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Reforming Rating Agencies

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12.1 Rating Activity's Characteristics

12.1.1 Rating Agencies Give Information to Investors About the Credit Risk of Issuers

This is the rationale of the agencies: they inform investors who would not be able to assess the credit risk of issuers without their help.

Is that true?

Partially. First, we may reasonably think it is true on the primary market, that is at the issuance of new bonds. In that case, investors do not have a precise knowledge of the issuer and the help of such agencies may be required. It is commonplace to assert that rating agencies help new issuers decrease the cost of the money they borrow.

It is also true for products that seem difficult to value by some specific investors. Imagine a German city wanting to issue bonds to be sold to some Japan institutional investors. It appears to be very difficult for these investors to assess the credit risk of the German city. They need the help of an advisor in credit risk such as a credit rating agency. It is the same for sophisticated financial products that cannot be easily analysed by investors. For instance, it

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would be very complicated to invest in a CDO (collateralized debt obligation) without any rating from a credit rating agency.

Regarding other issues, we are led to distinguish informed investors from uninformed ones. The former, for the most part, do not need the agencies to assess the credit risk of an issuer. The latter, which we may call "trustful investors," do not have superior information; they need the help of rating agencies and follow their ratings.

12.1.2 Issuer Paying System

The rating agencies activity consists in selling information about the credit risk of bonds and other quoted debt contracts. Since the 1970s, the investors benefiting from the credit risk information are not the ones who pay for it: the issuers (the ones who are rated) buy the ratings from the agencies. It is an important characteristic of the agencies that immediately raises the question of collusion between the rater and the issuer paying for being rated.

The answer of the agencies is: reputation. They argue that they spend a lot of money and efforts when they start the company to achieve a good reputation with investors; and this reputation is indeed the main asset they own. It would be a really bad strategy to dilapidate this asset by colluding with the issuer.

Roughly, this may be true. But there are always some situations in which it does not work. For simple products such as domestic bonds, investors can make up their own idea about the credit risk of an issuer. For more complex issues (foreign issues, issues relevant to an unknown bankruptcy law or sophisticated financial products such as a CDO), basic investors may have some difficulties assessing the level of risk of the issue and they may need some kind of an expert to rate the default probability of such products. These investors will easily trust rating agencies. And these "trustful" investors will give the agencies the opportunity to do, let us say, a quick job. As we have seen during the subprime crisis, sophisticated products may not be rare and a wrong appreciation of their risk may give birth to a financial crisis. A new regulation for CDO rating has been enacted, but there are still many other products about which some investors are not well informed and have to be trustful.

Is it possible to come back to an investor paying system, such as the one used before the 1970s?

It may be a good solution, but we think it might not work with the present organization of the rating sector. The problem comes from the ability of investors to duplicate the analyses and ratings of the agencies. In the 1950s and at the beginning of the 1960s paper copies were not so easy to get. Nowadays, the creation of an electronic copy requires only a simple click. How can the free scattering of the work of the rating agencies be avoided?

As a niche sector, one can imagine a rating service dedicated only to investors paying an annual fee, with rating and analyses being consulted on a website without any possibility of copying the files. In such a case, the rating company would work as if it were a subsidiary of the investors. Such an organization presumes a long-term and trustful relationship between the rating agency and the investors. It would be very difficult to organize for a global and international rating agency without a reliable investor base. Many investors would choose not to pay the annual fee.

Another difficulty implementing an investor paying system comes from the very cause of the success of rating agencies; that is the very simple and synthesized way they express their analyses. A letter scale is an easy way to express the opinion of the rating agencies about credit risk since everyone can easily understand it. But of course it can easily be copied. Another way is to establish a report about each issuer or at least to multiply the criteria of appreciation of an issuer's credit risk so that a synthesis through a single mark (the rating) would be difficult. During the 1960s and the 1970s, an English rating agency specialized in the rating of banks (IBCA) drew well-known reports about the credit risk of banks. To synthesize the whole report in a single mark would have meant to strongly reduce the high-quality content of this report. Copying such a report would have had no meaning.

These two conditions seem necessary if one wants to set up an investor paying system: credit rating agencies working in a niche sector with a reliable investor base and strongly enriching their rating with a report that would mitigate this rating.

