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The regulatory use of credit ratings in bank capital requirement regulations

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ABSTRACT

The paper addresses recent developments in international bank capital requirement regulations. A major change over the last decade has been the involvement of credit rating agencies in the measurement of bank capital requirements in the Basel II Accord. The proposed way of proceeding is expected to incentivise banks to improve their risk management practices. The authors argue, however, that the ratings-based regulation has negative effects on the financial markets. The paper analyses its effects on the credit rating industry as well as on the banking business. It is recommended that regulators reconsider the use of credit ratings in financial market regulation.

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INTRODUCTION

Banking regulation is essentially justified by the necessity of providing a safety net for the protection of depositors from the risk of bank failures.¹ In particular, bank capital requirements are designed in many legal frameworks to guarantee banks' financial stability. The Basel Committee on Banking Supervision (BCBS) has been entrusted with the creation of minimum standards for internationally active banks. Such kinds of minimum levels of capital are enshrined in Basel II. This Accord, approved by the BCBS in June 2004 and replacing the older framework of 1988, reflects the result of its work to promote international convergence on supervisory regulations.² Therefore, the framework has significant effects on the new legislation enacted in the countries participating in Basel II. Furthermore, even if the framework is not directly legally binding on the banks, it has — regardless of the establishment of new national frameworks — repercussions on the banks' management practices. Indeed, banks benefit from meeting the international standards in order to maintain and enhance their reputation.

The fundamental objective of the BCBS was to develop a framework that would further strengthen the soundness and stability of the international banking system. This objective is achieved in promoting the adoption of stronger risk management practices by the banking industry.³ For this purpose, the Basel II Accord proposes two broad methodologies for calculating bank capital

requirements. The first approach consists in measuring credit risk in a standardised manner, supported by external credit assessments.⁴ Designed to be implemented for all banks, the standardised approach characterises a portfolio of bank loans by risk categories; the risk-weight associated with each category is based on the credit rating agencies' (CRAs) evaluation of the counterparty risk.⁵ The second alternative, called the internal ratings-based (IRB) approach, is subject to the explicit approval of the bank's supervisor, allowing the bank to use its internal rating systems for credit risk.⁶

Under Basel II, the standardised approach assigns a prominent role to external credit ratings. Therefore, Basel II is considered as an example of the regulatory involvement of CRAs in the development of capital standards.⁷ In fact, Basel II entails an explicit recognition of the CRAs in the financial markets. Such an enshrinement gives rise to new incentives in the system. The importance of obtaining a favourable credit rating has increased; this trend also has practical implications to be taken into account in assessing the regulatory work.

Concerns have, however, been expressed about the greater pressure put on the system by the regulatory incorporation of credit ratings in bank capital requirements.⁸ CRAs are traditionally private companies monitored by decentralised market forces; thus, they normally need to remain competitive to preserve a place in the financial markets. The use of credit ratings in regulation may, however, have changed the structure of the credit rating industry.⁹ The aim of this paper is to determine the impacts of the regulatory use of credit ratings on the financial system.

This paper especially focuses on the consequences of the ratings-based bank capital requirements in an economic slowdown phase. Currently, the subprime crisis is stressing the system, thereby highlighting its weaknesses. Traditionally, banks used to keep the originated loans on their balance sheet and monitor them for their entire life; through the securitisation process, banks have the possibility to offload credit risk from their balance sheet and transfer it to other investors.¹⁰ If credit risks are more widely spread in the financial sector and sold to a broad spectrum of investors, bank capital can be used more efficiently and, consequently, the supply of credit increases.¹¹ At the same time, the financial markets have become riskier than in the past. Financial crises have shifted from bank-based to market-based crises.¹² While the turmoil triggered by the subprime crisis has involved many market actors, it is inadequate to point the finger of blame at one specific group.¹³ At any rate, attention has been paid to the CRAs' role in the evolution of the crisis as they are an essential part of the originate-to-distribute banking model.¹⁴ Not only did rating downgrades make investors unwilling to purchase the affected finance products, but they also put great pressure on the balance sheets of the banks basing their risk management practices on external credit ratings.

The ongoing discussion primarily relates to the weak regulation governing the CRAs. More supervisory control of their business is likely to reassure the financial markets of their credibility. For this purpose, the issuance of codes of conduct or new regulatory rules can ameliorate corporate governance structures as well as reduce conflicts of interest in the credit rating industry.¹⁵ The fact that CRAs are lightly regulated is not consistent with the expanded use of their ratings in regulation; it is doubtful whether private companies should be entrusted with such an important role without monitoring them accordingly. In contrast, this paper seeks to address another issue, namely the negative effects due to the use of credit ratings in banking regulation. The central point is whether the involvement of CRAs in bank capital requirements is appropriate or creates bad incentives in the financial markets.

