The Risk of Ratings in Bank Capital Regulation

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Abstract

The article analyses the rationale of credit ratings in financial market regulation with a specific focus on bank capital regulation. Specifically, it traces the development of external credit ratings in bank capital regulation and in particular how they became a major component of Basel II. In doing so, it reviews how ratings were used in the structured finance markets before the global financial crisis began in 2007 and how their misuse contributed to the crisis. Because ratings had become an integrated feature in banking and securities market regulation, risk management in financial firms became excessively dependent on their use thereby creating agency problems and increased systemic risks in financial markets. The paper also considers the implications of the use of credit ratings in bank capital regulation for macro-prudential supervision and the control of systemic risks. It highlights the different approaches to the use of credit ratings in bank capital regulation between the European Union and the United States and suggests that the lack of harmonisation in this area could lead to market distortions and systemic risks. Finally the article concludes that credit ratings are inappropriate in prudential bank regulation especially in determining bank regulatory capital and their use should be reconsidered in the Basel III agreement.

Introduction

The article addresses the widespread use of external credit ratings in bank capital regulation and the structured finance market and how this contributed to market failures that resulted in the global financial crisis of 2007–2009 and the ongoing risks to financial stability which credit ratings pose.1 It argues that although a well-regulated ratings industry can provide useful information for investors in capital

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1 The causes of the crisis have been attributed to over-expansive monetary policies in developed countries which led to a property and share price bubble in the United States, the United Kingdom and many other developed countries. Other factors which induced the crisis include bank pay structures which rewarded speculative trading and the design of complex investment instruments which were based on high levels of leverage. Cf. Kern Alexander, John Eatwell, Avinash Persaud, and Robert Reoch, Financial Supervision and Crisis Management in the EU, 21–23 (Brussels: European Parliament, 2007) (one of the earliest reports analysing the causes of the global credit crunch).
markets, external credit ratings have far less utility when used by bank regulators, banks and other financial institutions in determining the amount of regulatory capital. Moreover, it suggests that widely divergent regulatory approaches between the European Union and the United States regarding how ratings are used in bank capital regulations will result in regulatory arbitrage and an unlevel playing field between major financial market jurisdictions that will limit competition and create significant risks for financial stability. It further argues that the Basel Committee on Banking Supervision should undertake a review of the financial stability risks of using external credit ratings to calculate regulatory capital and whether or not there should be a harmonised approach internationally in using ratings in bank capital regulation.

Part I discusses the rationale of external credit ratings in financial markets and the market failures that have arisen as a result. Part II traces the development of ratings in bank capital regulation and its emergence as a major regulatory instrument in Basel II. Part III reviews how ratings were used in the structured finance markets before the global financial crisis began in 2007 and how their misuse contributed to the crisis. Because ratings had become an integrated feature in banking and securities market regulation, risk management in financial firms became excessively dependent on their use thereby creating agency problems and increased systemic risks in structured finance markets. Part IV analyses the role of external ratings in the financial crisis of 2007, while Part V reviews macro-prudential regulatory objectives and bank capital regulation and the risks posed by external ratings to achieving a more stable banking sector. Part VI compares the different approaches of the European Union and the United States to incorporating external ratings into their bank capital regulatory regimes and suggests that a lack of harmonisation between these two major economic areas in how they incorporate ratings into bank capital regulation creates a major regulatory and competitive imbalance internationally between these financial systems which may increase systemic risks.

I. Financial Markets and External Ratings

In modern financial markets investors, issuers of securities, and many financial firms have become heavily reliant on credit ratings by third party rating agencies for their investment and business decisions and for determining their compliance with regulatory requirements. Indeed, ratings agencies have become the first point of contact for issuers, investors and financial institutions seeking to assess their credit risks. The multitude of regulations that require that external ratings be used for assessing credit risks have exacerbated the oligopolistic structure of the ratings industry and contributed to market failures in both financial markets and in the provision of ratings services. The three main ratings agencies – Moody’s, Standard and Poors and Fitch – dominate the ratings industry.\(^2\) Recent literature has shown how market concentr-
tion in the provision of ratings has limited competition and impaired the quality of ratings, while their role in assessing investment risks for regulated institutional investors and in determining the level of regulatory capital for banks has become immense and a threat to the efficient operation of financial markets.

An extensive literature has examined how the conflicts of interests prevalent in the issuer pays business model and the industry’s oligopolistic structure resulted in a lack of competition and agency problems. These factors, combined with the vital role ratings play in financial regulation, have contributed to the growth of their immense power and influence in financial markets and have led in certain circumstances to market failures. As discussed below, potential conflicts of interest can be attributed to the issuer pays model to the extent that ratings agencies may award higher ratings in order not to jeopardise business relationships with their client issuers. This was especially the case with ratings agencies that awarded AAA ratings to structured finance products that were arranged by investment banks in the period before the global financial crisis began in 2007.

II. Bank Regulation and Ratings

The use of credit ratings for the purpose of bank capital regulation began in the United States in the 1930s. The Banking Act of 1933 created the Federal Deposit Insurance Corporation and increased prudential requirements for US banking institutions. Under the Banking Act, banks were required to use external credit ratings to assess the credit worthiness of their assets and to provide investors and depositors with a rating of the riskiness of their assets. The purpose behind using ratings to determine the riskiness of bank assets was to give regulators an idea of how risky a particular institution was and to provide a legal basis for regulatory intervention in bank management when the bank appeared to be engaged in excessive risk-taking.


