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The Credit Rating Agencies, Institutional Strengths and Methodological Weaknesses: The Banks' Ratings Case

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Abstract

The role that the credit rating agencies have played during the last financial crisis put the focus on them. The aim of this work is to study their origin, their history and the arguments that drove them to accumulate the present institutional power. But we want to go beyond that, because their performance during the crisis shown that, despite the fact that they have institutional power and recognition, their methodology had failed. Along the following pages, we analyze this discordance between their role and their reliability.

Keywords and JEL classification

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Credit rating agencies

Bank rating

Rating methodology

JEL codes:

G15

G18

G20

G21

G24

Introduction

Just after the subprime financial crisis, Packer and Tarashev (2011) analyzed the correlation between the ratings assessed by the credit rating agencies for a sample of sixty large internationally active banks and the banks' subsequent reliance on the emergency measures taken. What they found was especially surprising, the correlation was clear but, nevertheless, it was positive: the higher rating, the higher the help required. In this master thesis we analyze the role of credit rating agencies in economy, where they come from and how they really work.

With this aim, we have structured this paper in three sections and concluding remarks. The first one is an introduction focused in credit rating agencies, their place in society, their origins and how they arrived to be what they are today. In the second section we go in depth in the way these agencies work, in the methodology they use. In order to do this, we focus in one of the many procedures they use, one that we consider among the most significant: the banks' rating methodology. Besides this, the sovereign creditworthiness rating is probably the other most relevant methodology, but we decided to center in the banks' one given the evident fiasco it has been observed at the beginning of the crisis period. Thereby, in the third section we discuss what we believe are weaknesses in the banks' rating procedure and why we think that, despite this, their role is, and probably will be, institutionally so strong. Finally, we close this master thesis with some concluding remarks.

1. Rating Agencies: Role, history and function

1.1 Role of Credit Rating Agencies

Globalization has lead to an expansion of the capital markets, both in terms of widening the interactions around the world and the amount of capital invested. In this context, the governments and firms need liquidity, which is feed by external capital. Government and firms issue debt and bonds by selling them to private investors, obtaining by this way the necessary financial resources.

One of the main concerns of any lender is ascertain the capacity of the borrower to return the debt. For this purpose, the lender could collect his/her own information about the potential borrower as well as imposing contract agreements. But lenders could also seek for external advice from independent agencies. When investors lend the money by buying bonds, they expected that issuers –borrowers– repay the loan in the future with some interests. In this context, the Credit Rating Agencies (CRAs) have become an important tool for determining ratings about the ability to pay back the debt that was contracted. The agencies claim that their rating provides an approximation of the willingness to pay back the debt following the terms of the contract. These agencies help by offering judgments that fulfil the asymmetric information between the issuers and the holders. Summarizing, the CRAs provides two main services: The first one is offering an independent indication of the ability of the issuer, either governments, financial or non-financial firms, to return the debt obligations. The second service provided is offering monitoring services by which they control the issuer's performance and promote corrective actions to recover better rates (Boot *et al.* 2006). These companies prefer to call "opinions" to their judgements, by saying that their offered statements are opinions and not recommendations to purchase.[1] At present, CRAs evaluate a huge amount of different products, such as sovereign ratings that governments emit to attract foreign investors, or structured products, which nowadays are key elements of financial markets.

1.2 Capital markets without Credit Rating Agencies

The business of assessing bonds quality by CRAs emerged at the beginning of the twentieth century. Before that time, bond and capital markets had already existed for at least three hundred years. Moreover, the previous last two centuries of these old capital markets could be considered global. Dutch investors had been buying government bonds for previous three centuries (Neal 1993), English investors had developed a modern financial system during the eighteenth century (Dickson 1967) and at the end of the same century the

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[1] CRAs state that they emit "opinions" to claim they are publishers. By this way, they are protected by the First Amendment of the United States Constitution when are sued by investors who claim that the ratings of the agencies have affected negatively their decisions.

United States too (Sylla 1998); all of them without the existence of rating agencies. This historical perspective indicates that CRAs are not basic components of capital markets as their function has been previously accomplished by several other mechanisms (reviewed in Sylla 2002). The business of CRAs was born in the United States, and the American history could help to explain why these agencies appeared and succeeded. Before the rating agencies existed and appropriated the bond-rating market, lenders and borrowers got the credit information by different means: by credit-reporting agencies, by specialized financial press or by investment bankers. In some way, the CRAs innovation was the merge of these three institutional sources of information.

Credit-Reporting Agencies

By the 1830s, the need of expanding from local to wider transactions through the United States, encouraged businesspersons to get more information about the creditworthiness of other people. As the trading distances became larger, the merchants do not know personally their customers, and previous information channels such as letters of recommendation were not sufficient. This specialized service of provision of commercial information of individual costumers was carried out by the credit-reporting agencies, which gathered financial reliability of different businessman all over the United States. In 1857, John Bradstreet of Cincinnati published the first commercial reporting book. The Bradstreet companies merged in 1933 with the Dun Company, another important credit-reporting agency, to form the 'Dun & Bradstreet' firm. In 1962, this firm acquired the Moody's Investor service, the oldest of the three big credit rating agencies. By this way, the closely related service of credit reporting and credit rating became merged under a single corporation service.

The Specialized Business/Financial Press.

In United States, railroad corporations became a huge business at the beginning of nineteenth century. As a result, a specialized publication, *The American Railroad Journal*, was launched in 1832. The journal suited the demands of investors when Henry Varnum Poor (1832) became its editor in 1849. During the period of Poor's editorship, 1849-1862, the journal gathered systematic information about the propriety of railroads and related financial information.

Several years later, Poor created a firm with his son that published an annual manual about operating statistics of the American railroad field. This book was considered as an authoritative source of information. In 1916, the Poor company itself entered into the credit rating business.

Investment Bankers.

The investment bankers acted as the financial intermediaries who were in charge of distributing the securities from railroad corporations, and put their reputation on the line in every transaction. They possessed privileged information that they shared with their investors. The power that banks had, and the increasing number of potential investors who desired to access to the same information as the bankers, led to the creation of new regulatory laws. At the 1930s, in United States was created a mandatory disclosure law of financial information for issuers of securities that reinforce the predominant role of the CRAs in detriment of investment bankers.

1.3 History of Credit Rating Agencies

1.3.1 Origin

The origin of the CRAs is mainly explained by the large construction of railroads through the United States country during the nineteenth century and the beginning of the twentieth. The railroads corporations needed large amounts of capital, and the solution for financing the projects were the development of a huge market of bonds debt. The United States corporate bond market became a financial innovation, which later was spread to the rest of the world. In 1909, John Moody published the first ratings about railroad bonds. The Poor Company, which was already specialized in financial press, entered in 1916 into the bond-rating sector. In 1941, the Poor's company merged with Standard Statistics firm, another firm that have been already in the rating sector, to create the Standard & Poor's (S&P) company. And S&P became merged with the publisher McGraw Hill in the 1960s. The third biggest rating agency, Fitch, was created in 1924.

These three firms nowadays continue having most of the market share of the rating sector, about 95%, and they are widening their scope by delivering ratings of a broad range of products. Moody's and S&P, the biggest ones, retain more than the 80% of rating market share (White 2010). These three CRAs obtained in the past their revenues through selling their ratings of creditworthiness to investors.