BANK SOLVENCY AS A POLICY GOAL

Financial failures are associated with serious social costs.¹⁶ Because bank failures can contaminate other financial institutions and, ultimately, the economic system as a whole, every country imposes policies intended to ensure that banks are safe and sound.¹⁷ In fact, regulation has as its objective the maintenance of a banking system that is resistant to collapse and avoids

contamination of the payments system and the credit allocation system, yet without precluding the failure of competitively unviable or poorly managed institutions.¹⁸

The aforementioned objective is achieved in a preventive manner with the establishment of minimum bank capital requirements. 'Adequate regulatory capital cushions individual credit institutions against expected losses, and it contributes towards the stability of the banking system as a whole'.¹⁹ The required levels of capital are considered minimum standards, that is, they should still concede a certain playing field to banks and not undermine their creativity in the development of innovative risk management practices.

Another important regulatory task consists in counterbalancing business cycles rather than accentuating them.²⁰ The market dysfunction to be combatted occurs because banks tend to take excessive risks during economic booms instead of accumulating the necessary reserves to face an economic downturn. A well-designed regulatory system should see capital rising during periods of high profitability and falling during recessions.²¹

Generally, a certain amount of precaution needs to be taken while enacting new public policies. Regulators need to be aware of the incentives that they create in the financial system. The fact should not be ignored that regulatory initiatives may have unforeseen consequences.²² Indeed, even 'well-intentioned government policies aimed at reducing the systemic risks of a crisis in the global financial system may have the unintended and perverse consequence of actually increasing the risk of such a crisis'.²³ Bank capital requirements should only be established by regulators in order to maintain and foster financial stability; in contrast, inadequate bank capital requirements can even exacerbate financial instabilities.

In 1988, the BCBS first issued rules to strengthen the soundness and stability of the international banking system.²⁴ The framework, which became known as Basel I, proposed a single measure of risk and capital for internationally active banks. It established a capital requirement of 8 per cent as a one-size-fits-all measure focused on credit risk.²⁵ This approach presented some weaknesses, however. In particular, criticism was raised against the equal risk-weighting given to all credits whether of high or low credit quality.²⁶ Indeed, one of the unwanted consequences of Basel I was that banks were incentivised to go into riskier business.²⁷ Moreover, this simple structure encouraged transactions mainly benefitting from arbitraging bank capital.²⁸ Credit quality continued to deteriorate, as Basel I did not differentiate between high and low credit quality, with the consequence that the same level of capital was needed to hold the riskiest as well as the safest positions.²⁹

As a response to the aforementioned criticism, the BCBS developed a more risk-sensitive approach within Basel II. Pursuant to this revised framework, banks are recommended to use risk-related weights for the computation of the capital-to-asset ratio.³⁰ While a 100 per cent risk-weight means a full capital charge equal to 8 per cent of that value, a 50 per cent risk-weight implies a capital charge of 4 per cent of that value.³¹ Linking capital charges to the riskiness of exposures tends to preclude banks from taking excessive risks. This is achieved through the requirement of more capital for holding risky positions. As a consequence, this approach should reverse the trend to go into riskier business noticed after Basel I. Such reorientation was considered necessary to foster financial stability.

At the beginning of 2007, many countries and banks started the implementation of Basel II. At the time when the subprime crisis arose, however, the framework had not been implemented. For instance, the Capital Requirements Directive of the European Community (CRD)³² incorporating the rules and standards on capital measurements and risk-based supervision contained in the Basel II Accord into the legal framework of the common market was only transposed into national law by the Member States from January 2007 onwards and banks started applying the principles of the CRD.³³ In Switzerland, the Federal Council enacted the Capital Adequacy Ordinance (CAO) as of 1st January, 2007.³⁴ The CAO establishes bank capital requirements that partly implement the Basel II Accord; the Federal Banking Commission (FBC) is responsible for carrying out the Basel II Accord. Relating to the

ongoing financial crisis, the question is to what extent the entire implementation of the Basel II framework is beneficial to the financial markets.

The standardised approach of Basel II can measure credit risk, market risk and operational risk.³⁵ Credit risk is the risk of default by a creditor or counterparty; market risk arises from on- and off-balance sheet positions due to changes in market prices; operational risk refers to losses resulting from inadequate or failed internal processes, people and systems, or from external events.³⁶ It is worth mentioning that the function of the CRAs is limited to assessing credit risk. The banks have to comply with other types of risks that can account for instabilities in the financial system. Currently, concerns have been raised about liquidity risk, warehousing risk, reputational risk and concentration risk. In the future, public policies aiming at bank solvency will have to strive at taking them increasingly into account.

