

# **WHITE PAPER ON RATING AGENCY REFORM**

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## **Executive Summary**

The recent failure of the rating agencies in connection with the so-called subprime crisis has been well documented. Many securities that received Triple-A ratings, until recently, a synonym of “foolproof”, have either defaulted or been severely downgraded. As a result, the rating agencies have seen both, their methods of analyses and their business practices, called into question.

The focus of this White Paper is a topic that has received very little attention but we believe that is critical to achieve any meaningful rating agency reform. We refer to the fact that Congress, inadvertently, has given the rating agencies not only the right to issue ratings (something that everybody is aware of), but also the right to define what those ratings mean (something that, so far, has gone unnoticed). Considering that a large part of the regulatory framework is driven by ratings, this last feature amounts to the ability to modify the regulatory environment at will. In essence, something akin to giving private companies the right to legislate whenever they choose to do so.

We argue that this situation, highly abnormal by any standards, is actually very dangerous. Consequently, we propose a legislative initiative to remedy this very unusual state of affairs.

## BACKGROUND

Trust and confidence are the centerpieces of well-functioning capital markets. In the case of the fixed income market, a significant part of this confidence depends on the rating agencies and their views on credit risk. For instance, when retail investors allocate their savings to institutions that require capital, the existence of a well-defined credit rating system helps them make these decisions by reducing the amount of time and resources that they might otherwise need to research all the possibilities. Additionally, a properly functioning credit ratings system reduces the asymmetry of information making the entire market more efficient. Moreover, banks and other key market participants monitor their risk and determine their reserves, based partially on ratings. Therefore, the importance of a reliable and transparent ratings system is paramount.

If the rating system fails, the confidence of investors is at stake; and when this confidence gets damaged, it can hold back the engine that makes resources flow. That confidence is a common good that needs to be preserved.

Unfortunately, the confidence in the ratings system has been badly damaged. And to restore this confidence –something, which is very much in the public interest-- we believe that is critical to address a fundamental flaw of the current system.

To explain this flaw, we will use as reference an example based on the two leading rating agencies: Moody's and S&P.

Moody's uses a 9-category risk scale for its ratings. The categories are labeled as: Aaa, Aa, A, Baa, Ba, B, Caa, Ca and C. Moody's claims that these categories correspond to different levels of Expected Loss (EL), a mathematical concept that is associated with risk.<sup>1</sup> Moody's has also specified –and changed from time to time-- the different EL levels (cutoff values) that correspond to each of the nine categories.

S&P, on the other hand, relies on a different measure of credit risk, Probability of Default (PD), another mathematical concept associated with risk. Just like Moody's, S&P also uses a 9-category scale. Its rating levels are designated as: AAA, AA, A, BBB, BB, B, CCC, CC and C. S&P has specified, and also modified from time to time, the different PD levels associated with each rating category.

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<sup>1</sup> Expected Loss is calculated as the product of two factors: (i) Probability of Default; and (ii) Loss Severity given the exposure.

Figure 1 summarizes this information (see Appendix).

It is important to notice that there is no reason to believe that the 9-category Moody's scale and the 9-category S&P scale are, in any sense, equivalent. In other words, a AAA by S&P and a Aaa by Moody's are, conceptually, totally different. The same can be said about a BBB (S&P) and a Baa (Moody's). The reason is simple: the two scales are based on different concepts, EL and PD, and these two figures of merit are very dissimilar: PD captures either the willingness or the ability of a creditor to pay back its obligations; whereas EL incorporates an additional piece of information: the recovery value of the asset in case there is a default.

Moreover, Moody's and S&P employ different computational methods with different input values to determine their ratings. Therefore, one would expect to see a certain level of discrepancy between the agencies when issuing ratings.

In practice, this is not the case; more often than not, a bond that gets a AAA from S&P receives a Aaa from Moody's; and a bond that gets a AA from S&P would get a Aa from Moody's, and so on so forth.

Nevertheless, this high level of agreement in ratings, as we have already explained, is difficult to justify from a theoretical point of view. In fact, one might be tempted to suspect that this agreement seems to be driven by a calibrated effort of the agencies to be "consistent with each other" in order not to jeopardize market share.

### RATINGS AND REGULATORY FRAMEWORK

The regulatory framework that governs most of the fixed income market in the United States and overseas has been built around credit ratings. In fact, a substantial part of the rules and regulations that affect market participants (commercial and investment banks, hedge funds, insurance companies, pension funds, swap counterparties, etc.) are ratings-driven. For example, insurance companies and pension funds cannot buy assets with ratings below certain level; swap counterparties are forced to post collateral if their ratings drop below a specified level; some institutions and investment vehicles are forced to sell assets if their credit ratings fall below investment grade; many regulators use ratings to determine reserve levels for banks, thrifts and S&L institutions, etc. In summary, what market participants can and cannot do is largely dictated by rules that are a function of a rating. Therefore, if you change the definition of a specific rating, in essence, you are changing the rule.

## CURRENT SITUATION

At the present time the rating agencies are empowered to perform two activities:

- (1) they can issue ratings, that is, they can decide to which one of their nine categories a particular asset will belong based on its risk profile; and
- (2) they can define and alter the parameters (cutoff values) that define their ratings levels. Another way to look at this second feature is that they can change the meaning of any three-letter symbol; they can re-define what the symbol stands for.