The judgments or opinions expressed by these agencies are in forms of ratings indicated by a letter grade, from "investment grade" bonds to "junk bonds": AAA, AA, A, BBB, BB, and so on, with also symbols as pluses and minuses to achieve higher level of detail of the tranches. They also published and outlooks called "watchlists" that focus on short time horizon and are strong predictors of rating changes (Hill *et al.* 2010). These perspectives analyses also have a monitoring function of issuers' performance, through inducing them to take corrective actions in order to avert rating downgrades (Boot *et al.* 2006).

In 1934 it was created "The Securities and Exchange Commission" (SEC) in the United States, following the demands for encouraging banks to invest in safe bonds and requiring to corporations to issue standardized financial statements (U.S. SEC 1934).[2] The set of regulations imposed by this commission allowed banks only to invest in "investment grade" products, and prohibited banks from buying "speculative investment securities", which are bonds that were rated below the BBB grade or equivalent. The banks were forced to use the judgments of the recognized rating manuals -that were Standard, Poor's, Moody's and Fitch-. By this new regulation, the judgments of the independent CRAs became fixed by law. Before these changes take place, many buyers and banks had bought speculative low rated bonds, and the reminding of the Crash of 1929 was still present. After this event, several ratings were downgraded and investors became especially concerned about the quality of the bond and the risk of default of it, increasing the CRAs reputation. The prohibition of buying low-rated bonds by banks, created incentives for issuers to obtain a good credit rating (above the minimum BBB) and CRAs became more important and valuable.

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[2] SEC's net capital rule (Rule 15c3-1 under the Securities Exchange Act of 1934).

Interpretation	S&P and Fitch	Moody's	Meaning
Highest quality	AAA	Aaa	Extremely strong capacity to meet financial commitments.
High quality	AA+	Aa1	Very strong capacity to meet financial commitments.
	AA	Aa2	
	AA-	Aa3	
Strong capacity of payment	A+	A1	Strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstances.
	A	A2	
	A-	A3	
Adequate capacity of payment	BBB+	Baa1	Adequate capacity to meet financial commitments, but more subject to adverse economic conditions.
	BBB	Baa2	
	BBB-	Baa3	Considered lowest investment grade by market participants.
Uncertainty. Likely to fulfill obligations	BB+	Ba1	Less vulnerable in the near-term but faces major ongoing uncertainties to adverse business, financial and economic conditions.
	BB	Ba2	
	BB-	Ba3	
High-risk obligations	B+	B1	More vulnerable to adverse business, financial and economic conditions but currently has the capacity to meet financial commitments.
	B	B2	
	B-	B3	
Vulnerable to default	CCC+	Caa1	Currently vulnerable and dependent on favorable business, financial and economic conditions to meet financial commitments.
	CCC	Caa2	
	CCC-	Caa3	
Near or in default or bankruptcy	CC	Ca	Currently highly vulnerable.
	C	C	Currently highly vulnerable obligations and other defined circumstances.
	D	D	Payment default on financia commitments.

Chart 1: Rating grades of Standard & Poor's (S&P), Fitch and Moody's. At left, a short description interpreting the ranking. At centre, the letter system grade and equivalencies among agencies. At right, the meaning of the ranking letter system. Data source S&P and Moody's website and own design

1.3.2 Past Performance

The initial performance of the CRAs in the United States had been assessed by a study of the "National Bureau of Economic Research" conducted by W. Braddock Hickman and published in 1958 (Hickman 1958). Hickman's data include the largest corporate bond issued in United States from 1900 to 1943. The author analysed the bond market in terms of three different sources of creditworthiness information used by investors at that time. The first one was a composite average of the four independent agency ratings of that moment (Moody's, Standard Statistics, Poor's and Fitch). The second was the ratings of the "legal investments lists for saving banks", adopted by the regulatory

authorities of several American states. And the third source of information came from a market-rating given by the yield spread of a particular bond over the lowest yield spread of a corporate bond with the same maturity. The main results were that during the first half of the twentieth century the rating agencies did a proper job in assessing the quality of the bonds. The author concluded that the ratings provided good information to investors, and this information clearly reflected the default rate of the bonds. But Hickman also found that the other sources of information, legal lists and market ratings, also estimated properly the possibility of default. Hickman concluded that the similar results achieved by the three different sources of creditworthiness were due to the fact that their assessments have been created using almost the same kind of information. At that time, the reputation of CRAs was growing and the changes in regulations promoted by "The Securities and Exchange Commission" consolidate their position as official institutions.

1.3.3 Present Performance

In the first half of the twentieth century the revenues obtained by CRAs generally came from selling the agency reports to the investors instead of the bond-issuers. This model of "investor pays" was the one established by John Moody in 1909. But the agencies change their business model in the early 1970s by switching to an "issuer pays" model, whereas the entity that issues the bond is the same that pays to the rating firm in concept of bond rating. Among the reasons that led to that change it is included the spread of photocopy machine and fax. Rating firms were discouraged of selling their rates to the investors, as their manuals could be widespread thanks to these machines. This change in the earning model creates a potential conflict of interests between the payer and the agency, because the one that ask for the rating is the same that pays for it. Moreover, the issuer could choose to be evaluated by another rating agency, creating incentives to rate upward the bond to keep the issuer happy and to avoid loosing costumers (White 2009). The second big change in the rating business was due to new regulations. In the 1930s the "The Securities and Exchange Commission" gave to the agencies a regulatory role in the bond market, and in 1975 consolidated still more the power of the existing ones by creating the "Nationally Recognized Statistical Ratings Organizations."

(NRSROs). Only the ratings emitted by these organizations were valid for the determination of the broker-dealers capital requirements (reviewed in White 2010). The Commission designated, apart from the three big agencies, four more firms[3] that by the end of 2000 were finally merged to the original three ones. The "Securities and Exchange Commission" did not establish any formal criteria or methodology to assign the category of NRSROs, designating the seventh mentioned and refusing others without explanation, generating barriers to entry into this sector. The Basel II framework (2004),[4] have fixed some rules about banks capital requirements. An external credit assessment must be done by a CRA that are recognised by the official authorities. The implementation of this directive have led to the European Parliament and the Council of the European Union to approve a new European regulation on credit agencies, in September 2009.[5] Therefore, the different legal systems in United States and the European Union have create an institutional legal role for the CRAs (reviewed in Haan and Amtenbrink 2011).

Growth and expansion of CRAs

The great expansion, both in terms of number of bonds rated as employees, took place from 1980s to onwards. This increase reflects the growth of the business of credit ratings. By 1980 S&P had 30 professional in its industrial group, whereas nowadays present thousands of analysts (Partnoy 2002). Meanwhile, Moody's has expanded his staff at similar rate. The number of rated issued has increased also in a similar way. Whereas in 1975 Moody's rated 600 new bonds, 25 years later, in 2000, Moody's rates 20,000 public and private issuers in the United States and a thousand more from non United States issuers, both sovereign states and corporate bonds. S&P rated fewer in each category. In 2000, Moody's rated $5 trillion worth of securities and S&P rated $2 trillion. Ninety-five per cent of the CRAs revenues came from the payments of the issuers (Partnoy 2002). More recent data still reinforce their growth

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[3] The "Security and Exchange Comission" bestowed the NRSRO designation on Duff & Phelps in 1982; on McCarthy, Cristanti & Maffei in 1983; on IBCA in 1991; and on Thomson Bank Watch in 1992

[4] Basel II is the second of the Basel Accords, which are recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision. The purpose of Basel II (published in June 2004) was to create an international standard that banking regulators can use when creating regulations about how much capital banks need to put aside to guard against the types of financial and operational risks that banks could face.

