likely to be aware of the risks their financial institutions are facing. All in all, the focus should be on the practice rather than creating more regulation, since banks need the ability, capacity and motivation to recapitalise in a way that will be most beneficial for entrepreneurship and innovation.

[177] Kaufman, G.G., Scott, K.E., 'What is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?', The Independent Review, v. VII, n. 3, Winter 2003, ISSN 1086-1653, 2003, pp. 371-391.

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