THE USE OF AGENCY RATINGS IN BANKING REGULATION

The explicit recognition of CRAs in Basel II

The idea of incorporating CRAs into the regulation was not new when the BCBS proposed the Basel II framework. Indeed, the regulatory involvement of credit ratings began in the United States. The first rule that privileged banks holding highly rated securities was enacted in the 1930s.³⁷ The regulatory bodies have increasingly incorporated credit ratings in the US regulation since the 1970s.³⁸ Nevertheless, the BCBS has explicitly recognised the use of CRAs in bank capital requirement regulatory schemes on the international level,³⁹ that is, the standardised approach of the Basel II framework gives rise to the first enshrinement of credit ratings on the global scale.

The primary objective of the BCBS has been to provide banks with a solution to determine the risks related to given assets. The CRAs are thought to be adequate entities assessing the creditworthiness of a wide range of securities. 'As ratings have gained greater acceptance in the marketplace, regulators of financial markets and institutions have increasingly used ratings to simplify the task of prudential oversight'.⁴⁰ Giving a regulatory task to private entities whose existence in the financial markets preceded the new regulatory framework has the advantage of being cheap and easy to implement.

The certification process of CRAs

Some form of regulatory approval of CRAs is needed as long as the application of governmental laws is based on credit ratings.⁴¹ Therefore, the standardised approach of Basel II conveys the national regulators to a selection of CRAs that are suitable to be used for regulatory purposes. These privileged CRAs are called 'External Credit Assessment Institution' (ECAI) in the Basel II framework.⁴² Indeed, the BCBS did not attribute the ECAI designation to CRAs, yet it contented itself with mentioning the criteria to be taken into account by the national supervisors. Each country remains responsible for recognising the CRAs that deserve the ECAI designation according to the criteria developed by the BCBS.

The relevant criteria to qualify as an ECAI are classified in Basel II as follows: the objectivity of the methodology for assigning credit assessments, the independence of the ECAI, the transparency of the individual assessments, the disclosure of the relevant information (relating to the assessments methodologies, the time horizon and the meaning of each rating), the resources of the ECAI and its credibility.⁴³

In particular, a list of certified CRAs is provided by the national regulators.⁴⁴ In the European Union, each Member State has its own list of certified CRAs. In Switzerland, the FBC publishes a list of recognised CRAs. In the United States, the designation of a 'Nationally Recognized Statistical Ratings Organization' (NRSRO) has been implemented since the 1970s. 'In adopting its net capital rules, the SEC created the NRSRO concept, although it neither defined the term nor indicated which agencies

qualified as NRSROs'.⁴⁵ The informality of the process and the absence of clarity of the acceptance criteria were indeed heavily criticised.⁴⁶ The US regulator perceived the problem and is currently addressing it with a new regulation.⁴⁷

THE IMPACTS OF RATINGS-DEPENDENT REGULATION ON THE CREDIT RATING BUSINESS

The changing role of the certified CRAs

CRAs are 'private companies whose business is assessing the risks associated with the full and timely payment of debt securities'.⁴⁸ They traditionally act as information intermediaries to improve the efficiency of securities markets by increasing the transparency of securities, that is, reducing information asymmetries between investors and issuers.⁴⁹ In particular, this objective is decisive in cases in which individual investors face high costs relative to their investment in assessing the creditworthiness of an issuer's securities; a few CRAs can make this assessment on behalf of many individual investors, thereby achieving an economy of scale.⁵⁰ Thus, CRAs play an important role in the relationship between investors and issuers.

'Apart from information intermediation, credit ratings are today generally associated with a second major function: ratings serve as a regulatory tool in financial market oversight'.⁵¹ Indeed, some regulators use credit ratings for various regulatory purposes.⁵² In the United States, credit ratings have been incorporated into hundreds of rules, releases and regulations, in various substantive areas, including securities, pension, banking, real estate and insurance regulation.⁵³ Given the considerable extent of the ratings-based regulation, the new trend has given a new role to the CRAs. A credit rating is today considered a seal of approval giving rise to favourable regulatory treatment.⁵⁴ Assessing the credit quality of a wide range of securities, the CRAs have obtained a quasi-regulatory function.⁵⁵

This approach, however, gives rise to concerns over whether the incorporation of credit ratings in regulation has completely changed the rating business. Critics even mention a shift from the business of providing valuable credit information to the far more lucrative business of selling regulatory licences.⁵⁶ Therefore, US regulators have fundamentally changed the nature of the 'product' that CRAs sell.⁵⁷ Credit ratings are valuable not only because they contain valuable information, but foremost due to the regulatory privilege that they give to issuers purchasing them.⁵⁸

The regulatory barrier to entering the credit rating industry

Barriers to entry lead to less vigorous competition in the credit rating industry.⁵⁹ Indeed, the presence of regulatory, historical, institutional and natural barriers to entry leads to a highly concentrated market structure.⁶⁰ Worldwide, Moody's, Standard & Poor's and Fitch are considered the leading CRAs. Over the last century, they have acquired market power in the credit rating business.