12.1.3 Rating Through the Cycle

If some investors are not perfectly aware of the risk level of financial products, others are. Some institutional investors indeed choose to dedicate a team of analysts to a specific sector they estimate fundamental for their investment strategy. For the issues of that sector, the institutional investor's analyses generally appear to be timelier than the ones of the rating agencies while being as accurate. As a result, the institutional investor can anticipate the rating agencies' decisions and buy or sell the bonds before the rating announcement. In perfect financial markets, the movement in price resulting from the action of buying or selling bonds is enough to inform other investors of the change

in the issuer's credit risk, and there is no need for a rating agency. That is the point of view of many investors. To go against that idea, the rating agencies claimed that they were rating "through the cycle." One has to understand that they are not influenced by the business cycle and that the rating does not move each time the activity goes up or down. It is a kind of long-term or medium-term rating. If this concept appears quite clear from a theoretical point of view, it is not so clear from an operational point of view. An important power of decision seems to be left to the analyst who decides if an event will trigger or not a rating action. As a result:

- 1) Rating actions are deliberately late compared to market reactions (changes in prices).
- 2) Market reactions are supposed to be much more frequent than rating actions, some of them being thought of as not fundamental by the agency.
- 3) Even if two agencies agree about the credit risk level of an issuer, split ratings should be the rule as these agencies may not agree about the time to disclose the new rating.

12.1.4 The International Credit Rating Sector Is an Oligopoly

At the national level, rating agencies are not an oligopoly. In the USA, ten rating agencies are registered (Nationally Recognized Statistical Rating Organizations, NRSRO) by the Securities and Exchange Commission and can operate all over the country. Three of them work at the international level, and seven of them at the national level. Within Europe, 16 rating agencies are registered, the same three international ones and 13 agencies (mainly German ones) working at a national level. In Japan, China and Canada, we also observe rating agencies working at the national level. All over the world, there are about 130 credit rating agencies.

At the international level, there are only three agencies: Moody's, Standard and Poor's and, with a lower market share, Fitch. Some competitors are trying to challenge these agencies (the US agency Rating and Investment Information (R&I), the Japanese Japan Credit Rating and the Canadian Dominion Bond Rating Services), but the sector is still an oligopoly.

Why is it so? First, for economic reasons. The main asset of rating agencies is their reputation. And it takes a long time to build it up. Investors appreciate the quality of an agency work based on its results and the agency has to work for a long time before being trusted by investors. Moody's and Standard and Poor's (which comes from the merging of Henry Poor's Publishing Company and the Standard Statistics Company) are the oldest agencies; the present company Fitch comes from the merging of several agencies (IBCA, Duff and Phelps, Thomson Bankwatch and the former Fitch) that were well known for bank rating (IBCA) and securitized bond rating (Fitch).

Second, for regulatory reasons. The action of authorities had two effects: setting up a new market for rating agencies by filtering out the companies which are authorized to rate the issuers, and making this new market an oligopoly by confining to a small figure the number of authorized rating agencies. As early as 1936 in the USA, the accounting rules regarding high yield bonds became different from those for investment grade bonds; it made financial companies hold mainly investment grade bonds and, at the same time, it put the rating agencies in a central position. In France, bonds from securitizing vehicles have to be rated. More recently, Basel II agreements gave an important role to the external ratings of rating agencies. These rules and agreements contributed strongly to the growth of the rating sector. At the same time, the authorities decided which agencies which were authorized to rate. In 1975 in the USA, the Securities and Exchange Commission created the NRSRO which counted at first only three agencies. In Europe, the European authorities did the same by recognizing 16 agencies that could operate across Europe. So an oligopoly of rating agencies with a protected market was created.

What are the consequences of such a market structure?

First, and classically, rating agencies' fees tend to be high. The revenues of rating agencies come from new ratings and from the reexamination of former ones, as it is very difficult for a company, once it has been rated, to withdraw its rating from the market. It means the operational risk of rating agencies is quite low, just as the volatility of their revenues. We don't know much about the prices of ratings and the profits of agencies. Nevertheless, in 2011, the operational profit of Standard and Poor's and Moody's was about 40 %; and Fitch's was 31 %. For the first nine months of 2011, the revenue of Standard and Poor's reached US\$ 1.3 trillion for about 1,400 analysts. The figures for Moody's were US\$ 1.2 trillion for 1,300 analysts. These figures make for an annual revenue per analyst higher than US\$ 1 million, which is quite high.

