

# FOCUS ON...

## RATING AGENCIES AND FINANCIAL REGULATION : THIRTY YEARS OF ACADEMIC RESEARCH

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It is at the beginning of the XXth century that rating activity, according to the modern meaning of that word, appeared within the economy; but we had to wait till the interwar period and the economic crisis to see the rating agencies grow up.

Since 1929, rating agencies developed an activity of sovereign rating, succeeding to underwriters who had been certifying the quality of the sovereign issues since the beginning of the XIXth century. After the interwar crisis, underwriters have outsourced their certification function to rating agencies which allowed them to expand their range of services and to assist governments when issuing speculative debts. The growing power of rating agencies allowed for the emergence of a 'market for lemons', the speculative sovereign debt market, which did not exist in the past (M. Flandreau, J. H. Flores, N. Gaillard et S. Nieto-Parra – 2009).

Following the interwar crisis, administrative changes gave to the rating agencies a prominent part in regulating the US bond market. The United States Treasury and the Comptroller of the Currency (a department of the Treasury who had in charge the bank supervision) decided in the early thirties to use credit ratings to book the value of US national bank's bond portfolios. These bonds were divided in two groups. The first one included the four best rated bonds which were booked according to the purchase price. The second group included low rated bonds which appeared in the balance sheet of the owner at their market price. The consequences of this new regulation were to increase the weight of ratings in the explanation of bond spreads and to induce a decrease in price of low rated bonds (due to the risk of fluctuation of their accounting price) (West, 1973).

In a period when Basel Committee have increased the part of credit rating in the supervision of banks, it is important to know what is (and what should be) the part of rating agencies in financial regulation. This survey aims to synthesize the academic knowledge concerning this subject.

### I. ACCURACY

#### I.1 WHICH KIND OF RISKS ?

Rating agencies try to take into account every kind of default risk, should it be a strategic risk or a financial risk. H. Marble III (2011) split risks between endogenous ones and exogenous ones. The first ones are the risks which are chosen by the company (the financial gearing, a company acquisition, ...) and the second ones are the risks which are merely born by the company (as a change in the business conditions). The author studied the rating changes by Standard & Poor's from 2001 to 2005. He finds that among downgrades, 28% are driven by management choices (endogenous factors), and among upgrades about 44%. These results shed light on the importance of corporate governance on the credit rating of a firm.

#### I.2 ASSESSING THE CREDIT RISK OF A COMPANY : RATING VS STATISTICAL METHODS

Rating from agencies have often been compared to the results from other methods, in particular scoring (R. Kaplan and G. Urwitz, 1979). More recently, structural methods coming from option theory have been used to assess the credit risk. According to Kealhofer (2003), as they use stock price data, these methods allow a finer assessment of credit risk than traditional ratings. A few years before, Delianedis and Geske (1998) exploiting stock price and balance sheet data were driven to the same results: the default probabilities computed by the authors were more advanced indicators of any change in credit risk than the credit ratings.

From an historical point of view, rating agencies did not perform very well during the interwar period: agencies' anticipations concerning defaults were not more reliable than those estimated from stock prices and many bonds with a high rating collapsed. Agencies failed to predict the interwar economic crisis (M. Flandreau, N. Gaillard and F. Packer, 2010).

But according to R. Cantor and C. Mann (2007), the higher accuracy of statistical methods is also correlative of a lower stability of their predictions. G. Löffler (2007) considers that the best default prediction, in particular for short maturity bonds, relies on ratings from one hand and an analysis of stock prices from the other hand.

### **1.3 CONSISTENCY OF RATINGS WITH ACTUAL DEFAULT RATES AND SPREADS**

Over the period 1983-1998, actual default rates and recovery rates given default displayed some discrepancies according to the economic sector, default rates being higher within the banking sector than the corporate sector for a same rating; but this result could be explained by the economic situation. On the opposite, actual default rates and ratings according to the country of issuance were very consistent (J. Ammer and F. Packer, 2000).

Ratings are no more consistent with actual market prices and spreads. Over the period 1988-1998, W. Perraudin and A. Taylor (2004) observed that about 25% of the bond ratings were inconsistent with their prices and rates of return. Nevertheless, taking into account the slowness of rating agencies' reactions allows a high decrease of that percentage.