Broad evidence is available that the regulatory use of credit ratings raises regulatory barriers to entry. Many scholars argue that the certified CRAs have an effective oligopoly due to various regulations that have developed over time; in fact, it is nearly impossible for banks to have a successful bond issue without a certified CRA rating.⁶¹ To make matters worse, issuers prefer to obtain, and investors prefer to use, the assessments of CRAs that public authorities also use.⁶² These facts explain the dominance of the certified CRAs.

The regulatory use of credit ratings is hardly consistent with the level of competition required in the credit rating industry. Most affected by the present regime are undoubtedly the potential competitors.⁶³ Indeed, the forces resulting from the expanded use of some privileged CRAs can constitute barriers to entry for new participants.⁶⁴ Furthermore, investors are also affected by the lack of competition in the credit rating industry. As the ratings-based regulation undermines competition, it may alter the incentives that CRAs face to provide investors with accurate information.⁶⁵ The certified CRAs have little incentive to be responsible to the needs of investors.⁶⁶ They have more interest in

helping the issuers to benefit from a favoured regulatory treatment than in providing investors with accurate information.

Further, the inappropriateness of several recognition criteria appears as a factor that even enhances the regulatory barrier to entry. In particular, the objectivity criterion, which requires historical experience, poses a problem because a CRA can hardly obtain a good reputation without being approved by regulation.⁶⁷ Accordingly, it is excessively difficult to receive the status of certified CRA. To the extent that regulatory recognition is based on reliance by the market, and market reliance is influenced by regulatory recognition, excessive entry barriers do exist in the credit rating industry.⁶⁸

The accuracy problems in the credit rating processes

The lack of competition resulting from the regulatory use of ratings implies the emergence of inappropriate behaviour in the credit rating industry. Indeed, the most vehement criticism against the privileged CRAs has been raised because they do not seem in a position to provide the financial markets with accurate and valuable information.⁶⁹ It is certainly not a mere coincidence that particularly since the mid-1970s the informational value of credit ratings has massively declined.⁷⁰

Normally, the value that investors accord to credit ratings depends on the CRA's reputation.⁷¹ The fact that the CRA needs to maintain a good reputation enhances the credibility of its credit ratings.⁷² Market forces work in competitive markets as follows: if a CRA's reputation for timeliness and accuracy were to suffer, the information value that investors accord to its credit ratings would also suffer.⁷³ Investors would not rely on a CRA that provides unsatisfactory credit ratings. Furthermore, in a market with low barriers to entry, a CRA would issue inaccurate credit ratings at its peril.⁷⁴ Issuers would purchase the services of a more reputable CRA.

These market forces do not, however, work properly in the market of the certified CRAs. First, the ratings-dependent regulation may alter the incentives that the certified CRAs have to provide valuable information to the financial markets; in fact, this phenomenon can appear if investors rely on the credit ratings notwithstanding the quality of the given information. Moreover, the value of a certified CRA's credit rating does not essentially consist in the credibility of the signal it sends to potential investors, but rather in its regulatory use.⁷⁵ In addition, because of the regulatory barrier to entry, the privileged CRAs do not need to preserve their reputation as strongly as they used to.⁷⁶ Competitive pressures scarcely affect the way they conduct their business. As a consequence of the ratings-dependent regulation, the certified CRAs no longer have a specific incentive to generate valuable information to sustain their reputation for quality over time.⁷⁷

Further, the existence of conflicts of interest in the credit rating industry alters the performance of the certified CRAs. It is well known that investors are less willing to pay fees due to the free rider problem stemming from the spread of low-cost photocopying.⁷⁸ Thus, in the early 1970s, the major CRAs began to charge the issuers for the credit ratings instead of the investors.⁷⁹ Little evidence is available regarding the reasons compelling the issuers to pay for the credit ratings. Although requiring a third party to assess securities reduces the agency costs caused by the information asymmetry, this argument is not satisfactory to explain the high fees that the issuers are willing to pay. A better explanation results from the fact that a good credit rating entitles the issuers to certain advantages related to regulation.⁸⁰ For instance, in the United States, financial institutions such as pensions funds are allowed to purchase only investment grade securities.⁸¹ Therefore, the issuers obtaining high credit ratings benefit from the possibility of selling their securities to a larger range of investors.