[5] Regulation (EC) 1060/2009 of the European Parliament and of the Council of Credit Rating Agencies (O.J. 2009, L 302/1).

perspective. The present low interest rates have prompted a surge in bond issuance. At the end of 2013 Moody's have issued 900,000 bonds and Moody's near 1,1 million (Einhorn 2015).

Impact of CRAs decisions on global markets

The influential power of CRAs over the market has been shown by multiple studies. Several authors have studied the relationship between bond-rating changes and financial market reaction and *vice versa*. According to some authors, when a CRA change its rating on a bond, the market subsequently reacts (Jewell and Livingston 1999; Creighton *et al.* 2007). But this change could be provoked by the implicit regulatory status that the ratings have. Other empirical studies suggested that it is the market that alerts the CRAs, and the alarm that cause the agencies rating downgrade is the decline in value and quality of bonds shown by the expansion of yield spreads (Kliger and Sarig 2000; Galil 2003). Also the CRAs ranks influence each others decisions. A recent study showed that during pre-crisis period the most part of banks ratings across the different agencies occurred independently. But that was not the case during the crisis period (2008-2013), whereas there was a high probability that a bank rating that has been downgraded by a CRA could experience a notch downgrade by another CRA. This could be due to the CRA practices which similar and conservative (Alsakka 2014).

Inaccuracy of ratings in last decade

In November 2001, the energy corporation Enron declared bankruptcy. This firm was rated by the three CRAs with the category of "investment grade" until five days before the company bankrupted. This situation led to the United States congress to ask to the "Securities and Exchange Commission", and to the rating agencies, why they were so slow in recognizing the weak financial condition of Enron. Some months later, a similar situation happened with the telecommunications firm WorldCom. The lateness in reaction have been repeated until more recent days, where the three rating agencies maintained the "investment grade" ratings on Lehman Brothers' company the same day that this bank declared bankruptcy, in September 2008. The credit rating agencies defend themselves by stating that they provide a long-term perspective-through-the-cycle rather than providing short-term assessments (Löffler 2004).

They excused themselves stating that under their assumptions, the agencies judgements will present always a delay in the assessment of changes within the shape of a cycle; as they need time to test if the cycle is reversible or if it is the beginning of a sustained improve or decline.
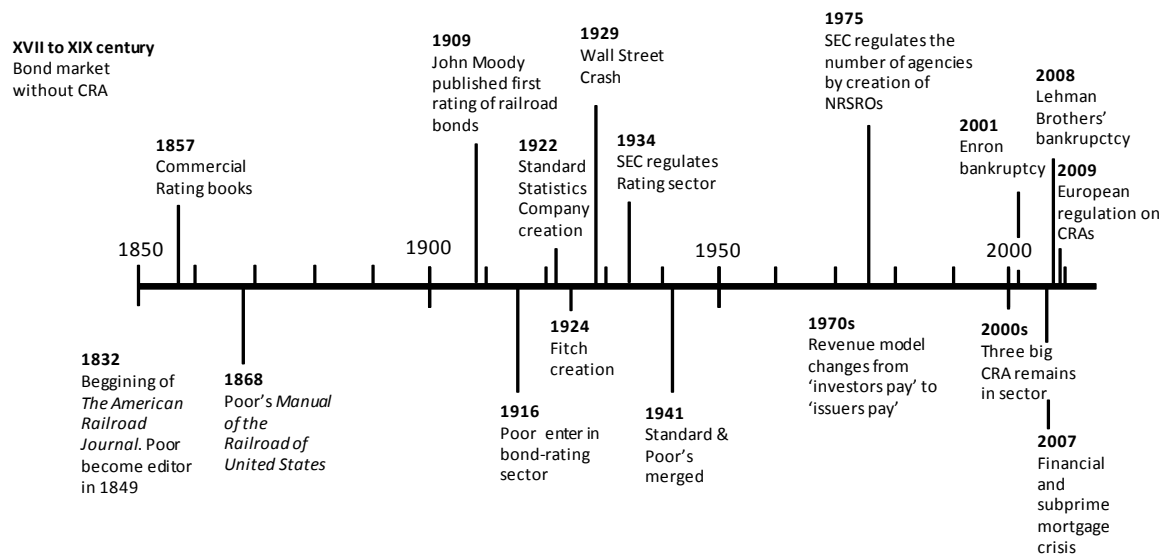
Chart 2: Time line with important events related with CRAs. This figure contains a line that represents a time frame in which are represented the most significant events related with CRAs. Own design

1.4 Commercial banking sector

Banks, financial entities and insurance companies represents the biggest sector of all the corporate bonds that agencies rates. The financial and banking sector is highly dependent in CRAs decisions, and then, the rating judgements have clear repercussions in the whole banking system. Moreover, there is an official recognition of the ratings provided by NRSROs to compute the regulatory capital requirements for commercial banks. And the banks have been in the epicentre of the recent financial crisis. New financial instruments have been created around the banking sector. Among them, the role of Collateralized Debt Obligations (CDOs) has been of special interest.[6] Securitized instruments, like the CDOs have been involved in the housing market boom as well as affected the banking sector. This happened because most of these instruments were

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[6] CDOs are a structured financial product that pools together cash flow-generating assets and repackages this asset pool into discrete tranches that can be sold to investors.

rated AAA before the crisis, in 2007. However, in mid-2007, the rating of the CDOs has been downgraded after experiencing large losses (Lucchetti 2008). The inaccuracy of some of the rates over nearly bankrupted corporations emitted by the CRAs and their role during financial crisis has raised questions about their performance. Given the central role of banking sector, and the precedent problems related with rating assignations, we are going to study the bank rating methodology as a paradigmatic example.

2. How is the rating assigned? The case of bank sector

2.1 Introduction and scope of the criteria

In this second section of the manuscript, we are going to analyze the different methodological aspects that rating agencies take into account when they assign their ratings for banks. We decide get in depth in the bank sector given the role they play in economies, not only as the most important issuers, but also as a keystone for the overall system stability.