9 Aline Darbellay and Frank Partnoy, Credit Rating Agencies and Regulatory Reform, Research Paper No. 12-083 (April 2012) (providing a thorough review of the literature on rating agencies with particular focus on the conflict of interest problems in the issuer pays ratings model and policy reform proposals).


8 Ibid.

9 12 USCA Para. 227, 1933 Banking Act.
The US approach to using credit ratings of the customers and counterparties of banking institutions became a model for other countries and by the 1980s many countries with developed financial markets had begun to incorporate external credit ratings into their bank regulation regimes. Indeed, international standard setting bodies approved the use of external credit ratings as regulatory requirements in banking and capital market regulation in the 1990s.

In 2009, the Joint Forum of Financial Conglomerates published a survey that revealed that financial regulators – especially bank regulators – had continued to rely heavily on the use of credit ratings to determine compliance with prudential regulatory requirements. The Joint Forum 2009 report classified the main objectives and regulatory uses of external credit ratings by the thirteen countries who were then members of the Basel Committee on Banking Supervision. These countries had adopted external ratings as regulatory requirements by way of legislation, regulatory rules and supervisory control and guidance. The use of credit ratings by these countries in their legal frameworks had the following purposes: 1) calculating regulatory capital requirements; 2) classifying the riskiness and concentration level of assets for regulated institutional investors, such as pension funds and life insurance companies; 3) assessing the credit risk of securitised instruments based on the underlying riskiness of their assets; 4) assessing the credit risk of issuers of listed securities as part of overall capital market disclosure requirements; and 5) determining eligibility of a prospectus for public offering. Of the above classifications, the predominant use of credit ratings by most countries in financial regulation has occurred in the prudential regulation of banks, especially in the determination of regulatory capital requirements. Moreover, the survey noted that Canada, United Kingdom, and the United States used credit ratings much more often in their financial regulation requirements than did continental European countries and Japan.

Furthermore, central banks used credit ratings in their open market and liquidity operations to determine the type of bonds and other debt instruments they would take as collateral and the margin or haircut applied to such collateral when purchasing bonds or lending cash to participating financial institutions. The European Central Bank (ECB) requires that marketable assets meet high credit standards in order to be eligible as collateral, for instance, requiring at least one BBB credit rating from one

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12 Joint Forum, *Stocktaking on the Use of Credit Ratings*, above n 10, at 1, 3, 10 et seq.
13 The thirteen members of the Basel Committee in 2009 before the G20 London Summit approved the expansion of the Basel Committee’s membership were: Belgium, Canada, France, Germany, Italy, Japan, The Netherlands, Spain, Sweden, Switzerland, United Kingdom, United States. The G20 London Summit statement of principles in April 2009 approved the increased membership of the Basel Committee to 27 members including, inter alia, the previous members of the Basel Committee and Brasil, China, India, Russia and South Africa.
15 Ibid.
of the four accepted External Credit Assessment Institutions (ECAI), with the exception of asset-backed securities, for which the credit rating at issuance should be AAA.16

In addition, academics and some policymakers have classified the regulatory use of credit ratings into three categories:17 First, to assess the risk sensitivity of assets in regulated investment portfolios and for determining limitations on certain asset classes within those portfolios. For example, the US Securities Exchange Commission issued a report18 in 2003 that buy-side investment firms use credit ratings to comply with their internal by-law restrictions or investment policies that required certain minimum credit ratings for investments or acceptable counterparties.19 Buy-side firms also use credit ratings to ensure compliance with various regulatory requirements. Second, issuers of securities with lower credit ratings would be required to disclose more information on a more frequent basis than firms with higher credit ratings.20 Third, regulatory capital requirements for deposit-taking banks and other regulated financial institutions would be based on their credit and market risk exposures.21 As a result, external credit ratings became embedded in the financial regulatory regime and integrated into the risk management decisionmaking of financial institutions and institutional investors. Moreover, as discussed below, they are substantially relied upon by bank regulators and supervisors in assessing financial risks.

III. Basel Capital Accord and External Ratings

The use of external credit ratings in prudential bank regulation became internationally accepted in 2004 when the Basel Committee on Banking Supervision adopted comprehensive amendments to the Basel Capital Accord, which became known as


19 Indeed, some institutional investors such as pension funds are not allowed to invest in high risk instruments. Accordingly, in case of downgrade of an AAA instrument held in their portfolios, these institutional investors are forced to sell their securities whose rating is below a mandatory threshold determined by the bylaw or investment policy guideline.


Basel II. External credit ratings were given a key role under Basel II in measuring the riskiness of banks’ assets for both larger banks on the advanced internal ratings-based approach (which utilised sophisticated data measurement systems) and for smaller banks on the standardised approach which referenced credit ratings reports on bank customers and counterparties to determine the amount of regulatory capital the bank should hold. Basel II was perceived by many regulators, bankers, and academics as a novel regulatory model that allowed banks to hold lower levels of regulatory capital to approximate the economic capital they were already holding in return for showing bank supervisors that they had improved their risk management and measurement models.