Due to the transition from charging investors to charging issuers, conflicts of interest automatically arise in the credit rating industry.⁸² The CRAs cannot reasonably behave like the independent parties they are supposed to represent. Frequently, the most important source of information about the creditworthiness of an issuer comes in fact from the issuer itself.⁸³ Under such circumstances, the certified CRAs have more interest in helping the issuers benefit from a favoured

regulatory treatment than in providing investors with accurate information. Consequently, doubt has been raised about the reliability, credibility and accuracy of the credit ratings, which seem to give no additional information to the financial markets.

Therefore, issuers paying rating fees do not really purchase credibility with the investor community, but rather purchase a regulatory privilege.⁸⁴ The certified CRAs are very profitable because of the service they can render to the issuers; this trend is particularly obvious in the following two situations.

First, the ratings-dependent regulation may generate inflated credit ratings.⁸⁵ This tendency is a consequence of the fact that CRAs have more interest in helping issuers than in warning the investors against potential losses. Indeed, the certified CRAs have an incentive to give more favourable ratings.⁸⁶ For instance, in the subprime crisis, serious questions have arisen over whether the obtained credit ratings were based on incorrect information and inadequate models.⁸⁷ In retrospect, many credit ratings proved to be wrong signals of the credit quality of many instruments.⁸⁸ More generally speaking, the problems in the credit rating process are particularly pronounced in the developing area of securitisation.⁸⁹ In this area, little innovative practices have existed so far in the rating process due to the market power that a few certified CRAs have. Excessively high credit ratings were attributed to many structured products and securitisation was partly used to obtain better credit ratings.

Secondly, the decreased value of credit ratings becomes particularly clear in respect of downgrades. Over the last decades, CRAs have been very reluctant to downgrade an enterprise or securities. Therefore, CRAs are accused of merely parroting the markets. For regulatory purposes, it is less expected that the certified CRAs provide timely information to the financial markets than that they provide stable, conservative credit ratings.⁹⁰ In fact, downgrades can cause such devastating effects to the financial markets that CRAs only downgrade at the last moment.⁹¹ Therefore, the CRAs are not in a position to anticipate financial debacles.

THE NEGATIVE EFFECTS OF RATINGS-DEPENDENT BANK CAPITAL REQUIREMENTS ON THE FINANCIAL MARKETS

The creation of wrong incentives in the banking business

The effects of the ratings-based banking regulation also need to be examined relative to the incentives given to the banks. The requirement of regulatory capital orientates the banks' management practices in a certain direction. Broadly speaking, critics argue that Basel II permits the reduction of bank capital requirements while not reducing their risk exposures accordingly. As the Basel II framework was not integrally in force at the beginning of the ongoing financial crisis, concerns have now been raised about its potential effects as well as about the repercussions that it has already had on the financial markets. On the banks' side, two aspects are to be taken into account.

First, the banks appear as issuers of debt securities willing to offload credit risks from their balance sheets. If the banks are able to distribute credit risk to a pool of investors, they can use their capital more efficiently.⁹² As a result of their off-balance sheet commitments, they are able to finance additional business. Broadly speaking, the originate-to-distribute business model is the model that, in order to economise on risk capital and balance sheet liquidity, has encouraged the setting-up of the structured products that collapsed during the subprime crisis.⁹³ As an external actor, the CRAs play a determinant role in the originate-to-distribute banking model.⁹⁴ The investors rely heavily on the credit ratings stemming from the certified CRAs. Over the last decade, this trend has particularly been observed with respect to structured finance products; in this context, investors appear to have over-relied on the credit ratings of the CRAs.⁹⁵ Before the subprime crisis, an extraordinary expansion of credit risk transfer (CRT) instruments had occurred in the financial markets, which permitted the transfer, hedging and active trading of credit risk as a separate asset class.⁹⁶

Assuming that investors rely excessively on credit ratings, the banks know that they can transfer credit risk notwithstanding the quality of the underlying asset if certified CRAs give high credit ratings. Therefore, the banks have a higher interest in issuing highly rated securities than in verifying the quality of the underlying assets. The banks are incentivised to create innovative finance products just to obtain a higher credit rating.⁹⁷ For instance, the complex credit products that triggered the subprime crisis were partly created by issuers in order to benefit from higher credit ratings. The issuers could transfer credit risk in the market without caring about the quality of the underlying assets. Accordingly, in the originate-to-distribute banking model, the banks have less incentive to monitor the borrower, being in any case able to transfer credit risk. These phenomena may lead to a deterioration of the general quality of the underlying assets.