The other consequence is about reputation. It is obviously true that at the beginning of its life a rating agency needs to care a lot about its reputation, which is seen by economists as a price to pay to get in the rating sector (and then as a barrier to the entry of competitors). But, as we have seen, there is another barrier to entry that is the status of NRSRO, which rules the incumbents out of the sector. And, at least in the short run, this regulatory barrier

can appear as a sufficient protection for the international agencies and be the origin of a relaxing of their reputational constraint. This can explain the greed of rating agencies concerning collateralized issues before 2008, and today the possibility for an issuer to do his "shopping" among the agencies before being rated. Reputational effects can be a guarantee of quality (to some extent) only if reputation is the only (or at least the most important) barrier of entry into the sector, which is not the case for credit rating agencies. The protection given by the regulator may give birth to a downward competition between the agencies, which is obviously the opposite of the aim of such a protection.

12.2 Criticisms Towards the Activity of Rating Agencies

Three kinds of criticisms have been formulated against the rating agencies during these last 20 years.

12.2.1 Conflict of Interest

Rating agencies were at the very heart of the financial crisis that subverted the whole financial world in 2007–2008.

The main point is the handling of the securitization operations by rating agencies. Such operations mean packaging classical debt contracts in new bundles, assessing the credit risk of each bundle and then issuing new debt contracts backed on each bundle. The rating agency steps in at several levels of the process. First, it helps the issuer fix the size of each bundle, that is to set up the financial structure of the special purpose vehicle used to issue the debt contracts. Then it assesses the credit risk level of each bundle of new debt. This credit risk depends of course on the financial structure of the special purpose vehicle, a financial structure that has been chosen and assessed by the rating agency itself. The agency has a conflict of interest: it sets up the special purpose vehicle and appreciates the default risk of this vehicle. It gave birth to an underestimation of the credit risk and, owing to a large dissemination of junk debts in the balance sheets of banks, to a tremendous financial crisis.

Rating agencies were asked to build a "Chinese wall" between their advisory and rating activities, and the problem nowadays seems much less acute.

12.2.2 Sluggishness

Apart from a systematic undervaluation of the credit risk of securitized issues, credit rating agencies were blamed for informing investors late. This sluggish attitude has three consequences.

First, investors were not warned in due time of the bankruptcy of the issuer. In 2002, four days before Enron went bankrupt, the rating of this issuer was still good. It was the same for the Lehman Brothers' bank during the last financial crisis.

Then, even if the downgrading of the issuer does not lead to a bankruptcy, it induces a partition of investors between the ones who can appreciate the risk level of the issuer by themselves, without the help of the agencies (the informed investors) and other investors. The former benefit from the fact that the latter are informed late by selling them at a high price the bonds that will be downgraded. The sluggishness of the agencies induces a wealth transfer between informed investors and other investors.

And at last, if rating agencies do not inform investors in due time, the whole bond market appears not to be not regulated and the usefulness of rating agencies to be very limited.

12.2.3 Toughness

In some cases, when the agency proved not to have foreseen the fall in credit risk of the issuer, it tried to compensate for this blindness by tough downgrading which did not seem to be justified. For instance, during the Asian crisis at the end the twentieth century, rating agencies were blamed for making the crisis worse with harsh ratings. It was the same with securitized issues, which were deeply downgraded after the beginning of the crisis.

12.3 The Utility of Rating Agencies

12.3.1 Credit Rating Agencies Have a Certification Function

As credit rating agencies are late in disclosing their new ratings, we may wonder what their usefulness on the financial markets is. An observation of the market reactions, for instance in the credit default swap (CDS) market, will certainly give more complete and timely information to the investors. What is the function of the agencies?

Their role is indeed to specify, among all the market reactions, the ones that will last over time and can be qualified as fundamental changes, and the ones that will quickly disappear. Only the first ones will correspond to a change in rating. The function of the agencies is to confirm that the change in prices corresponds to a change in the level of credit risk. This is a certification function.