Regulators from member countries of the Basel Committee hailed the use of internal and external ratings as a major milestone in the history of banking supervision. The Basel II agreement allowed banks to use both their own internal ratings of credit risk, market risk and operational risk, along with external ratings of credit and market risks, so that they could utilise novel methods of measuring risk that enabled differences in credit-worthiness to be quantified between individual borrowers and other customers. Bank supervisors would play a passive role in approving these measurements and deferring to the vast amounts of data that banks maintained in their lending and trading books and the technical models they used to measure and calculate their regulatory capital. Basel II replaced the old risk-weighting regime of Basel I with a more complex and granular risk-weighting regime that combined the use of internal ratings and external ratings to achieve a more sophisticated and precise measurement of risk.

Basel II had many weaknesses that were exposed by academics and some regulators before the global credit crisis began in 2007. The use of external credit ratings for

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24 *Ibid.*, 45–46. Basel II was often referred to as a regulatory ‘process’ because although it had some default rules regarding how regulatory capital should be calculated its essence involved bank supervisors interacting with banks to test the robustness of their risk-weighted models and to approve a regulatory capital amount that was appropriate for the level of risk which the bank had demonstrated it was exposed to. *Ibid.*

25 Gerhard Hofmann, then Head of Bank Supervision Deutsche Bundesbank (May, 1999), (stating that ‘[t]he new Basel capital regulations in general, and the proposed prudential use of ratings in particular, are major milestones in the history of banking supervision’ (1999)).

26 The Basel II regulatory framework allowed banks to devise models that relied on their own internal default data and statistical value-at-risk models to determine regulatory capital. Banks were already using these models before Basel II was adopted to calculate their economic capital. The financial crisis demonstrates how these models failed to take account of the liquidity risks and counter-party credit risks in the wholesale debt markets while underestimating correlations across asset classes in the mortgage-backed securities market. These factors contributed significantly to an undercapitalisation of the banking system which weakened its ability to absorb losses when the crisis began.

27 For a discussion of these weaknesses prior to the crisis, see Alexander et al., *Global Governance*
determining the risk weightings of a bank’s balance sheet was criticised on the grounds that it would favour banks in jurisdictions that were mainly capital market-led finance systems, such as the United States and United Kingdom, while jurisdictions that were mainly bank-led finance systems, such as Germany and Japan, had utilised external ratings much less and therefore their banks would be put at a competitive disadvantage under Basel II. This so-called ‘ratings gap’ between the Anglo-American capital market-led finance systems and the continental European and Japanese bank-led finance systems resulted in a competitive advantage for US and UK banks compared to banks in other G10 economies.

Moreover, the Basel II standardised approach for measuring credit risk based on formulaic risk weightings required banks to rely almost entirely on the credit rating scores of their customers to determine their risk-weightings which, in turn, determined their regulatory capital requirements for retail and wholesale loans. Table 1 below illustrates how the standardised approach under Basel II worked.

<table>
<thead>
<tr>
<th>Credit Assessment</th>
<th>AAA to AAA+</th>
<th>A+ to A-</th>
<th>BBB+ to BB-</th>
<th>Below BB-</th>
<th>Unrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Weight</td>
<td>20%</td>
<td>50%</td>
<td>100%</td>
<td>150%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The rigid formula above for determining the risk weighting of a borrower based on its credit rating (ie., AAA or BBB+) made it costly in terms of regulatory capital for banks on the standardised approach to provide loans to customers with less than AAA ratings even though the banks may have been confident (despite the negative rating) that the customer in question would repay the loan because of the banks’ positive past dealings with the customer. On the other hand, the use of external ratings for banks on the standardised approach provided them in theory with an incentive to improve and invest in their risk management and measurement systems so that they could seek approval from the regulator to use one of the advanced internal-ratings-based approaches for measuring their risk exposures that could potentially result in a lower regulatory capital requirement.

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30 Under the advanced measurement approaches, if the bank could show through its risk measurement model that its balance sheet was less risky than what the Basel II default rules would have assessed the risks to be it could hold a lower level of regulatory capital than what would otherwise have bene
Moreover, competitive imbalances could arise between countries with more volatile macro-economies (i.e., developing countries) where the use of ratings agencies to measure credit and market risk could result in banks holding much higher levels of regulatory capital in comparison to the capital levels held by banks based in relatively more stable developed country markets.31 Also, competition between the ratings agencies in providing ratings to banks could lead to weaker ratings standards with the result that banks could engage in ‘ratings shopping’.

