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Five Easy Steps to Fixing the Rating Agencies

Northfield Information Services Commentary

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One of the largest contributing factors to the Global Financial Crisis of 2008-2009 was the huge number of fixed income instruments with very high ratings (e.g. AAA) that were either severely downgraded or went into actual default. All three of the principal rating agencies, Moody's, Standard and Poor's, and Fitch were shown to be seriously deficient in their ratings of a variety of debt instruments, particularly complex instruments (e.g. Credit Default Obligations or CDO) and the obligations of major financial institutions such demonstrated by the spectacular collapses of firms such as AIG, Bear Stearns and Lehman Brothers.

In response to such clear failure, there have been a variety of suggestions from economic policy makers and regulators of several countries as to how to restructure the rating business, so as to reduce the potential for ineffective credit ratings to foster systemic risk within the international financial community. In considering such proposals, the first thing we must remember is that the purpose of the rating agencies is not to protect investors and bank lenders from defaults on commercial debts. The purpose of the rating agencies is to provide a mechanism for creditworthy borrowers to demonstrate their creditworthiness, and thereby be able to borrow large sums from a broad set of lenders through a public bond issue. In such cases, no single lender or bond buyer is lending a sufficiently large sum that it would make economic sense to undertake the cost of elaborate credit analysis of the borrower. Instead, such investors depend on diversifying their portfolio across a broad set of debt instruments to mitigate their risk along with the agency ratings. Of course, it is clear that since the ratings are paid for by the borrower the rating agencies have strong business incentives to be optimistic in their credit assessments, and in some bizarre cases have simply "rubber stamped" ratings with no actual analysis being carried out. Equally perplexing to some financial market participants was the recent downgrading of US Treasury debt from AAA to AA+ by S&P.

The vast size of traded bond and syndicated loan markets around the world are a testament to the fact that the current structure of the ratings business has been largely successful in facilitating capital flows from lenders and investors to borrowers. During the financial crisis the rating process failed miserably to protect bond investors from downgrades and defaults. However, the rating agencies are paid by the borrower and owe no legal duty or particular allegiance to lenders or investors. On the one hand, it is hard to fault the rating agencies for failing to carry out a responsibility to lenders that they never accepted as theirs. On the other, the rating agencies have routinely charged large fees to banks and investors for access to the rating data and hence bear significant responsibility for the legitimacy and quality of the information being sold.

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The extent to which agency ratings taken on the role of a safeguard for investors is a legal construct where *all sorts of regulations across banking and investment are dependent on agency ratings, giving private profit-making companies the effective power to be regulators of financial markets.* The concept of agency ratings is deeply embedded in international banking regulations (e.g. the Basel accords) wherein rules on balance sheet leverage and capital adequacy are based directly on the ratings of a bank's asset portfolio. Similarly, the rules of most jurisdictions governing insurance companies, annuities, mutual funds, and private trust management involve the concept of an "investment grade" fixed income instrument, a crucial label bestowed at the discretion of the rating agencies.

Regulatory Fixes?

In response to the problems during the financial crisis where many "safe" fixed income portfolios lost most or all of their value, numerous suggestions have arisen to reform the rating process. Early suggestions in the US focused on regulating the way in which ratings are paid for the rating service so as to remove the economic incentives to be optimistic as to the creditworthiness of borrowers. However, if borrowers are not going to pay for the extensive analytic work that should go into a rating, who will? As previously noted, the basic structure of a public bond issue is to allow for many, many investors none of whom will want to shoulder the cost burden of detailed credit analysis for the relatively small sums they will invest in any one particular bond issue. One possible approach would be to have some kind of tax on bond and syndicated loan issuance and have the tax monies collected used to pay for the rating agencies under contract to a regulatory agency.

Financial regulators in Europe have called for making the global ratings business more competitive by encouraging the establishment of a new rating agency based in Europe, and legal requirements for borrowers to rotate their rating business among rating agencies on a periodic basis so as to reduce the potential for any intentional collusion, and to ensure some business for start-up rating agencies. More radical suggestions have included rewriting all regulation for financial services firms so as to remove or at least reduce dependency on ratings. Of course, if credit ratings are removed from the existing regulations as metrics of the default risk of a debt instrument, it is less clear what mechanisms could be put into place that would better safeguard investors while continuing to promote vigorous fixed income markets around the world.