Secondly, the banks get a regulatory advantage if they hold highly rated positions that allow them to reduce their capital requirements. Within the standardised approach of Basel II, the certified CRAs are entrusted with the assessment of credit risks. If the bank's commitments to its obligors are highly rated by the certified CRAs, it will be required to hold less regulatory capital under Pillar I's standardised approach. In other words, as capital is very costly to banks, the standardised approach of Basel II allows banks to reduce the costs of regulatory capital if they have highly rated exposures.

On the banks' side, the standardised approach of Basel II permits them to outsource credit risk valuation. According to the risk-adjusted measure of capital, banks are incentivised to find a way to reduce their capital costs. The problem that can arise is that banks pay too much attention to the manner of reducing their regulatory capital. The primary idea of risk-weights consists in the assumption that a cushion is needed to be engaged in risky business. In this sense, more capital is required if the bank holds risky positions. The implementation of these capital standards in practice seems, however, to go in another direction. While less capital is needed if the banks hold less risky positions, the banks have the incentive to purchase highly rated securities to be enabled to overstretch their balance sheet. This trend can be observed in the subprime crisis. The contrast was striking between the risky activities in which banks were increasingly engaged and the increasingly healthy capital ratio which they reported; banking appeared riskier, but capital ratios declared them safe.⁹⁸

In a nutshell, favourable credit ratings have two primary advantages for the bank: they enable banks to transfer credit risk to investors willing to purchase it and they also make the balance sheet of banks appear safer. Following the bad incentives resulting from the banking regulation, the banks are more interested in the obtained credit ratings than in the quality of the underlying assets. This trend is not consistent with financial stability. In the modern world of finance, the supply of credit has increased because of the possibility of offloading risk from the balance sheet, yet at the same time bank capital requirements have decreased due to the risk-weights attributed to banking assets.

Further, the heavy reliance on certified CRAs under the standardised approach in Basel II undermines the incentives of banks to monitor their customers. The traditional banking business implied that the banks collected more information on the potential borrowers than the market has. In this case, the banks' role was to determine which loans are viable and which are not. In the evolving world of finance, the CRAs are endorsed with an essential function as they gather and control information concerning borrowers.⁹⁹ Pillar I's standardised approach incentivises banks to rely on the assessments of external CRAs instead of collecting large amounts of information on borrowers. This trend may partly explain the increased origination of bad loans.

The criticism of procyclicality

With the help of capital regulatory schemes, banking regulation should give the right incentives to banks in order that they accumulate the necessary reserves during economic booms to be able to overcome a financial crisis. Indeed, a well-designed regulatory system should see capital rising during periods of high profitability and falling during recessions as unexpected losses are written off against

capital.¹⁰⁰ Avoiding procyclicality, such a system can contribute to better stability of the financial markets.¹⁰¹ It is worth mentioning that all episodes of financial distress of a systemic nature, with potentially significant implications for the real economy, arguably have at their root an overextension in risk taking and in balance sheets in good times.¹⁰² A banking regulation with procyclical effects can exacerbate this market trend instead of counterbalancing the problem.

The use of credit ratings to measure bank capital requirements is heavily criticised by reason of its procyclical effects. In economic boom times, the CRAs tend to upgrade the credit ratings of borrowers.¹⁰³ In financial crisis times, the CRAs tend to downgrade their credit ratings.¹⁰⁴ They might have assessed the quality of some assets wrongly and have to change the given credit ratings according to new information. At any case, an economic downturn implies a shortage of liquidity in the financial markets as well as doubts as to whether the counterparty is creditworthy — due to a lack of confidence — in order that downgrades are unavoidable. Therefore, Basel II is procyclical, reinforcing trends rather than counterbalancing them.

As a consequence of its procyclical effects, Basel II has a negative consequence on the banks' financing since credit will be scarce in an economic slowdown phase.¹⁰⁵ Capital reserves can be lowered in economic expansion, yet capital requirements increase in economic downturns.¹⁰⁶ Problems arise especially in times of massive credit ratings downgrades. In fact, the capital ratio of banks will look completely different after the downgrades. Even if it seemed healthy before the downgrades, it will be in poor shape immediately afterwards.

The procyclical effects of the ratings-based bank capital requirements can already be seen in the subprime crisis. As the subprime market situation worsened, CRAs began to downgrade many structured products.¹⁰⁷ Similarly to most financial crises, the turmoil represented a sharp repricing of credit risk, which followed a prolonged phase of broad-based and aggressive risk taking.¹⁰⁸ In fact, banking appeared riskier as banks were increasingly associated with risky activities such as prime-brokerage and credit derivatives, but capital ratios declared them safe.¹⁰⁹ Although before the crisis banks held more than enough capital pursuant to the regulatory requirements, the crisis surprised them and they eventually lacked liquidity.