### **1.4 RATING SCALES DIFFER FROM ONE AGENCY TO THE OTHER.**

R. J. Kish, K.M. Hogan and G. Olson (1999) show differences in investors' perceptions of ratings according to the agency (Moody's or Standard and Poor's); but they were not able to say which one is perceived as the more important.

When issuers, rated by Moody's and Standard and Poor's, are rated by a third agency (Fitch or Duff & Phelps Credit Rating Agency), the third rating is generally more encouraging than the first two ones. The authors argue this is due to rating scale discrepancies, a same rating meaning not exactly the same default risk (R. Cantor et F. Packer, 1997).

### **1.5 MIMICKING**

Over the period 1997-2004, Moody's and Standard and Poor's ratings to nearly defaulted issuers have been studied by A. Güttler and M. Wahrenburg (2007). It seems that Moody's react more quickly than Standard and Poor's to any increase in credit risk, that in case of a downgrading (and to a certain extent, an upgrading) by one agency the other one shortly downgrades (upgrades) this issuer with a higher intensity, and more generally that any harshness by one agency is followed by an identical harshness by the other agency. But no geographical discrepancy can have been noticed in the results.

### **1.6 RATING INFLATION.**

During economic boom, issuer default risk decreases, investors become more trusty towards rating agencies, whose interest is therefore to grant encouraging ratings to issuers. An identical phenomenon of rating inflation can

also occur in case of an important issue or of a company which frequently issues bonds (P. Bolton, X. Freixas and J. Shapiro, 2012).

## **II. TIMELINESS**

### **II.1 ON DEBT MARKETS, RATING AGENCY ANNOUNCEMENTS ARE ANTICIPATED BY INVESTORS**

One of the first issue addressed by academic research concerning ratings is the impact of rating announcements on bond spreads. As a whole, the results of these researches are consistent.

There is a weak reaction (or no reaction) in case of an upgrading. Y. Kim and S. Nabar (2007) argue it is so because of an important anticipation by investors. On the opposite, downgradings or inscription on a watch list with a negative outlook give rise to a decrease in prices and an increase in spreads. These changes in prices and spreads occur before the rating announcements, which therefore are anticipated by investors (Grier and Katz, 1976; Hettenhouse and Sartoris, 1976; Weinstein, 1977; McCarthy and Melicher, 1988; Hite and Warga, 1997; Steiner and Heinke, 2001). On Continental European debt markets, investors' reactions to agencies' negative announcements seem to be less frequent than on US or UK markets: downgradings or negative watch list match with spread variations only in case of an important downgrading or when the issuer rating before the announcement is weak (M. Dallochio et al., 2006 ; J.N. Ory, P. Raimbourg and A. Salvi, 2011). At last, split ratings are more frequent in case of banks and insurance companies, maybe because of the complexity and opacity of bank operations (D. P. Morgan, 2002).

A similar phenomenon can be observed on corporate and bank CDS markets: investors' reactions anticipate downgrading announcements (J. Hull, M. Predescu and A. White, 2004).

### **II.2 ON STOCK MARKETS, ONLY DOWNGRADINGS ARE CONCOMITANT OF A PRICE REACTION; MOST OF TIME, THIS REACTION OCCUR BEFORE THE AGENCY ANNOUNCEMENT.**

As for bond markets, many academic researches have explored the effects of rating changes on stock prices. The main results are the following ones:

■ Upgradings have a weak effect or no effect on stock prices (Holthausen and Leftwich (1986), Hand, Holthausen and Leftwich (1992), Goh and Ederington (1993), Nayar and Rozeff (1994), Barron, Clare and Thomas (1997), Followill and Martell (1997), Dichev and Piotroski (2001), Choy, Gray, Raganathan (2006)).

■ Most of time, downgradings are concomitant with a decrease in stock prices (Pinches and Singleton (1978), Griffin and Sanvicente (1982), Holthausen and Leftwich (1986), Glascock, Davidson and Henderson (1987), Hand, Holthausen and Leftwich (1992), Goh and

Ederington (1993), Nayar and Rozeff (1994), Barron, Clare and Thomas (1997), Goh and Ederington (1999), Dichev and Piotroski (2001), Gropp and Richards (2001), Elayan, Hsu, Meyer (2003), Choy, Gray, Rangunathan (2006) (see appendix 1 for an overview of the effects of upgradings and downgradings on stock return),

■ Most often, investors' reaction anticipates agency announcement.