Leaving aside for the moment that recently the ratings agencies have issued very unreliable and inaccurate ratings, nobody would be surprised by (1). After all, this is what the rating agencies are supposed to do: issue ratings.

It is (2) what is most troubling. An example will clarify the point.

In the U.S., for instance, pension funds cannot buy assets with a rating below BBB. That is the rule. However, the regulators have failed to specify the meaning of BBB, that is, what BBB stands for. It is up to the rating agencies to define the level of risk that the BBB symbol represents. Thus, whenever the rating agencies change the characterization of BBB (something they have done oftentimes) they are in fact changing the regulatory environment.

We are not aware of any other business activity in which a group of private companies have been granted, to put it quite bluntly, the right to legislate over an area of public interest --because the power to change the regulatory framework is, in essence, tantamount to the ability to legislate.

Needless to say, the current arrangement not only gives the rating agencies extraordinary power, but it also creates insurmountable conflicts of interests: the most obvious is the temptation to manipulate the ratings scale to preserve the impression of accuracy. A simple example: suppose that BBB-rated assets start to show default rates far in excess of what is expected for BBB assets, at least, based on historic data. One possible "remedy" is to change the definition of BBB to "remove" the anomaly from the data, and thus, maintain an ill-founded appearance of accuracy.

## PROPOSAL

In light of the current situation we would like to make a fairly straightforward proposal: a government authority such as the SEC, for example, should define a ten-level (C)redit (R)isk scale, say, CR1, CR2,..., CR10 based on clearly spelled out risk parameters (more about this issue later).

Then, the rating agencies would concern themselves only with determining to which category (CR1, CR2,..., CR10) a specific bond belongs.

In short, the basis for the regulatory framework --the meaning of the ten rating categories-- would only be controlled by the SEC and the rating agencies would not have the right to change the meaning of these categories.

The arrangement outlined above is very much in line with what happens in other areas of the economy, at least, when the common good and basic services are at stake. For example, drinking water standards (acceptable levels of different chemicals) are normally established by a government-managed health authority. Private companies (much like the ratings agencies in our proposal) can be authorized to perform tests to see whether a specific sample of water meets those standards, or, if it fails, estimate by how much it fails. But they do not set the standard. That is the critical issue.

## IMPLEMENTATION

We propose a three-step implementation schedule:

- (1) Congress should re-assert the right of the SEC (unless a different government agency is established) to determine the benchmarks to be used to specify ratings. It should make clear that the rating agencies will only be entitled to issue ratings, but will not be entitled to change the benchmarks on which the ratings will be based.
- (2) A three-month consultation period should be opened to all market participants in order to examine two issues: (i) advantages and disadvantages of several metrics (figures of merit) to measure credit risk; and (ii) establish appropriate cutoff points to determine the different categories in the ratings scale.
- (3) After a prudent deliberation period, the new ratings scale (CR1, CR2,..., CR10) based on the newly adopted metric should be introduced. From that point in time, any new regulation should reference the new ratings

scale. Additionally, some sort of “equivalence table” should be established in order to interpret any old regulation that references the old ratings scale.

### CONCLUDING REMARKS

There are several potential candidates to measure credit risk. An obvious candidate is the Probability of Default (PD) of the asset in question. Nevertheless, other alternatives, and more specifically, combinations of several metrics, should be explored. For instance, one could investigate the pros and cons of using a combination of PD and LGD (Loss Given Default). The advantages of capturing in one “number” the likelihood of default plus the severity of the loss is quite appealing, at least conceptually. Due to the number of alternatives it is imperative to have an open and transparent consultation period.

Also, it is important to study several data sets with historic default information to establish meaningful cutoff points. Obviously, whether ultimately the ratings scale will consist of ten or eight or five categories is not as relevant. What is critical is that the cutoff values that specify these rating categories achieve a reasonable discriminating effect; and also, that these categories are clearly spelled out so that all the agencies can use them as common benchmarks.

It might seem that the previously outlined proposal is quite radical. In fact, it is not. What is most radical --not to say deeply flawed-- is the current environment; namely, an environment in which a small group of private companies have been granted the right to dictate and control the norms under which the fixed income market should function. Our proposal is merely an attempt at correcting this highly unusual situation.

Therefore, let us leave the rating agencies in charge of issuing ratings, which undoubtedly, is what they were originally supposed to do; but let us take away from them the ability to legislate, something which, as we have argued, should not be the privilege of a small group of private companies. The current regulatory framework –an extensive body of rules based on 3-letter symbols whose meaning Congress and regulators neither understand nor control—is simply untenable.

# APPENDIX

Category	Moody's Symbol	S&P Symbol	Risk Level
1	Aaa	AAA	Very Low
2	Aa	AA	
3	A	A	
4	Baa	BBB	
5	Ba	BB	
6	B	B	
7	Caa	CCC	
8	Ca	CC	
9	C	C	Very High

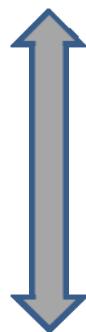


Figure 1. The different rating symbols employed by Moody's and S&P.