Is this certification function important for the market? We don't think it is for institutional investors who specifically analyse some issuers: they know before the agencies what the changes in credit risk of the issuers are and they do not need the agencies to select their investments. But the agencies may be useful for other investors from two points of view:

- 1) The agencies inform these investors that the change in prices is due to a change in credit risk and is definitive; of course, this affects their investment strategy.
- 2) They also inform these investors about the importance of the change in credit risk. Even if these investors guess that the market price reaction is due to a modification of the credit risk, they may not be sure of the importance of that change, the price reaction being possibly followed by another one. The rating disclosure gives a clear indication of the new credit risk of the issuer.

So the financial market, or at least some investors, needs the credit rating agencies' appreciations of credit risk. This information transmission to these investors also means a coordination of all the investors' expectations.

12.3.2 Credit Rating Agencies Have a Stabilizing Effect on the Bond Market and Give a Profit Opportunity to Informed Investors

With the coordination of investors' expectations comes the stabilization of bond prices and spreads.

Let us assume there is a downgrading. Uninformed investors first experience a fall in price resulting from the selling decision of informed investors. This decrease in price can be a nice opportunity to invest for the uniformed investors if it does not last long. On the opposite, it means a loss of money if this decrease corresponds to a change in the credit quality of the issuer. So uninformed investors wonder how to interpret the decrease in bond price and they don't know what should be the fair price of the bond. It means bond price volatility increases after the observation of the change in the bond price. When the rating agency announces a downgrading, the expected fair price of the uninformed investors meets the price of the informed investors, and bond price volatility decreases. A change in the credit risk of an issuer has a destabilizing effect on the bond price, and the rating agency's announcement has a stabilizing effect. Of course, it works exactly in the same way in the case of an upgrading, but with a less acute intensity because an upgrading is good news for every investor, and uninformed ones are less keen to trade their bonds.

In which cases do rating agencies' announcements have a destabilizing effect? First, when it is a surprise event. Sometimes, the rating agency has information about the issuer the informed investors do not have. The agency reacts first causing a change in bond price and an increase in volatility.

A destabilizing effect also occurs when the rating agency disagrees with the informed investors. Informed investors are now assumed to react first, and then the rating agency discloses its new rating. But this announcement can be inconsistent with the informed investors' reaction. For instance, in case of a fall in price, the downgrading announced by the agency can be tougher than expected. This disagreement between the agency and the informed investors makes the bond price volatility increase.

We must also notice that this behaviour of the rating agencies gives a profit opportunity to informed investors. As the agencies are late to give information about an issuer's credit risk to uninformed investors, informed ones have time to sell their bonds at a high price in case of a downgrading, or to buy them at a low price in case of an upgrading. Why do uninformed investors agree to buy or to sell bonds? Because they are not aware of the change in the issuer's credit risk. As soon as uninformed investors become doubtful and wonder if there is any change in the issuer credit risk, the bond price volatility increases, and the announcement by the rating agency should stop this increase in volatility. So the sluggish behaviour of the rating agency, which gives birth to a stabilizing effect, is also at the origin of a profit opportunity for informed investors. If rating agencies were to react in a timely manner, their announcements would increase volatility (in the short run) and there wouldn't be any wealth transfer between investors.

12.4 Improving Bond Market Regulation

As they reduce asymmetry between informed investors and less informed ones, and by doing so stabilize bond prices, rating agencies seem to be necessary to a good regulation of the bond market.

Apart from treachery, which should be fought (a Chinese wall between rating activities and advisory ones is absolutely necessary), the main complaints against rating agencies seem to be sluggishness (which gives birth to wealth transfers between investors) and high fees. Rating shopping does exist as issuers often use the rating advisory services of banks, but it is not a huge problem when multiple ratings are quite compulsory and the point of view of agencies is more or less the same (split ratings diverge only by one notch). We may think the best incentive to make rating agencies work harder and decrease their fees is *competition*. Other ways to regulate agencies do not seem very appropriate:

- 1) Controlling *ex ante* the rating agencies' methods: necessary, but insufficient.
- 2) Allocating blindly an agency to an issuer, in order to avoid the rating shopping: a very theoretical solution which would destroy the commercial relationship between the agency and the issuer.
- 3) Making the agencies liable for the consequences of their errors: this would make the rating business disappear because of the difficulty of predicting a default and the importance of the consequences.