In addition, Basel II was criticised as being pro-cyclical because regulatory capital calculations depended on the perceived riskiness of bank assets which varied greatly between upturns and downturns in the business or market cycle.32 The use of ratings in Basel II exacerbated the procyclicality problem because it made banks forced sellers of risk-weighted assets when the economy was in a downturn and, when the economy was in an upturn, it led banks to take on too much risk because assets were perceived at that point in the cycle to be less risky. Ratings respond to market trends – i.e., to market ‘bubbles’ or ‘busts’ – and by incorporating them into bank capital requirements Basel II intensified market trends and contributed to their volatility. Rather than mitigating volatility in the asset price cycle, Basel II magnified it by relying heavily on credit ratings to determine the risk weights of banking assets thereby substantially influencing the calculation of regulatory capital.33 Ratings agencies therefore played a key role in assessing financial stability risks in the banking sector and structured finance markets. For example, a sudden ratings downgrade on a particular bank asset or off-balance sheet product could result in a required sale of the asset or product that could lead to solvency or liquidity problems for the bank. This occurred in the summer of 2007 when ratings agencies suddenly changed their assessments of AAA-rated structured mortgage debt securities in response to an increase in the number of US mortgage defaults. This precipitated an ‘investor run’ in wholesale debt markets, which led to a loss of liquidity for many financial institutions.34 Similarly, during the Asian financial crisis of 1998–99, sudden ratings downgrades contributed to ‘herd instinct’ among institutional investors who had invested substantial sums in developing country and emerging economy debt and equity markets with the result that capital outflows from these countries were exacerbated by ratings downgrades.

The incorporation of external ratings into Basel II also resulted in substantial influence granted to these private enterprises acting as information intermediaries whose ratings would be utilised by bank supervisors to determine how much regulatory capital banks should hold under both the advanced risk measurement approaches and the standardised approach. In this regard, the use of external ratings in bank capital requirements conferred on ratings agencies a quasi-public regulatory status in that the credit rating, by signalling the amount of risk involved to bank supervisors, under-
mined the incentive of supervisors to engage in more proactive surveillance to determine an appropriate and sustainable level of risk measurement and reduced the incentive of bank managers to construct robust models to assess the risks to which they are exposed.

To address the quasi-public role that ratings agencies were playing in financial regulation, Congress adopted legislation in 1996 that required ratings agencies to publicly disclose their ratings methodologies in a spirit of transparency so that market participants could inspect and test ratings models. Pursuant to this legislation, the Securities and Exchange Commission adopted Rule 17g-5 to implement this legislative requirement and to increase openness among ratings agencies, arrangers and issuers. As discussed below, the mandatory disclosure of ratings methodologies led to the ‘built to rating’ business model and introduced a system of transparency so formal and regimented that both ratings agencies and issuers feared to speak openly about transactions.

Another example of ratings failure which arose because of conflicts of interest between the issuer and ratings agency contributed to the collapse of the dotcom and telecoms market in the early 2000s along with the financial fraud and bankruptcy of Enron in 2002. The main ratings agencies had awarded AAA ratings to many dotcom and telecom companies and to Enron just before they collapsed. As a result, the United States adopted reforms to the regulation of the ratings industry to mitigate conflicts of interests and require more transparency in how ratings methodologies were devised.

This led to the International Organisation of Securities Commissions adopting international standards to reduce conflicts of interest in the ratings process and to improve rating agency governance. Also, the US Credit Rating Agency Reform Act of 2006 (which amended SEC Rule 17g-5) addressed conflicts of interest in ratings by 1) prohibiting ratings agencies from issuing a rating with respect to an obligor or security where it has advised or consulted on the design or structuring of the security and by 2) prohibiting an analyst who participates in the rating determination from negotiating the fee that the issuer or arranger agrees. The first measure aims at reduc-

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35 17 C.F.R. Section 240.17g-5(c)(5) (2010).
36 Johnson and Kwak, above n 33, at 148–49 (discussing the Dotcom bubble and ‘how rating agencies failed to disentangle Enron’s web of special purpose entities’ while giving it a AAA rating).
38 The US legislation generally prohibits conflicts of interest, prohibits unfair, abusive or coercive practices, enhances registration requirements, and requires quarterly statements of financial condition reported to the SEC. Pursuant to this legislation SEC Rule 17g-5(c)(5) was adopted that banned a NRSRO issuer from issuing or maintaining a rating if it or an associated person ‘made recommendations about the corporate or legal structure, assets, liabilities, or activities of the obligor or issuer of the security’. Cf. 17 C.F.R. Section 240.17g-5(c)(5) (2009).
39 SEC Rule 17g-5(c)(6) (prohibiting a NRSRO from issuing or maintaining a credit rating ‘where the fee paid for the rating was negotiated, discussed or arranged by a person within the NRSRO who has responsibility for participating in, determining or approving credit ratings’ 17 C.F.R. Section 240.17g-5(c)(6) (2009).
ing the potential conflict of interest which stems from the provision of consulting services to issuers by ratings agencies, whereas the second aims at protecting the independence of the ratings analysts. Similarly, the EU Regulation adopted in 2009 prohibits ratings agencies from providing consulting or advisory services to a client whose securities are being rated.\(^{40}\) International convergence can also be discerned from new provisions in the 2012 EU regulation that requires ratings agencies to disclose their ratings methodologies and main assumptions.\(^{41}\)

Nevertheless, the main proposals for governance reform of the ratings agencies and their methodological practices have still not fully addressed the problems arising with the issuer-pays business model or with the oligopolistic structure of the ratings industry that limits competition and the provision of reliable ratings for investors and other market participants. Nor do these reforms address the risks of using external ratings to assess regulatory risks in the structured finance market. In addition, the US Dodd-Frank Act 2010\(^{42}\) amends the Investment Company Act of 1940 to remove references to external ratings in investment documents (ie., prospectuses and annual reports) for newly issued securities.\(^{43}\) The Dodd-Frank Act requires regulators to review guidelines and rules on how market participants may refer to and use credit ratings and to remove – as much as practicable – all references to external ratings in US financial regulatory requirements.