RECOMMENDATIONS

Abandoning the use of credit ratings in banking regulation

The most significant change to be envisaged consists in abandoning the regulatory rules based on CRAs.¹¹⁰

A first argument is that the withdrawal would be beneficial to the credibility of the CRAs. Indeed, eliminating the regulatory dependence on credit ratings is the best way to foster a competitive environment for the credit rating industry. If the regulators were to abandon the use of CRAs in regulation, the establishment of a registration process for CRAs should replace their certification process. Rather than needing an approval, the CRAs would merely be required to register as such.¹¹¹ Moreover, with the help of international bodies, the national regulators should strive to coordinate the external oversight of the credit rating industry globally. Such an approach would ensure consistency for investors and issuers in the financial markets, thereby enhancing the credibility of the CRAs.

A second argument against ratings-dependent regulation is that bank capital requirements could be enshrined more appropriately if they were not based on external credit ratings. The regulatory use of CRAs in banking regulation has pervasive effects that should be avoided.¹¹² Indeed, financial institutions using external credit ratings had extremely healthy ratios just before the subprime crisis. No sooner had the crisis arisen than credit rating downgrades deteriorated the ratios of these

financial institutions, thereby enhancing financial instabilities. As the CRAs cannot be expected to act as stabilising institutions, they should rather remain apart from the financial regulation.¹¹³

Finding alternatives to the ratings-dependent bank capital requirements

A substitute for credit ratings should be looked for in order to define bank capital regulatory schemes. Some scholars argue that safety-and-soundness regulations could bring market-based information immediately into the process.¹¹⁴ The market is able to give more objective and accurate information than the CRAs. For instance, a proposal is envisaging using credit spreads instead of credit ratings relating to the entire regulation depending on CRAs.¹¹⁵

Concerns have, however, been raised that the use of market-based ratings in bank capital requirements would have even more procyclical effects than credit ratings.¹¹⁶ If banking regulators cease relying on credit ratings, they have to find a way to 'encourage the build-up of cushions in good times, when imbalances emerge, so that they can be run down, up to a point, in bad times, as the imbalances unwind'.¹¹⁷ Therefore, the sole use of market-based ratings might not be the solution.

Some amelioration could be achieved if the IRB approach was easier to implement. Under this approach, national supervisors allow banks to use their own estimates for assessing some risk components. Two different methods are made available by the BCBS: the foundation IRB approach and the advanced IRB approach.¹¹⁸ Considering the existence of differences between banks, Basel II has brought along some benefits. Accordingly, the IRB approach consists in the most innovative aspect of Basel II. For example, UBS has applied the advanced IRB approach since January 2008.¹¹⁹

Nevertheless, there are elements that make the standardised approach more appealing to banks. On the one hand, the standardised approach often yields much lower regulatory capital levels than the internal models approach, precisely the opposite of what was intended.¹²⁰ On the other hand, the standardised approach is less costly. There are indeed significant costs of implementing the IRB approach. Therefore, the standardised approach is especially intended for the smallest, least sophisticated banks.¹²¹ As the IRB approach is not implementable to them, the accession to the IRB status will be limited to relatively large banks.¹²² Efforts still need to be made in order for the IRB approach to be easier to implement.

Encouraging the banks to trade structured products on a public exchange

So far, most structured finance transactions have been private. Indeed, structured finance transactions often involve securities and investment vehicles that are unique products traded among a small number of institutional investors.¹²³ Even if CRAs do not assess liquidity risk, the fact that a structured product is highly rated is perceived by the investing community as enhancing its liquidity.¹²⁴ In this sense, the market for affected structured products became illiquid immediately after the downgrades triggered by the subprime crisis. If investors had means to assess the quality of structured products other than credit ratings, the downgrades effectuated by the CRAs would not have such devastating repercussions on the liquidity of markets for structured products.

If more structured products were traded on a public exchange, this would solve many problems. In the ongoing financial crisis, one of the fundamental problems is the valuation of some specific structured products related to mortgage assets.¹²⁵ As a rule, public secondary markets tend to be more liquid than private markets, since — among other reasons — the number of potential buyers tends to be larger and trading information tends to be more transparent.¹²⁶ Therefore, if banks favoured exchange platforms to trade their structured products, the secondary market for structured products would be more transparent. More information would be available, thereby improving price discovery mechanisms.

For this purpose, banking regulation could give to banks the incentive to trade more structured products on a public exchange. For instance, to require more capital if the issued finance product is

not traded on exchange may incite banks to prefer trading public to trading private. Such an incentive would be beneficial to the financial markets as a whole.