If we want to go a little further and look at the way the whole rating industry may be organized at the European level, we should first mention that a rating agency is a private company that fulfils a general interest mission. Other companies or individuals do exactly the same; for instance, chartered accountants and accounting auditors who have to certify the accounting books of other companies. This could be a good example to use to organize the rating industry.

Raters, and not only rating agencies, should be regulated. The organism in charge of regulation should approve the new raters who want to get into the business only if they fulfil some specific conditions in terms of training (as for registered accountants, an academic path, with examinations and internships, should be followed by applicants who want to become raters). Rating agencies could only be created by approved raters. We can expect an increase of the number of rating agencies, and at last of competition among the rating industry, as everyone fulfilling the training conditions could be a rater.

We think such an organization would create a good balance between a compulsory monitoring of the rating agencies and a free right to get into the market in order to increase competition.

Bibliography

Alsakka, R., & Ap Gwilym, O. (2010). Leads and lags in sovereign credit ratings. *Journal of Banking and Finance, 34*, 2614–2626.

Altman, E. I., & Rijken, H. A. (2004). How rating agencies achieve rating stability. *Journal of Banking and Finance, 28*, 2679–2714.

- Boot, A. W., Milbourn, T. T., & Schmeits, A. (2006). Credit ratings as coordination mechanisms. *Review of Financial Studies*, 19, 81–118.
- Cheng, M., & Neamtiu, M. (2009). An empirical analysis of changes in credit rating properties: Timeliness, accuracy and volatility. *Journal of Accounting and Economics*, 47, 108–130.
- Dallocchio, M., Hubler, J., Raimbourg, P., & Salvi, A. (2006). Do upgradings and downgradings convey information? An event study of the French bond market. *Economic Notes*, 35(3), 293–317.
- Grier, P., & Katz, S. (1976). The differential effects of bond rating changes among industrial and public utility bonds by maturity. *Journal of Business, 49*, 226–239.
- Hand, J. R., Holthausen, R. W., & Leftwich, R. W. (1992). The rating agency announcements on bond and stock prices. *The Journal of Finance*, 47, 733–752.
- Heinke, V. G., & Steiner, M. (2001). Event study concerning international bond price effects of credit rating actions. *International Journal of Finance and Economics*, *6*, 139–157.
- Hettenhouse, G., & Sartoris, W. (1976). An analysis of the informational value of bond rating changes. *Quarterly Review of Economics and Business, 16*, 65–78.
- Hite, G., & Warga, A. (1997). The effect of bond-rating changes on bond price performance. *Financial Analysts Journal*, 53, 35–51.
- Hubler, J., Louargant, C., Ory, J. N., & Raimbourg, P. (2014). Do rating agencies' decisions impact stock risks? Evidence from European markets. *The European Journal of Finance*, 20(11), 1008–1036.
- Jeon, D. H., & Lovo, S. (2013). Credit rating industry: An helicopter tour of stylized facts and recent theories. *Toulouse School of Economics*, WP n° 376.
- Jorion, P., Liu, Z., & Shi, C. (2005). Informational effects of regulation FD: Evidence from rating agencies. *Journal of Financial Economics*, *76*, 309–330.
- May, A. D. (2010). The impact of bond rating changes on corporate bond prices: New evidence from the over-the-counter market. *Journal of Banking and Finance*, *34*, 2822–2836.
- Ory, J. N., & Raimbourg, P. (2015). European rating actions, investor reaction and bond spread volatility. *Economic Notes*, 44(2), 333–360.
- Ory, J. N., Raimbourg, P., & Salvi, A. (2011). Does it really hurt? An empirical investigation of the effects of downgradings and negative watches on European bond spreads. *The Journal of Fixed Income, 20*, 86–96.
- Raimbourg, P. (2013). Rating agencies and financial regulations: Thirty years of academic research. *Bankers, Markets & Investors*, (123), 54-61.

Sénat. (2012). Rapport d'Information, N° 598.

Weinstein, M. I. (1977). The effect of a rating change announcement on bond price. *Journal of Financial Economics*, *5*, 329–350.