### IV. Credit Ratings and the Structured Finance Market

The structured finance market (ie., securitization) was a great source of systemic risk in the financial crisis. Securitization, special purpose vehicles, structured investment vehicles, and other financing conduits were used to avoid bank capital requirements and to drive up leverage in the financial system. Regulators and supervisors also played a role by failing to require that banks hold adequate levels of capital while also failing to detect the dangerous liquidity exposures of financial institutions in the wholesale funding markets and the dramatic build-up of leverage in the financial system. Also, credit ratings agencies underestimated and under-priced the risks of structured finance products, and failed to understand the liquidity risks in the instruments they rated.\(^{44}\)


\(^{41}\) Ibid., Arts 8–10.


\(^{43}\) Then SEC Chairperson Mary Schapiro stated that ‘[t]he focus of these efforts is to eliminate over-reliance on credit ratings by both regulators and investors, and to encourage an independent assessment of creditworthiness’.

\(^{44}\) The UK Financial Services Authority has stated that ‘[a]lthough recent evidence suggests that ratings for corporate, financial institutions and sovereign issues have continued to perform broadly as expected, there is evidence that the ratings of structured finance products have proved less reliable. As a consequence, the FSA believes that there needs to be a fundamental review of the use of structured
Specifically, ratings agencies played a contributing role in causing the crisis with respect to the AAA ratings they issued to mortgage-backed securities (MBSs) and collateralised debt obligations (CDOs) which consisted of highly correlated assets of US mortgage loans. Moreover, because the AAA rating these instruments received attracted much lower regulatory capital requirements under Basel II, they were heavily used as collateral in the securities lending and repurchase agreement (‘repo’) markets. It was difficult for investors in MBSs and CDOs to understand the nature of the risks involved because of the complexity of the financial structures used, and the large amount of information provided in the prospectuses obscured, rather than clarified, the risks to which investors were exposed.

To attract regulated institutional investors, such as pension funds and insurance companies, therefore, banks needed these instruments to be rated by an independent and reputable third party – the ratings agencies. However, the packaging of the MBS and CDO instruments by the banks was not independent of the ratings agencies’ assessment of the instruments. This is because ratings agencies were required by US law to make publicly available the software that enabled them to input specific assets into a package of debt instruments in order to see what rating they would receive. Packages were therefore ‘built to rating.’45 This practice of building CDOs to rating was an important force in the homogenisation of institutional investor practices in respect of their selection and valuation of portfolios. CDO packages with the same rating in the same industry sector (i.e., residential mortgages) began to look more alike. This created procyclical forces in the wholesale debt markets which could result in a sudden loss of funding if investor sentiment turned sharply negative on the valuations of the underlying assets of the CDO instruments.

Credit ratings were therefore critical to the growth of the securitization, CDO and structured investment vehicle (SIVs) markets. Without positive ratings, banks would have found it hard to sell-on profitably individual loans that generally were denied direct access to the capital markets. Packaging and structuring of slices of loans together into a CDO or SIV created a focus on credit risk and a diversification of credit risks that were attractive to a wider group of investors, but it also made the instruments more complex and difficult for investors to understand, and, for the market to function, a positive rating was required.

As a result, inherent conflicts of interest arose in the relationship between banks, ratings agencies and investors.46 The ratings were for the use of investors, but were paid for by the arrangers – the investment banks, such as Goldman Sachs, UBS, Barclays Capital, and Merrill Lynch. The arrangers made more profit when the ratings agencies provided higher ratings to packages of risky instruments, while the ratings

45 See Alexander, Eatwell, Persaud and Reoch, Financial Supervision and Crisis Management in the EU, above n 1, at 42–43 (discussing how the ‘built to rating’ process worked).
46 Aline Darbellay and Frank Partnoy, Credit Rating Agencies and Regulatory Reform, Research Paper No. 12-083 (April 2012) (reviewing the literature on rating agencies with particular focus on the conflict of interest problems in the issuer pays ratings mode).
agencies made more profit when the arrangers gave them more packages to rate. As a result, ratings agencies would have done much less business, if they had been more discerning over what they had rated and had issued less generous ratings. It has been debated to what extent the ratings agencies were influenced by the arrangers who were paying them to rate the packages. Because a specific *quid pro quo* was never demonstrated, one can only surmise whether the packages would have received a higher rating than what would have been issued if there had been no conflicts of interest.

Consequently, investors paid a high price, and following the onset of the crisis it became apparent that the ratings were excessively generous and lost much of their credibility as a source of market information, especially for complex financial instruments and structured products. This led to a number of regulatory reforms across jurisdictions that ranged from stricter regulation of ratings agency governance under EU law and a requirement that ratings firms be authorised by the European Securities and Markets Authority (ESMA) as a condition for doing business in the EU all the way to the requirement under the Dodd-Frank Act that, as far as practicable, ratings should be eliminated from US financial regulation. In considering regulatory reforms, however, it should also be noted that burdensome and misdirected state regulation can significantly increase the risk of a loss of confidence in ratings by investors and other stakeholders, and reduce what little scope there is already for competition and innovation in the oligopolistic ratings industry.