In order to analyze the different aspects agencies consider, we have studied in depth the way that the two most important agencies (in market share terms) organize they procedures: Standard and Poor's and Moody's. Moreover, the mentioned agencies are the ones which facilitate free access for their full rating's procedures. In the case of Fitch, the access to this information is limited to a concrete kind of membership. For the other two, the creation of a user in their website, with an easy procedure, is enough to get full access to their different rating methodologies. And that is exactly what we started doing. One of the problems was to determine what procedures were the correct to analyze. This is due to the fact that agencies assign a rating for every different debt product that a certain society has issued. This translated into that, for every bank, we could find a different specific methodology for every product. Fortunately, both agencies specify a procedure for assigning ratings to banks, as a "long term issuer" (or "senior debt long term issuer"). They define the scope for these criteria as ratings on retail, commercial, and corporate and investment credit institutions (banks). Bank's definition includes the larger broker-dealers, mortgage lenders, trust banks, credit unions, etc.
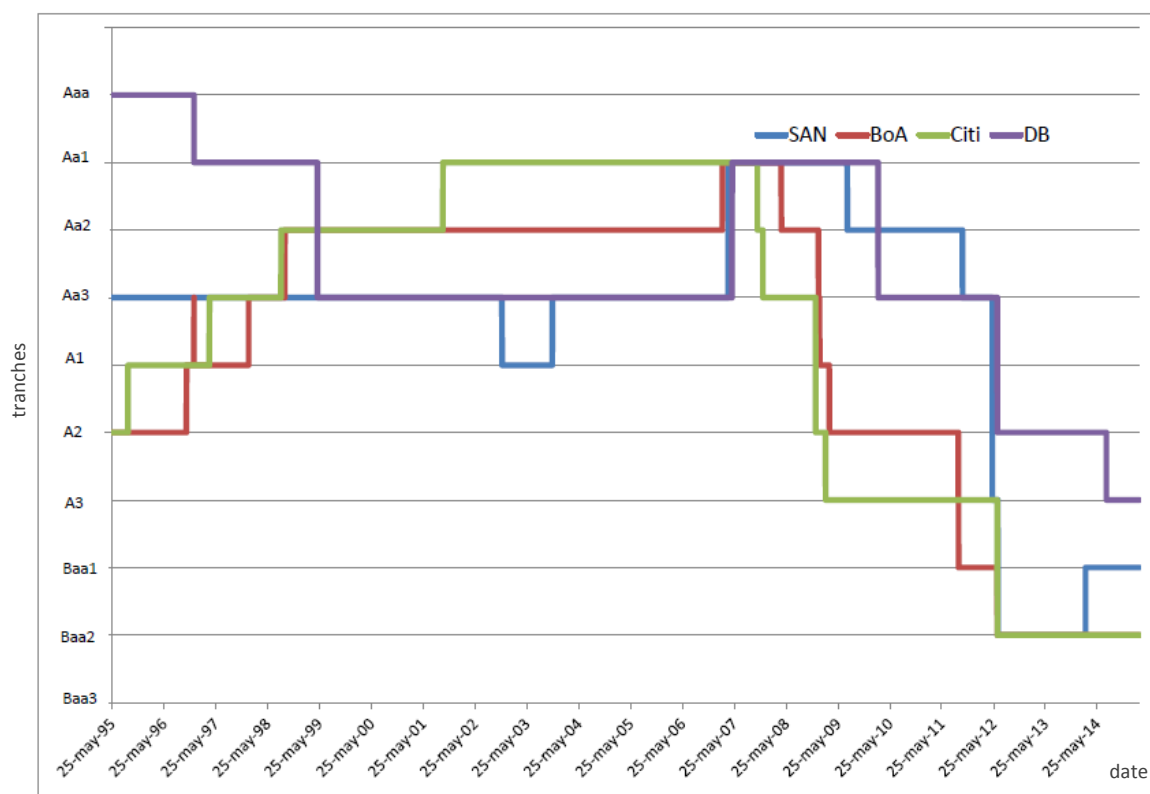
Chart 3: Evolution of the Moody's rates for four global banks (Santander, Bank of America, Citigroup and Deustche Bank) in the last twenty years period. Data source: Moody's investor service website and own design

They rate the expected loss on instruments issued, in general, ranging from the simple bank deposits to the preferred stock. The methodology also includes the default probability of certain senior contractual obligations. We have observed that both agencies consider, approximately, the same aspects. However, they often use different names for them and combine them in a different procedure. Despite of this, it is possible to explain them jointly, given that conceptually they look for the same features.[7]

The bases are the assessment of bank's intrinsic strength combined with the possible external support. Both, intrinsic strength and external support consider different elements. The intrinsic part consider macro-elements and, obviously, specific aspects of the bank. The external support considerations include the government support in addition to the support offered by the other members of each bank group.

 The complete detail for the methodology is composed by hundreds of pages and dozens of tables. Thus, along the rest of the section, we will try to briefly

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[7] We have checked to find concepts that are very similar in their analysis and then we have selected the details form the methodology that, in every case, defines better the concept.

resume the more salient characteristics of every aspect they consider on these procedures. In this regard, we try to maintain the same structure that they use and finally we introduce some insights about these factors' combination. We will not go into the different details, because usually are too complex, and the conceptual understanding provides enough information for our analysis in this piece of work.

2.2 Stand Alone Credit Profile Assessment (SACP / BCA)

This first group of factors consider the bank's capacity of paying its debts by itself, without further external support. It is composed by a combination of the macro factors' analysis and the bank's specific factors.

2.2.1 Macro Analysis (BICRA)

The first perspective that agencies consider when they analyze the bank's issuer strength is its macroeconomic environment. Supported by many academic studies, and according to their experience, they consider that there are some macro factors that are predictive of a bank to fail. They divide this analysis in two parts: The first part considers the macro-economic risks for the whole economy, in the concrete bank's country. The second takes into account only the specific characteristics and situation of the banking sector in its country.

2.2.1.1 Economic Risk (Economic Resilience)

Agencies assign a risk score to the country where the bank operates, based in macro-factors, trying to reflect the bank's underlying economic risks. When a bank operates in more than one country then the score is calculated as a weighted average of the different countries risk score. What they try to evaluate in this section is the potential for adverse economic developments and the overall country's economy strength. So, it takes into account the stability and structure of a country's economy, its potential imbalances, its economic policy tendencies, and the credit risk characteristics of the economic participants of this economy (households and enterprises). Actually, the considerations are parallel to the assignment to the country's risk rating (sovereign rating), but

also have significant differences. As for the country's risk, the three key factors are economic strength, institutional strength and susceptibility to event risk. In order to evaluate economic strength, they consider economic stability and hence the volatility of the economic cycles in this economy. This is the GDP growth and its standard deviation along the last cycles. Inside de institutional strength, agencies take into account factors such as integrity of public institutions and the legal system's warranties. Surprisingly, for measuring legal warranties, they measured for instance indicators as the length of foreclosure on residential real estate. The "susceptibility to event" consideration acts as a sort of catch-all for every occurrence that is susceptible to affect the economy. Notice that, even being very similar considerations that the ones they use for sovereign ratings, the government financial imbalances are not considered specifically for this point. Certainly, this factor is secondarily reflected in the GDP performance, but the real reason for not considering this aspect in this section is that it actually belongs to the external support analysis.

2.2.1.2 Industry Risk (Banking Country Risk)

For the analysis of the industry risk, agencies consider basically three structural features: (a) the institutional framework for banking industries, that is the quality and effectiveness of the specific regulations; (b) the competitive dynamics; based on competitive landscape, existing financial products and practices and the role of other nonbank financial institutions; and (c) the role of government or central banks as funding institutions for this economy. They assign an important role to the degree of use of complex financial products, such as derivatives, in the overall sector. Unlike in the case of the economic risk assessment, when a bank operates in different countries this factor is only considered for the home regulatory framework and industry, and not as a weighted average of the different countries where the banks operates. This makes sense, given that, when a bank operates in a country with different regulations, the most common procedure is to create a different filial of the corporation.

2.2.2 Bank Specific Factors (Financial Profile)

The second part of the "stand-alone" specific profile analysis is carried out in a microeconomic-basis, looking only for those aspects that reflect the specific situation of the bank. In this part of the analysis, the considered factors can be classified in four groups: asset risk, capital and profitability, funding structure and qualitative factors.