Structured products are, however, built to respond to specific needs of investors and every structured product cannot be traded on a public exchange. Another mechanism could be to develop a secondary market trade reporting system so that buyers and sellers of structured products are provided with more information regarding the frequency with which a given security trades and the most recent bid and ask prices.¹²⁷ Pursuant to this mechanism, issuers and originators of structured finance products would make all relevant information regarding these products publicly available in a format that sufficiently sophisticated investors could analyse.¹²⁸ The main objective is in any case that investors are left with means to assess the quality of structured products other than credit ratings.

Developing better risk management practices

Market participants should be aware that they cannot set aside their own risk management practices, which have to be carried along the regulatory capital requirements. Indeed, banks' due diligence is required. Bank capital regulatory schemes will never replace banks' responsibility for adapting their risk management practices continuously. The idea of banking regulation is thus to strengthen incentives for prudent behaviour.¹²⁹

In particular, the CRAs solely capture credit risk. Credit ratings are assessments of the future creditworthiness of a particular company, security or obligation as of a given date.¹³⁰ Banks cannot limit their risk management practices to the assessment of credit risk. They have to take into account other kinds of risks. They have to be aware of the limit of credit ratings in order to avoid over-reliance on what the CRAs assess.

Especially, banks also have to comply with market risk, operational risk, liquidity risk, warehousing risk, reputational risk and concentration risk. The Basel II Accord provides banks with means to measure market risk and operational risk.¹³¹ The BCBS explicitly states in Basel II that it expects banks to further develop techniques for managing all aspects of the risks not treated in the framework.¹³² The problem is that, in the past, banks seem to have neglected the assessment of some specific risks.

First, as long as liquidity was easily available, many banks had failed to take account of a number of basic principles of liquidity risk management.¹³³ The originate-to-distribute banking model makes a firm more dependent on market liquidity.¹³⁴ Therefore, the viability of the banking system should be linked to better strategies that account for liquidity risks. For this purpose, the BCBS published a draft of new principles for measuring and monitoring liquidity risks.¹³⁵

Secondly, relating to the expansion of CRT instruments, banks face a warehousing risk. This specific risk occurs if banks can no longer count on markets to absorb underwritten credits.¹³⁶ In fact, when the US mortgage market collapsed, it was no longer possible to transfer credit risks like the banks used to do. In this sense, the banks underestimated the risk that the financial markets would become unwilling to absorb the credit risks.

Thirdly, the existence of reputational risk should not be ignored. The banks transfer credit risk to alleviate their balance sheet. In case of a financial debacle, however, it is likely that they will bear a part of it even if the transfer is valid in order to safeguard their reputation. In the subprime crisis, concerns about reputational damage have driven some banks to provide support to investment vehicles even if there were no contractual obligations.¹³⁷ The banks were not legally forced to bear so many losses.

Finally, risk management practices should be developed to consider concentration risk in an appropriate way. In principle, concentration risk exists if clients are engaged in similar activities or are located in the same geographical region or have comparable economic characteristics such that their ability to meet contractual obligations would be similarly affected by changes in economic, political or

other conditions.¹³⁸ In the subprime crisis, many banks failed to control the magnitude of their exposures to the US mortgage market. CRAs do not measure credit risk concentrations. They are sometimes even accused of reinforcing risk concentrations. Indeed, it is argued that extensive reliance on CRAs represents a concentration risk within the CRT markets.¹³⁹ Therefore, the banks are expected to improve their own techniques in view of avoiding undue risk concentrations. Concentrated risk could for instance imply the requirement of an elevated level of capital.

CONCLUSION

The actual regulatory system does not satisfactorily address risks in the banking sector. The ongoing financial crisis has highlighted many weaknesses in the financial markets structures. One of the most important problems is related to the use of credit ratings in banking regulation. Bank capital requirements should be measured with the help of other mechanisms than the assessments provided by the CRAs. Moreover, risk management practices need to be improved in the future.

The withdrawal of the ratings-based banking regulation will most likely not prevent future financial crises. Nevertheless, the negative consequences of these crises would be reduced in a significant way if the ratings-based regulation were replaced by more appropriate policies. The objective of a revision is to give to banks the right incentives while choosing their investments. Bank capital regulatory schemes should for instance foster the building of reserves during economic booms and enable the banks to overcome an economic downturn. This could reverse some negative trends observed over the last decades, thereby serving the purpose of financial stability. The credit rating industry would work better as an information intermediary without the regulatory use of its credit ratings. The banks would develop more appropriate means to assess the riskiness of their assets and might be wary of taking certain excessive risks.

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