V. Macro-prudential Regulation and Ratings

Few observers paid attention to macro-prudential risks which threatened the global financial system prior to the crisis. A synchronised economic boom led to excessive liquidity. As mentioned above, this was exacerbated by perverse regulatory incentives created by international regulatory standards such as the 1988 Basel Capital Accord and later Basel II, which was pro-cyclical and whose credit and market risk models failed to take account adequately of correlations between different asset classes and liquidity risks. Inter-connected financial agents and institutions in the capital markets and trading in collateralised debt obligations and credit default swaps contributed

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48 *Ibid*. The bank analysts during the dotcom bubble provide an analogy: they were allegedly encouraged to give generous ratings to companies to assist them in winning lucrative corporate finance mandates. Although the investment banks never admitted fault for what the appallingly poor ratings their analysts provided, they did settle with the US government in 2003 for $1.4 billion.


significantly to systemic risk. Moreover, accounting standards impeded adequate provisions and valuation of assets when wholesale markets suddenly collapsed.

As a result of these regulatory weaknesses, financial regulators are now focusing on macro-prudential risks.\(^{52}\) This involves devising regulatory standards to measure and limit leverage in the financial system and to require financial institutions to have enhanced liquidity reserves against short-term funding exposures and less reliance on funding from wholesale capital markets. Macro-prudential regulation will also involve capital regulation that is counter-cyclical – requiring banks to hold more capital during an economic upturn and permitting them to hold less than what would be required during a market downturn. Counter-cyclical capital requirements will vary according to points in the macro-economic or business cycle.\(^{53}\) This will necessarily involve banks using more forward-looking provisions based on expected losses. Moreover, a more effective macro-prudential capital regime requires enhanced quality and transparency of tier one capital that allow shareholders to absorb losses more readily and to impose losses on certain creditors and bondholders before a bank becomes insolvent.\(^{54}\)

_Credit Risk v. Liquidity Risk_

Another important focus of macro-prudential regulation is the regulation of liquidity risk. Basel III makes extensive use of external ratings to assess liquidity risks on banks’ balance sheets by utilising a liquidity coverage ratio and a net stable funding ratio.\(^{55}\) The importance of liquidity risk regulation in Basel III raises important issues regarding whether or not ratings agencies should rate liquidity risk exposures for banks and other regulated financial institutions.

In light of Basel III’s new focus on liquidity risk, the question arises should ratings agencies adjust their methodologies to assess liquidity risks in the banking business. It has been argued that the ratings agencies themselves and the investors who relied on their ratings did not understand the difference between credit risk – the risk of default or a prescribed credit event – which is what the ratings were designed to assess and liquidity risk – the risk that traders could not sell the assets onto someone else or that there would be a loss of funding in the market for issuers. The ratings agencies


\(^{53}\) The Basel Committee has introduced a framework for national authorities to consider how to implement counter-cyclical capital buffers. In doing so, it is reviewing the appropriate set of macro-economic indicators (eg, credit variables) and micro-indicators (banks’ earnings) to determine how and when counter-cyclical regulatory charges and buffers should be imposed.

\(^{54}\) Also, the Committee has introduced an “internationally-harmonised” leverage ratio, adjusted for accounting differences and a global minimum standard for funding liquidity and liquidity ratios.

were criticised for not providing a liquidity rating as well. Credit and liquidity analysis, however, are different. For example, a view regarding credit risk can be taken by an analyst simply by relying on publicly available data on an entity’s liabilities. Once established, this view will probably change only gradually, especially for the highest rated entities. In contrast, liquidity conditions can change rapidly and require an understanding of both market liquidity and funding liquidity. Such understanding is unlikely to be gained by an analyst working for a ratings firm, as it requires an experienced market participant with an understanding of market practices and structures.

The degree of confusion therefore over exactly what ratings mean is of concern. Commercial forces have played a role in causing some of the confusion. In the 1990s, ratings agencies expanded their business model from straightforward corporate bond ratings, where they had an established presence, to structured credit instruments, which was subject to substantial innovation in recent years. Ratings firms sought to establish themselves in the new market of rating structured instruments by using ratings labels that were already generally accepted in the market for simpler corporate debt instruments.

Regulating Moral Hazard

The conflicts of interest mentioned above created moral hazard that induced the ratings firms to produce ratings that were less than accurate. It would appear, however, at first glance, that the principal solution to the concern over the conflicts and lack of independence that were undermining the veracity of the ratings was to ban arrangers and issuers from paying for the ratings. This proposal however can be challenged on the grounds that ratings are a ‘public good’ in that they only have value to the issuer, investor and market if all investors are aware of them; but if all investors are aware of them, it is difficult – if not impossible – to persuade any of them to pay for ratings if they believe that they can ‘free ride’ off other investors who are willing to pay for them. Ratings agencies attempted the ‘investor pays’ model before in the first half of the twentieth century and it fell into disuse because of the moral hazard arising from the difficulty of persuading enough investors to pay for the ratings when they could access them without charge.57

If investors will not pay for them, the only other model is for the issuers or the government to pay for them. But the experience of the Eurozone sovereign debt crisis teaches us that sovereigns or public sector agencies should not be involved in influencing how ratings are derived.58 For example, there would be the risk that a state would...
consider itself morally obliged to protect investors from losses that were the result of state provided ratings. In fact, involving the state somehow in the ratings process has led to proposals in the European Union for the creation of a European credit ratings agency. This has been justified on the grounds that it is a reaction against the perceived bias shown by the US-based ratings industry against European-based private and state issuers, and because ratings agency methodologies are generally based primarily on recent market developments at a particular point in time, resulting in an unreliable measure of credit default during periods of market stress where there are liquidity problems in financial markets as opposed to solvency problems.