2.2.2.1 Asset Risk (Risk Position)

In this first parameter, agencies try to measure the degree of risk in the bank's asset portfolio. They look for changes in exposure in terms of both banking and trading. They also consider the assets volume and its evolution, searching for instance for rapid expansions, or the opposite. In some way, it is an attempt to monitor the portfolio and the direction of its movements in the risk spectrum. Logically, a change in the risk policy of this asset management becomes one of the most powerful indicators of the banks risk. They also analyze risk concentrations or diversification. Agencies check whether the bank concentrates its exposure to a certain country or region, a certain type of individual debtors, institutions or sectors, asset class, underlying asset or even a certain risk type shared by different debtors or products. The CRAs consider risk concentrations of any type as a primary reason for bank failures. Another factor to study, when analyzing the asset risk, is its complexity. A greater scale of the assets volume could be good in facilitating diversification, but also could increase the asset management complexity in terms of products to consider, business lines, and organizational structure for managing them. This is also considered dangerous by agencies. This complexity could appear when the weight for complex products (e.g. derivatives, securitizations or structured credit), is (a) too big; or (b) when the transparency in underlying positions is limited; (c) when the dependence on complex mathematical models is extreme or with important weight in tail risk portfolios.[8] The opposite of this complex asset risk structure is the presentation of transparent and straightforward risks, which are well-understood and well-managed. Complexity could come by the nature of the asset or by the way they are combined (using complex strategies beyond the

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[8] "Tail risk portfolio" contains risk with a low probability of occurrence but high loss severity.

mere diversification). When the trading activity is especially important for the bank's portfolio it may result in a weak score for this factor, especially when the risk analysis relies solely on Value-at-risk (it is considered an incomplete perspective by CRAs). Finally, it is interesting to know that this kind of assets' risk consideration does not cover specifically interest rates and currency risk, beyond the considerations in this regard in the diversification analysis. Agencies do not detail the reasons, but our interpretation of this is that those risks are inherent to the bond itself as financial product; if agencies consider it as a bank's asset portfolio risk, then the result would be to consider it twice.

2.2.2.2 Capital and Profitability (Capital and Earnings)

For the capital and profitability considerations agencies take into account four aspects:

The first is that the bank must fulfill all the regulatory requirements (this is Basel's rules and other national laws). Logically, when a bank operates with its capital too close to the minimum local regulatory requirements it receives a low score in this regard. The second point to consider is a projection for the bank's risk adjusted capital level ratio (RAC).[9] For instance, a RAC equal to 12% is considered enough for a bank operating in a developed country. This ratio objective is to compare a bank's capital to its risk-weighted assets (RWA). This represents a forward-looking evaluation of a bank's ability to rebuild capital through its retained earnings. To calculate the RWA of a bank, specific risk weights are applied to the bank's different assets. Then, they evaluate if this RAC projection is consistent enough with the capital sustainability ratio.[10] The third step is to analyze the quality of capital and earning. A high quality of capital and earnings is associated to aspects as: bank's core capital representing a high percentage (around 85%) of the bank's total adjusted capital; an investor base more supportive of strong capital (investors with lower dividends expectations); the capability of selling attractive assets without damaging competitive position (equivalent for instance to 10% of total assets); having substantial economic capital in reserves; the ratio net-interest-income/total-revenue is high enough; the ratio between fees-and-commissions/total-

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[9] This criterion is well defined in the S&P methodology and this is the one described here.
[10] This is, in plain words, if the forecast of the future capital ratio makes the capital of the bank sustainable or if this must be higher.

revenues is high enough; etc. This capital and earnings strength is studied through comparison with other banks of a similar economic risk score. Finally, the fourth aspect to consider is earnings capacity. This is based in the use of estimations of future earnings. This is basically done using estimations for operating incomes and losses for a certain future period (e.g. 3 years or more) and applying a buffer to the calculations.

2.2.2.3 Funding Structure (Funding and Liquidity)

This part of the analysis combines two aspects:

First, compares the strength of the bank's funding mix with the domestic industry average. This strength is assessed by reviewing the mixture of bank's liabilities (deposits, interbank loans, and borrowing in capital markets, etc.). The agencies evaluate these aspects based on financial ratios such as loan-to-deposit ratio, long-term funding ratio, or also reliance on short-term wholesale funding. When bank's real data is not available in this regard, agencies need to estimate it.

The second aspect is to take into consideration the bank's capability to manage its liquidity needs in case of adverse conditions, or even its survival in a lengthy period in such conditions. In a certain manner this is a consideration about the bank's degree of maturity transformation. The main points are the bank's dependence of central bank's liquidity facilities and bank's access to other possible liquidity sources. The higher the dependence from monetary authorities, the weaker the bank is considered. This analysis combines both absolute and relative terms comparisons. The common ratios used to analyze liquidity are liquid-assets/wholesale-funding and liquid-assets/core-deposits.

2.2.2.4 Qualitative Factors (Business Position)

Finally, in the analysis of the bank specific factors, agencies include aspects that are more difficult to measure, hence to evaluate. Sometimes this is called "business position", and in others are simply subjective extra evaluations that are added to the more "numerical" factors previously described. These factors include, for instance, a bank's franchise "stability" (stability of revenue, and customer base, etc.); the diversification of business activities (and the

contribution of every business line to the total revenue) or the quality of management, understood as the quality of the corporate governance and strategy (strategic positioning, operational effectiveness, financial management, etc.). Some of these qualitative factors interact; reinforcing or sometimes weakening each other's effect, so, the only way in which makes sense to consider these factors is combining them.

2.3 Support Analysis

As we have explained before, at the same time that the stand-alone capacity of the bank is analyzed, the hypothetical external help is also evaluated. This second part of the analysis is carried out through two perspectives: the support from the bank's affiliates and the support proceeding from the public entities. Agencies consider that a bank usually receives help from either its affiliates or government, not both at the same time. So, only the strongest of both support's considerations will influence the bank's rating.

2.3.1 Affiliate (group) support

When agencies consider the possibility of the bank receiving external support from its affiliates they look for the following aspects:

First, the relationship between the bank and its affiliates, which basically comprehends: the control relation between them, the brand's considerations, the possible supports imposed by regulations, their geographic interrelation, the existence of documented previous support, the strategic fit between the companies and their possible financial links. Second, the stand-alone capacity of the affiliates. This aspect is the most restrictive one, and could have even negative connotations if the affiliate is susceptible of needing help. And finally, the study of the possible correlation between their risks, considering their respective operating environments. This support is considered even when the affiliate is not a financial entity, for example an insurance company. In those cases, agencies take in special consideration the senior unsecured debt rating for this company, when available, and the other considerations relative to the two companies' relationship.