Rather than try to fix the ratings "business," we believe the appropriate immediate course of action is to simply put in place some basic rules that would ensure that credit ratings as currently available would be a sufficiently competent metric of creditworthiness. Investors don't need to fix the rating business or related regulations. *They simply need the ratings to be done with sufficient quality so as to be meaningful measures of economic risks borne by lenders.* In this regard we have a series of five suggestions:

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I. Consistency and Transparency

Fixed income investors have three key metrics as to the credit risk they are bearing in a particular bond or loan. The first is the expected likelihood of default over some time horizon (Probability of Default or PD). The second is the extent of expected economic loss of value if a default occurs (Loss Given Default or LGD). The third metric is the expected probability that a current rating will be downgraded over some time horizon (Transition Probability or TP). Rating agencies should be required to periodically publish guidelines that describe what each rating level (e.g. "AA+") represents in terms of expected ranges of PD, LGD and TP.

By representing the letter rating process in terms of actual economic values, we can improve the rating process in two ways. First, we foster consistency across instrument types. For ratings to be meaningful for investors, the expectations of economic loss arising from a given rating should be universal, not instrument specific. The credit risk of AA sovereign bonds, AA corporate bonds, AA municipal bonds, and AA structured products should all be comparable within some definable range. In addition, having an economic description of the meaning of ratings would also add consistency through time, so investors can be confident that the loss expectation of a BBB bond in 2011 is the same as it was in 2007. This two-dimensional consistency is absolutely crucial if agency ratings are to be used in bank and insurance regulation.

It should be noted that nothing in this suggestion requires that the various rating agencies agree with one another as to the range of values for PD, LGD or TP. Nor does it require that the rating agencies have a crystal ball such that the rating process would be judged a failure if the realized values of these metrics should fall outside the expected ranges. No reasonable investor would expect the rating agencies to be able to fully accurately predict wars, recessions, pandemics or natural disasters that might affect the global economy or the fortunes of a particular issuer. *All it requires is that each rating agency be consistent and transparent as to what they believe the economic meaning of a rating actually is.*

II. Accreditation

As we first suggested in 2009, regulators who oversee rating agencies should have an accrediting board of independent experts who would periodically visit with the rating agencies and determine if their analytical policies and practices are reasonable and within the range of contemporary methods. Such a board would be composed of both academics and practitioners with clear technical expertise. If a given agency's practices are found to be substandard, they would be suspended from issuing new ratings until the deficiency is resolved. This is no different than the process by which schools, colleges and hospitals are routinely subject to review and accreditation by supervisory agencies set up by regulators or trade associations.

III. Accountability

Providing a rating of the creditworthiness of a borrower is a probabilistic exercise. There is generally a high likelihood of repayment and a small likelihood of default. The hard part is deciding how "high is high" and how "small is small." In some ways, it is very closely akin to the problem of an insurance company that must decide what future claims will arise from writing a particular set of insurance policies. While predicting claims from something like an earthquake are obviously difficult, even predicting claims from life insurance policies can be problematic in the presence of outbreaks of serious contagious disease as in the case of AIDS in the 1980s and early 1990s.

Surprisingly, there are relatively few cases of insurance companies getting into financial difficulty because of miscalculating the expected claims from a particular set of insurance policies. We believe there are good reasons for this. Firstly, under the insurance regulations of most jurisdictions, each insurer must appoint a chief actuary who supervises the process of estimating the future claims. *The actuary is then required to write periodic reports attesting to their personal involvement in the process and certifying that the process has been carried out in a sound and professional fashion.* Secondly, the professional education requirements to be a full actuary in most countries are very substantial, requiring many years of field experience and passing up to nine competency exams. Actuaries whose work falls under any negative suspicion are subject to discipline from both regulators and professional societies, much the same as doctors and lawyers.

Each rating from a rating agency should carry a similar kind of personal certification from the credit analyst who led the rating process. Such a structure would add a layer of *professional ethics and discipline* to a business model that has been demonstrated to be difficult to regulate effectively. Professional associations in the finance field such as CFA Institute (CFA), the Global Association of Risk Professionals (GARP), the International Association of Financial Engineers (IAFE) and the Professional Risk Managers International Association (PRMIA) would be very keen to participate in the formulation of rigorous professional standards for credit analysts.