VI. Ratings in Basel III and Divergent State Practices

The crisis demonstrates that the ratings of structured products, which were an integral part of Basel II, proved unreliable. As a result, the Basel Committee has eliminated the use of external ratings for securitization exposures of banks and financial groups. Basel III will now recommend that bank supervisors require banks to perform their own internal assessments of externally rated securitization exposures and no longer use external ratings of these exposures for determining regulatory capital.60 Regarding their other exposures, banks will be strongly encouraged to rely more on their own internal credit and market risk ratings and to have robust credit decision processes in place, with external ratings being merely one amongst many factors for assessing credit risk.61 Indeed, Basel III provides that ‘banks should assess exposures, regardless of whether they are rated or unrated.’ Basel III therefore will no longer allow a borrower’s or counterparty’s external rating to be the sole or main factor in calculating regulatory capital. Banks may only rely on external ratings as a basis for risk-weighting differentiation of specific exposures – and not to measure or to determine with finality the minimum required capital itself. Moreover, Basel III recommends that外

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60 Basel III does not permit external ratings of securitization exposures. It states in relevant part: ‘the Committee assessed a number of measures to mitigate the reliance on external ratings of the Basel II framework. The measures include requirements for banks to perform their own internal assessments of externally rated securitization exposures’.

61 As discussed above, Basel II’s excessive reliance on external ratings for calculating and determining regulatory capital had the effect of disincentivising banks to perform their traditional function of assessing risks themselves, rather than relying on credit rating agencies to do so.
banks only use external ratings from credit ratings agencies whose governance and decisionmaking complies with the key elements of the IOSCO governance standards for ratings agencies as set forth in its Code of Conduct of Fundamentals for Credit Rating Agencies.

Nevertheless, both Basel III and the EU Capital Requirements Directive (CRD) continue to place great reliance on the use of external ratings as part of the calculation of bank regulatory capital. Basel III will continue to permit banks to use external ratings for the calculation of regulatory capital for its corporate lending and retail lending exposures. Moreover, the banks’ wholesale liabilities in the securities lending, foreign exchange and repurchase agreement markets will still require external ratings for their wholesale funding positions and funding haircuts. Under Basel III, banks will also continue to use external ratings for syndicated and structured loan products. Basel III will also require lenders to hold significantly more capital against covered bonds that are downgraded just one notch from AAA or from AA– to A+. These trigger points in Basel III’s capital rules for covered bonds are far-reaching because they do not take into account the ramifications of a ratings cutoff in banking markets which can lead to a large increase in the regulatory capital charge that can, in turn, lead to forced selling by banks, even though the downgrade is just one notch. In other words, external ratings will remain an integral and embedded feature for the determination of bank regulatory capital and liquidity coverage ratios under Basel III.

Similarly, the EU Capital Requirements Directive (CRD IV) will implement – more or less – the Basel III framework and rules into EU law. As with Basel III, it will continue with heavy reliance on the use of external ratings as part of the calculation of regulatory capital requirements. EU bank supervisors are now of the view that the use of ratings ‘triggers’ in financial products and contracts may, if ratings change rapidly, present significant challenges to a firm in managing its risks and obligations. It is essential therefore that firms take full account of the existence of such triggers in their stress testing and contingency funding plans.

As with Basel III, EU regulators have agreed to strip external ratings from banks’ external securitization exposures. To do this, bank regulators and supervisors are encouraged to work with the investor community to raise awareness that the inclusion of such triggers in contract documentation, while intended to protect their interests, may perversely undermine them by precipitating the rapid collapse of the entire firm. EU policymakers and regulators recognise that the use of external ratings in most other areas of bank capital regulation can have significant system-wide consequences

62 Basel III requires an increased level of Tier One regulatory capital to 7.0% (including a capital conservation buffer), a tighter definition of tier one capital to include only ordinary common shares, an additional 2.5% countercyclical capital ratio (yet to be determined for implementation); and liquidity requirements that include a ratio for stable wholesale funding, liquidity coverage ratios, and an overall leverage ratio. Recent the Basel Committee has agreed on an additional capital charge of up to 2.5% regulatory capital for large and inter-connected systemically important financial institutions (SIFIs).


and therefore is an example of the type of issue that should be monitored closely in macro-prudential surveillance.

EU policymakers, however, will continue to follow the Basel III approach of relying to a great extent on external ratings to determine risk-weightings and thereby set capital requirements. For example, Table 2 shows how the EU CRD IV relies expressly on external ratings for financial institutions to use when lending in the wholesale loan markets. Article 115 of CRD IV requires that exposures to institutions with a residual maturity of more than three months for which a credit assessment by a rating agency is available shall be assigned a risk weighting according to the credit assessment provided by a ratings agency.