2.3.2 Government Support

The analysis of the hypothetic support of the government is highly related to the sovereign creditworthiness. It means that one affect each other positive or negatively. As in the case of Ireland in 2010, it is possible that the government decides to support a bank even if it negatively affects its sovereign rating. Also, there is a capital differentiation when the bank is a government-related institution, which plays a concrete role in public policy, or a government has some kind of strategic long-term ownership in bank's capital. In these special cases, the whole rating procedure is different and based in very similar criteria to the one used for sovereign rating assessment. For the rest of banks, the strength of the link between the bank and the government is capital for determining the likelihood of the support. The two most important factors considered are: a) if the bank is considered of "systemic importance"; and b), the government's tendency (and capacity), based on past behaviour, to provide support for private commercial banks. In any case, the uncertainty for this support will be always considered higher than for those banks partially owned by the government or even higher than for the affiliates support. Agencies consider that the government balance sheet constrains may make impossible to help a bank relatively large for the country's economy. It could be also that the government changes its supporting attitude, maybe due to a change in the governing parties. They could consider different types of support. One is the support that a government provides to all financial institutions in regular manner (legally established), and another is the direct support that a bank provides to a specific bank in crisis, or also additional extraordinary short-term support for all banks in a sector's crisis (which is specifically announced in advance by governments). Another important factor considered is the relative size of the financial sector for the overall economy, which will determine the public body capacity to provide support in a crisis susceptible to affect the whole sector. This factor connects with the correlation between the banking system strength and the sovereign rating. The stronger the connection, less probable the improvement of the bank rating due to hypothetic government support.

2.4 Factors Combinations Insights and Final Credit Rating

In this last section of the second chapter we will try to resume the main characteristics of the agencies' procedures that are used to combine the different aspects described. Notice that every agency has its own methodology, weighting more or less every aspect and using different references, names, tables, scales, etc., for every factor to consider. The order employed in combining the factors is different, and moreover, they use intermediate stages at different moments of the process. But the methodology, according to the two cases analyzed, has these common traits:

A first baseline credit assessment is computed combining the macro-environment profile, the financial profile and adjustments according to qualitative aspects. This baseline (or stand-alone) profile is adjusted with the information about possible support (from affiliates and government). This is organized as a sequential analysis, so the second part is an adjustment of a limited number of notches from the first stand-alone rating consideration. Usually every factor or sub-factor is evaluated within a certain range, and subsequently combined through tables with other related factors also previously valuated. Depending on the previously specified determinants for every factor, the position of these factors is higher or lower in its possible range. Then, the combination in double entry tables allows that those factors that are more related could interact between them, enhancing or offsetting each other's effect. Finally, the resulting different evaluations are joined in partial scorecards, assigning weights to every factor, and the resulting tables are combined and weighted in more general scorecards. A final scorecard integrates all of them and provides the final overall view, but not the final rate. The resulting rate is then evaluated by a committee, under several criteria that could apply some adjustments (notches up or down) over the resulting rate on the scorecard. These adjustments are initially suggested (notching guidance) by those analysts that have studied the support factors (on simply: those factors that entail more subjective valuations), and have some limitations. But, in both agencies we have studied, the methodology description states that the final decision depends only on the committee criteria and do not have necessarily to be limited to any previous indication. This committee freedom is justified in the inherent limitations of the mathematical models when they need to adjust to

real life circumstances. Among the variables considered by the committee there are considerations not strictly applied in the scorecards, such as the rating of a bank could not be above the sovereign rate of the country where the bank is domiciled, except in very concrete circumstances. Moreover, a subjective evaluation of the bank's failure effects is also introduced and analyzed, considering the most likely resolution scenarios and its implications. Through this last perspective, the higher the damage of a bankruptcy scenario, the most improbable it is considered. Criteria like the last one described, defined according to Moody's by its "degree of simplicity", are good examples of the deficiencies that, under our opinion, this methodology presents. Probably the reader has noticed that many of the employed criteria presents simple procedures for analyzing wide-range characteristics, and in addition, the collected data are based in estimations or in subjective or relative evaluations. All this is hardly dissembled behind the methodology's complexity. The possible consequences of these deficiencies crash with the objective and well-defined descriptions of their rates. This issue is one important part of the critical analysis developed in the third section of this work.

3. The banks' rating. Methodological weaknesses and institutional strengths

3.1 What happens when they rate the banks?

The methodology applied by these agencies display some weaknesses that are noticeable once their methodology is studied. The previous detailed analysis of the concrete case of banks led us to describe, according to our criteria, their methodology contains at least five weaknesses that affect the reliability of the final result. On the other hand, it is comprehensible that these weaknesses are entailed in the task itself; given its difficulty, but it does not make them less worrying. These weaknesses are differently distributed along the analysis of the different factors they take into account, and even sometimes they are combined. So, in the factors analyzed we found that the rating process entails:

A. Subjectivity: Sometimes is not possible to conclude or assign a value within a range without using subjective factors. For the sake of this work, we consider "subjective factors" those that are no possible to quantify numerically (for

example the integrity of an institution, the transparency, the attitudes, etc.). In some cases, their valuations rely on indexes created by international organizations (like World Bank or World Economic Forum). In others cases, they simply assign a detailed, but also subjective, combination of sub-factors. After the last crisis, the banks' rating methodologies had been oriented to assign higher weight to the role of governments and central banks.[11] This change was made in order to adapt the methodology to the new reality, however, we think it increased the exposure to subjectivity.

B. Relativity: Often, even having obtained a numerical value, it is not possible to be evaluated by itself. This means that does not exist an objective absolute value to compare in order to know if this is a high or a low value. It means that this numerical value, in order to make sense, needs to be compared with the equivalent value of other banks. Thus, the only possibility is to compare between values and assume that being above the average must be indicative that the value is high enough. This actually happens when they try to evaluate factors like as the degree of derivatives usage or the dependence on central bank's liquidity. Even being possible to calculate a ratio, it is not possible to know if this is high or low without comparing with other entities. Notice that the reference values and the average values of these ratios could be evolving along time, in the whole global banking sector. So, as they do, the only possibility to put a value within a range is comparing among them. The existence of this "weakness" is emphasized by the agencies themselves, in the sense of note that this is a strong conditioning that they cannot avoid, neither hide.

C. Simplicity in procedure: Some factors, especially those related to "management performance" are not necessarily subjective to evaluate. Maybe it is possible to establish if their performance is good or bad objectively, in the basis of a numerical results combination or/and evaluating other aspects. However, when the method could combine a huge set of variables with different combinatorial possibilities, the procedure became subjective, which leads to an oversimplification. That is what "simplicity in procedure" means in this text: when, even being possible to use numerical data, there is no way to

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[11] This fact is stressed by Packer and Tarashev (2011), who followed the evolution of changes in the methodology throughout the crisis.

evaluate it in an objective manner –each combination will end in different results. Hence, it must be done intuitively and it drives to use exceedingly "simple" procedures in assigning how many notches up or down it must be in a certain range.[12]

D. *Need of forecasting*: The rating procedure itself, as a whole, is a forecast. But there are some specific aspects in the methodology that deeply rely on specific future values or behaviors estimations. In the case of numerical values it could happen when, for example, they analyze their projections of the risk-adjusted capital or in the estimation of future earnings. On the other hand, with behaviors it occurs when they study the possibility of political changes, which could affect to government support for banks. Forecasting is notably risky in the case of banks, because, as Packer and Tarashev explain, their earnings performance is highly volatile. One of the causes of that is their high leverage, roughly five times that of other sectors firms' over the past several decades. This fact is also reflected in the consistently higher volatility of returns on banks' stocks.