IV. Special Rules for Special Vehicles

The concept of borrowing money from a lending institution or investor is as old as organized society. We need only recall the Biblical discussions of money lenders setting up shop outside temples thousands of years go. However, in the last couple decades there has been a critical change in the nature of fixed income investing. Throughout history, money has been borrowed by entities that actually carried out some purpose other than simply borrowing money. Sovereign bonds have funded the operations of governments, municipal bonds have funded the operations of cities and corporate bonds (and loans) have financed private businesses that carry out some business activity. In each case, the issuer has some purpose other than to simply engage in some form of financial intermediation.

In contrast, many hundreds of very complex structured product instruments received AAA ratings in recent years while being the financial obligation of a "special purpose vehicle" (SPV). A large fraction of such AAA rated

instruments were either severely downgraded or went into default. SPVs are really just corporate shells that act as a legal structure in which a portfolio of assets is financed with a combination of debt instruments (and sometimes an equity tranche). If the assets earn a return higher than the cost of the financing, the organizers of the SPV stand to profit. While such "slicing and dicing" of financial assets can be very useful to investors in order to create new instruments with desirable properties (e.g. customized maturities), there is a clear danger in the operation of the rating process.

Since the financial structure of a given deal is essentially arbitrary, the organizers can "game" the rating process. For example, consider an SPV that holds a portfolio of $100 Million of corporate loans that is financed with two bond issues of which one issue is subordinated to the other. The organizers can effectively ask the rating agencies "How much of the financing has to be in the subordinated bond issue if we want the senior bond issue to get a AAA rating?" If the rating agency says $20 million, you can rest assured that the amount of subordinated bond issue will be $20 million and not a penny more. The deal is structured from the start to be as profitable as possible subject to getting the desired AAA rating for senior debt. From the outset the transaction *sits by design on the razor's edge of a downgrade to the next rating level*. This is a very different situation from a traditional borrower where the need to borrow and the creditworthiness of the borrower are largely external outcomes of real world operations.

Given the gaming aspects of such instruments and their high degree of complexity relative to traditional bonds, the ratings of structured products always carry more uncertainty than those of traditional bonds or loans. We suggest that rating agencies be prohibited from issuing their highest rating (i.e. AAA) to any structured product until the credit rating agency has at least ten or more years of experience with that particular type of structured product so that a meaningful history of rating change experience would be available.

V. External Awareness

Each rating agency has their own process for deciding when the rating of a borrower should be reviewed for possible upgrade or downgrade. Numerous academic studies have shown that well known analytical models have been shown to predict when an upgrade or downgrade is more likely to occur in the near future. It is only human nature that credit analysts, like real estate appraisers are uncomfortable with declaring their own prior analyses as being outdated and invalid. As such, the process of upgrading and downgrading credit ratings tends to be "sticky" and lag behind the flow of actual relevant events. In the words of the stage musical Evita, "it is hard to know which way to go when it is you that you are following."

There are numerous analytical models of the credit risk of various borrowers and fixed income instruments that are provided for a fee to lenders and bond investors. Service providers such as Moody's Analytics (separate from the rating business), Thomson-Reuters Starmine, Rapid Ratings and Kamakura all provide an independent "lender's perspective" on sovereign and corporate credit risk (our firm, Northfield, has a proprietary analytical model of corporate credit for use in our portfolio risk models, but does not sell credit risk information as a separate service at this time). We suggest that the rating agencies be required to subscribe to one or more of these services so as to

be aware of discrepancies in the perception of credit risk for particular issuers. This does not suggest that the rating agency has any obligation to change their rating in consequence of the view of outside services but rather should be at least aware of major discords as a way to trigger an internal review.

Conclusion

The structure of the ratings business has evolved into the current form for good and substantial reasons. Credit ratings are deeply embedded in the investing operations and regulation of essentially every bank, insurer and investment fund in the world. While wholesale reform of the ratings business may or may not be desirable, it is clear that relatively simple measures would bring greater strength and consistency to the existing ratings. We believe these modest reforms are both accessible and sufficient to ensure the quality of the rating process to the extent needed by investors and lenders as well as borrowers.