Table 2.

<table>
<thead>
<tr>
<th>Credit quality step</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Weight</td>
<td>20%</td>
<td>50%</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
<td>150</td>
</tr>
</tbody>
</table>

The EU approach fails to recognise that the use of external ratings in bank capital regulation is procyclical and therefore is a threat to financial stability. It will lead to procyclical bank lending in ‘booms’ and ‘busts’. In times of crisis, this will lead to a general downward cascading effect as lowered ratings lead to curtailed bank lending which, in turn, will lead to further ratings downgrades. External ratings in bank capital regulation will exacerbate volatility in financial markets, particularly in bank lending, thereby intensifying financial downturns. In an era when bank regulation is becoming macro-prudential, such procyclical regulation will not achieve the countercyclical objectives of macro-prudential supervision.

The United States, however, is following a different approach from the EU and the Basel Committee in respect of the use of external ratings in bank capital regulation. As discussed above, the Dodd Frank Act requires US financial regulators to review their rules and guidelines with a view to removing ratings from regulatory requirements. This has proved to be more difficult than expected for US policymakers as external ratings have become an integrated feature of US financial – and particularly bank capital – regulation. For bank regulation, section 939A(b) of the Dodd-Frank Act requires that US regulatory agencies completely remove external ratings reliance under Dodd-Frank. The legislation in section 939A(b) states as follows:

Each such agency shall modify any such regulations identified by the review conducted under subsection (a) to remove any reference to or requirement of reliance on credit ratings and to substitute in such regulations such standard of credit-worthiness as each respective agency shall determine as appropriate for such regulations.

To achieve this, US federal banking agencies in June 2012 issued three Notices of Proposed Rulemaking (NPRs) to implement Basel III which states with respect to ratings agencies the following:
In this NPR, the agencies also propose alternatives to credit ratings for calculating risk-weighted assets for certain assets, consistent with section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act).\footnote{Second NPR, \textit{Regulatory Capital Rules: Standardized Approach for Risk-weighted Assets; Market Discipline and Disclosure Requirements}; Proposed Rule.}

In November 2012, however, the impracticability of this approach over a short timespan was recognized by US regulators when they delayed the implementation deadline as follows:

In light of the volume of comments received and the wide range of views expressed during the comment period, the agencies do not expect that any of the proposed rules would become effective on January 1, 2013.

The divergence of regulatory approaches between the EU and the rest of the world that adheres to the Basel III guidelines with the United States has now become striking. Whereas in the US, priority is given to reducing or eliminating references to external ratings. However, in Europe and for all countries adhering to Basel III (except the US), the regulatory use of external ratings will continue in most areas of bank capital regulation (except for the rating of external securitisation exposures) and the priority will be to calibrate their use so they do not undermine macro-prudential regulatory objectives, but nevertheless are retained for the additional information they bring to investors and bank supervisors. The divergent approach to using external ratings in bank capital regulation may be harmful in that harmonisation at the national, regional and international level is desirable to implement international standards that attempt to control systemic risks that can spread quickly on a cross-border basis to damage other countries’ markets and to achieve a level regulatory playing field that would enhance competition in global banking markets.

Moreover different requirements regarding the use of external ratings between two major financial markets – Europe and the United States – would create regulatory arbitrage opportunities for banks to shift risk-taking to a jurisdiction not for business reasons but to qualify for a lower regulatory capital requirement because of the use – or not – external ratings for determining capital levels. It is necessary therefore to have coordination between the EU, US and international standard setting bodies regarding the use of external ratings in bank capital regulation and their use in related areas of prudential regulation. Moreover, while EU reforms of the ratings industry have taken on a specific focus to address governance concerns and competition issues, they have not adequately emphasised how to mitigate the risks of using external ratings as a factor in calculating bank capital requirements. Specifically, the recent EU Regulation adopted in 2012 does not go far enough in addressing the heavy reliance of prudential regulation – especially bank capital regulation – on external ratings and the potential financial stability risks.
VII. Conclusion

The article analysed the role of ratings in bank capital regulation and in the structured finance market before the crisis. Because ratings had become an integrated feature in banking and securities market regulation, risk management in financial firms had become excessively reliant on their use thereby increasing systemic risk in financial markets. The paper argues therefore that external ratings should be stripped from bank capital regulation because they can exacerbate serious financial risks. It moreover argues that expanding the role of ratings to include the assessment of liquidity risks is a mistake that will exacerbate financial market fragility in times of crisis. The paper suggests that it is misguided for the Basel Committee on Banking Supervision to continue its reliance on external credit ratings in Basel III for determining the riskiness or risk-weighting of a bank’s credit and market risk assets with the proviso that the ratings not be the final determination of a bank’s regulatory capital for a particular borrower or asset class. It also argues that diverse approaches to using external ratings in bank capital regulation between the EU and US will do more harm than good and that any coherent regulatory strategy for reforming how ratings are used in prudential regulation should seek to achieve international harmonisation – especially between the EU and US – when it comes to regulating the use of ratings in bank capital regulation and in other areas of prudential regulation where systemic risk is a concern.