E. *Use of estimated data*: Sometimes the information needed to evaluate a factor exists, but is not available for agencies. Possibly, the banks are not ought to make it public; and in addition, they could be interested in hiding the true values or even signaling the opposite to reality. In these circumstances, agencies make their estimations. Notice that this is different from forecast, because the real data exists, and it is susceptible to be deduced by available data. The factors affected by this weakness are, for instance, those related with derivatives and other portfolio strategies. In these cases, it would not make sense that the bank, neither other investor, were interested in making public all the data. However, it is crucial information in order to evaluate the overall risk situation. In this regard, Morgan (2002) claimed a higher opacity level in banks and insurance companies, and related it with the level of disagreement between the agencies.

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[12] We have distinguished between those cases in which the subjectivity is absolute (there are no numerical values to analyze) which is included in "weakness A", and when subjectivity is in the manner the numerical values are considered, "weakness C" (what we decided to call "simplicity in procedure" as an euphemism that means that combining without the possibility of using a true objective criteria).

Using data between 1983 and 1993, the author showed that the only companies with higher level of disagreement were the insurance companies (strongly linked to banks). He argued that banks are inherently more opaque than other types of firms, because of the kind of assets they use, especially loans and trading assets, the risks of which are harder to observe or easier to change. He also relates this opacity to their higher leverage, and their probable interest to let the competitors know as less as possible about it. According to this author, fixed assets -more difficult to conceal- tend to reduce disagreement between the raters, but given their business nature, such assets are lower at banks than in other firms.

If we accept the existence of all these weaknesses, it is easy to agree that agencies' problems increase when more than one of these weaknesses are combined in a concrete part of the analysis. If the presence of a single factor is negative for the conclusions' reliability, some of them in combination could make that the evaluation get close to be like a wheel of fortune result.

In the following table (Figure 4) we have tried to resume the weaknesses that, according to the methodologies descriptions studied and following our personal criterion, are present in each factor analyzed in the banks' rating methodology. In this regard, our analysis is based only in those more salient aspects of the methodology, those we have selected and introduced in section two.

We are conscious that, even having analyzed the existing information for every point, our weaknesses' assignation also relies partially in subjective aspects that we have considered along our interpretation of the methodology of the CRAs. Therefore it should be taken as a graphical summary of our consensual opinion about the presence of every weakness in each analyzed aspect. Thus, the table presented pretends to be an intuitive example of how these weaknesses are present in, more or less, the major part of the process.

Stand alone rate (A,B,C,D,E)	Macro analysis (A,B,D,E)	Economic risk (A,B,D)	Economic strenght	GDP growth
				GDP standard deviation
			Institutional strenght (A,B)	Integrity of public institutions (A)
				Legal system warranties (A,B)
			Susceptibiity to event risk (D)	Any extraordinary event (D)
		Industry risk (A,B,E)	Institutional framework for banking (A,B)	Quality of regulations (A,B)
				Effectiveness of regulations (A)
			The competitive dynamics (A,B)	Competitive landscape (A,B)
				Existing financial products and practices
				Role of the non bank institutions (A,B)
			Role of institutions (A)	Role of government (A)
				Role of central bank (A)
			Role of complex products (B,E)	Degree of derivatives use (B,E)
	Bank specific analysis (A,B,C,D,E)	Asset risk (A,B,E)	Risk exposure (A,B,E)	Portifolio composition (B,E)
				Movements of portfolio in risk spectrum (E)
				Evolution of asset volume
				Changes in risk policies (A)
			Diversification (E)	Regional concentration
				Individual debtor concentration (E)
				Asset class concentration (E)
				Underlying asset concentration (E)
			Complexity (A,E)	Weight on complex products
				Transparency in underlying positions (A,E)
				Dependence on complex math. Models (A,E)
				Weight in tail risk portfolios (E)
			Trading activity	Weight of trading activity
				Risk analysis limited to VaR
		Capital and Profitability (A,B,D,E)	Regulatory requirements (A)	Proximity to requirements limits (A)
			Projection of Risk Adjusted Capital (D)	Ratio compared to capital sustainability (D)
			Capital and earnings (A,B,D,E)	Weight of core capital on adjusted capital (B)
				Investors supportive of strong capital (A)
				Capabilty of selling attractive assets (A,D)
				Economic capital in reserves
				Net-Interest-Income/Total-revenue
				Fees-and-Commissions/Total-revenue (B)
				Estimation of future earnings (D,E)
		Funding and liquidity (A,B,E)	Strenght of funding mix	Loan-to-deposit ratio
				Long-term funding ratio
				Reliance on short-term wholesale funding
			Liquidity neeeds management (A,B,E)	Dependence of C.Bank liquidity facility (B)
				Access to other liquidity sources (A,E)
				Liquid-assets/Wholesale-funding
				Liquid-assets/Core-deposits
		Qualitative factors (A,B,C)	Bank's Franchise stability	Stability of revenue
				Customer base stability
			Diversification of business activities (B)	Contribution to the different business lines (B)
			Quality of management (A,C)	Strategic positioning (A,C)
				Operational effectiveness (A,C)
				Financial management
Support analysis (A,B,D)	Support analysis (A,B,D)	Affiliate support (A)	Relationship with the affiliates (A)	Control relationship (A)
				Brand's considerations (A)
				Regulated support
				Geographic interrelation (A)
				Documented previous support
				Strategic fit between companies (A)
				Financial links between companies
			Stand alone capacity of affiliates	(Whole unsupported analysis)
		Government support (A,B,D)	Public body capacity to provide support (B)	Sovereign creditwothiness (B)
				Sector size relation with country's economy (B)
			Government related institution (A)	Special role in public policy (A)
				Strategic long-term ownership (A)
			Systemic importance (B)	Bank's size relative to whole economy/sector (B)
			Government attitude (A,D)	Past supportive attitude
				Possible changes in government's parties (C,D)

Table key:

A: Sujectivity; Agencies can not conclude only with objective data	One factor involved
B: Relativity; Agencies needs to compare with another bank or country.	Two factors involved
C: Process' simplicity;Impossible to establish a reasonable systematic procedure.	Three factors involved
D: Need of forecasting; Agencies need to forecast some data.	Four factors involved
E: Probably estimated data; Agencies need to estimate some non-public data.	Five factors involved

Chart 4: Weaknesses in banks' rating analyzed factors. Informational source: based on S&P and Moody's Investor Service. Own elaboration and design.

Notice that when one factor is evaluated and is used in a scorecard (or in a double entry table), the result of the whole scorecard relies in the weaknesses of this factor And when a scorecard includes factors that entail different weaknesses, the final score assigned is polluted by all of them. If we look at the whole process with a wide perspective, the effect is like a general exercise of reductionism. The exercise consists in decompounding the evaluation into many small subsets of imperfectly related information, and trying to construct a rational big picture with it. Then, the great difficulties entailed on it could be hided in small weaknesses, which could be seen as negligible. After all, it apparently seems that every weakness only affects a small part. In our opinion, it is evident that agencies are conscious of their weakness in this regard, especially after the subprime "general failure"; and they are also making efforts to enhance the transparency of bank ratings methodology and the role they assign to the official support. This has resulted in generalized downgrades, especially of European and American banks, and increased agreement between agencies about banks' overall level of creditworthiness. One of the main differences in the new procedures they set up is to consider a greater dependence on public institutions support than in the methods they used in the past. However, as we have previously commented, this does not produce necessarily a much better result. As Packer and Tarashev (2011) wrote, **r**atings are only opinions about the creditworthiness of a rated entity, which combine always both ingredients: quantitative assessments of credit risk and the final decision of the "expert" judgment of the ratings committees. Therefore, "no rating can be unequivocally explained by a particular set of data inputs and formal rules". In the comparison that these authors made between the ratings and the posterior needed help (commented in the introduction), they found that some other market indicators much more simple than the rates, correlate much better than these.[13] On the other hand, different literature has proposed and discussed many model-based measures, which at least would allow standardizing and increase the implication of the scientific community in this issue (Borio and Drehmann 2009; Tarashev 2008). This kind of literature try to exploit some regularity observed with market data and banks performance. The problem is that often these methods are too much data-intensive and, given its

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[13] They pointed, for instance, Tier 1 capital ratios. These correlated negatively, and much more, with the provided government help.

complexity, very difficult to communicate even for the specialized investors. In other cases these are not "complete" models, and are only based in part of the analysis (systemic risk, for instance) (Drehmann and Tarashev 2011). At this point, it seems natural to wonder if it makes sense to assign rates to the banks, or, on contrary, it is more realistic to rely on other criteria. Others authors have reached similar conclusions and have stressed that CRAs present some other methodological problems. Based on a study of CDOs issued from 1997 to 2007, researchers have found that the ratings have a high degree of subjectivity, which in this case was translated in upward adjustments in the pre-crisis period (Griffin and Tang 2012). They attributed this subjectivity to fact to that top rating agencies have made their process more qualitative, instead of quantitative. Also, they stated that CRAs did not disclose all the details on how they rated past or current bonds.

3.2 Other non-methodological flaws of rating system

Methodology is probably not the greater problem associated with CRAs and the rating market. Some academics have pinpointed other flaws that are present in the system of rating by the external CRAs. Even some academics have proposed several alternatives.[14] In this subsection we have tried to summarize some of non-methodological flaws of rating system. The reader will notice that some of them are rooted in the historical evolution of the sector and the consequences from past actions.

Less reputation concern

Some of the concerns about CRAs are related with the loss of dependence on their reputational capital. By reputational capital some authors refer to the reputation that is acquired over the time based on previous behaviour; where investors relies on past performance and hold higher trust to predictable good performance. Historical view suggests that reputational capital has been one of the main drivers of CRAs performance (reviewed by Sylla 2002). However, some authors disagree with this traditional perspective (Mathis *et al.* 2009).

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[14] For instance, one alternative is the CRAs replacement by credit spread-dependent regulation (Partnoy 2002). This author stated that credit spreads incorporate the information contained in the rates delivered by the agencies, and moreover suppressed the regulatory licenses that control the Rating-market.

Mathis and co-authors created a model showing that reputation is only significant when a sufficient large fraction of the income come from other sources different from the rating of complex products. Assigning rating for complex products, given its nature, the reputation is less compromised than in others. Therefore, according to these authors opinion, under current conditions it seems that CRAs could exert their power without the need of preserving their reputational capital.[15]

Market power

Other problems found are those related with the market power exerted by the "oligopoly structure" that the three big rating agencies have (Blaurock 2007). These agencies have a regulatory role assigned by the governmental institutions. The market dominance also implies that the only benchmark is the comparison among them. The creditworthiness ratings published by the CRAs are protected by the force of law, and the firms depend on their judgements for acceding to credit. Partnoy has described this role as "regulatory licenses" (Partnoy 2002). The "regulatory licenses" are granted as a property rights to the agencies. Moreover, there are strong barriers to entry due to their need of being officially recognized as NRSROs. Furthermore, the market has other deterrence to entry, as the minimum reputation required itself. This lack of competition creates disincentives to generate accurate ratings (Blaurock 2007).

Delay in the response

CRAs also have been criticized by the problems related with delay in downgrading ratings in nearly failed corporations[16]. They have been criticised for responding late in adjusting ratings, as happened in Lehman Brothers' case. As we have commented above, agencies conclusions often depend on a long term perspective-through-the-cycle analysis (Löffler 2004). Their opinions, as agencies argue, will always present a delay in assessing changes, given its dependence of the cycle. Furthermore, this effect is reinforced given that the CRAs usually seem to act in a coordinate way, they up or down-grade (or remain unchanged) the bonds rating at similar time frame. Alsakka and

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[15] For instance, Moody's income from rating complex products increased from one fourth to almost one half from 2000 to 2006 (Mathis *et al.* 2009).
[16] See Financial Stability Board report (2010)

Gwilym (2010) described that the CRAs apparently coordinate their movements.

Income model

One of the main weaknesses discussed by different authors are the negative incentives created by the "issuers-pays" business model. The business model by which CRAs obtain their revenues creates partly irreconcilable incentives (Pagano and Volpin 2010). The CRAs are paid by the issuers of financial products and the agencies could be tempted to overstate the creditworthiness of their products to maintain their customers. Again, their apparently coordinated rating evaluations seem to be a consequence of this income model, in case of general rating upgrade, the fractious agency -that do not upgrade- is threatening its market share.

The proliferation of rating-driven transactions

The importance of receiving good ratings has resulted in an increasing number of rating-driven transactions (Partnoy 1999). This fact suggests that issuers are engaging on transactions to obtain better ratings based on factors that are not related with the improvement of credit quality. Besides, the new financial instruments like credit derivatives, have generated new opportunities of taking profits from positive ratings. Therefore, there may be a double motivation for executing rating driven transactions: The first are the benefits for the rated company, derived from a rating upgrading. The second is the speculative earnings obtained through operations based on an expected rating movement and hence a bond yields movement.

4. Concluding remarks

Although all the aforementioned methodological flaws and market-power disequilibria that the CRAs exhibits, there are important benefits derived from the agencies task. The external ratings produced by the CRAs reduce the inefficiency caused by the asymmetric information among agents, and also reduce the costs of negotiating among the parts. Likewise, the ratings offered by agencies provide investors with valuable experts' information, which turns into available professional criteria for all level of investing. Overall, facts seem to

indicate that the mentioned benefits are drivers of their institutional strengths. The different authorities at both sides of the Atlantic consider that, notwithstanding all the weaknesses of the system, the pros are over the disadvantages. The new regulations in Europe and United States are assigning more institutional power to the agencies. This situation could just be a heritage of the past history, a matter of need or a case of a second-best scenario. Or maybe it could be provoked by a combination of these three components.

In this work we have tried to describe a general picture of the role of CRAs, its origins and evolution. Specifically, we have addressed some methodological weaknesses associated with their ratings, besides other non-methodological problems related to the rating system established. We have focused in the banking sector but other ratings follow similar methodology. In addition to the factors developed in this essay, we are aware that several other aspects matter and further research and critical analysis is needed. Along the text, we have seen that there is disequilibria between the institutional strength that agencies had accumulated along time and the problems that the rating system itself, as well as the applied methodology, entails. This is worrying as far as, in our days, agencies have an extremely significant power. In 1996, the Pulitzer prized journalist Thomas Friedman, in a television interview said "*There are two superpowers in the world today in my opinion. There's the United States and there's Moody's Bond Rating Service. The United States can destroy you by dropping bombs, and Moody's can destroy you by downgrading your bonds. And believe me, it's not clear sometimes who's more powerful*".

However, we can conclude that no simple solution exists for achieving a proper work for this market. The rate, as a result, is influenced by too many different determinants and therefore no single perspective is capable of providing a satisfying solution for the rating system.

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