■ P. Jorion and G. Zhang (2007) point out that stock price reactions to rating announcements depend on the rating of the company before the rating action: the weaker the rating, the more important the reaction.

■ Some studies wonder if a rating change has an effect on stocks' risk. Concerning systematic risk, results are contradictory. (Arbel, Kolodny and Lakonishok (1977), Haugen (1979), Carpenter and Chew (1983), Abad-Romero and Robles-Fernandez (2006)).

■ One research investigates the effects of a rating on an IPO (An and Chan (2008)). The authors conclude that a rating may induce an under-valuation of the stocks of a company which goes public, but the stock volatility is likely to be lower after the IPO.

Some researchers study the effects on prices of an inscription on a watchlist (Wansley and Clauretje (1985)), or of a rating by Best Rating agency (Singh and Power (1991)) or Xinhua-Far East China Ratings (Poon and Chan (2008)); others look at the consequences of an unsolicited rating (Purda (2007)).

### **II.3 TIMELINESS VS ACCURACY: THE SLOW REACTION OF AGENCIES MAY BE UNDERSTOOD AS AN EFFORT NOT TO BE AFFECTED BY THE ECONOMIC SITUATION.**

E. Altman and H. Rijken (2004) compared ratings with scorings of the same companies. They found that ratings took into account long term explanatory variables and scoring much shorter ones. Moreover, rating changes occurred only when the scores of the bonds had moved beyond a specific threshold.

J. Amato and C. Furfine (2004) tried to know whether Standard & Poor's ratings are procyclical or not. They carried out tests in order to explain these ratings by macroeconomic indicators. As a whole and on one date, one cannot say that ratings are procyclical. But if we just consider investment grade ratings, rating changes, or the first assignment of a rating to a company, the hypothesis that ratings are procyclical may be right.

According to Löffler (2004), it is because agencies rate through the economic cycle that ratings are quite stable, but also a little less accurate and that they are correlated with prior ratings.

### **II.4 TIMELINESS VS ACCURACY: THE EFFORT OF AGENCIES TO REDUCE THE RATINGS' VOLATILITY CANNOT BE A JUSTIFICATION FOR THE SLOWNESS OF AGENCIES TO UPDATE RATINGS.**

Agencies are slow to react to a change in an issuer credit risk, and they argue it is so because they rate through the

economic cycle. M. Cheng and M. Neamtiu (2009) looked at ratings' quality before and after the collapse of Enron and the threats in regulation by Congress in 2002. They assert the quality of ratings, measured by their timeliness, but also by their accuracy and volatility, increased with the regulatory pressure. Both the timeliness and accuracy of ratings got better, and the usual argument of rating agencies does not seem acceptable.

## **III. UTILITY**

Due to the slowness of their reaction, one cannot say the economic function of a rating agency is to give an information about an issuer credit quality to investors. Consequently, the question of their utility arises.

### **III.1 RATING AGENCIES MAKE EASIER THE CAPITAL MARKET ACCESS.**

O. Bosch and S. Steffen (2011) have tested the effect of a credit rating on a bond issue by unlisted UK companies over the period 1996-2007. It appears that the syndicate composition is modified (it includes less banks if the issue is not rated), foreign banks and non financials investors take part in such a syndicate only if the issue is rated, and when an issue is rated there is no specific advantage to be listed.

### **III.2 DEFAULT RISK AND RATING ACCOUNT FOR COMPANIES' FINANCIAL STRUCTURES.**

The effects of ratings on companies' financial structures is controversial.

According to D. J. Kisgen (2006), when a rating is near to change (that is, on Standard & Poor's scale, when it includes the sign + or -), the company is to issue less debts than the one whose rating is not going to change. So, we may think that companies have a minimal rating target. This target often depends on the specific rules governing the investments of investors (D. J. Kisgen, 2009).

Exploiting Moody's 1982 credit rating refinement, T. T. Tang (2009) argues that credit ratings affect companies' financial structures, but not in the same way as in D.J. Kisgen's study. Firms with refinement upgrades experience an additional decrease in their ex post borrowing cost compared with firms with downgrades. The former issue more debt, have more capital investments, less cash accumulation and faster asset growth than the later.

### **III.3 RATING AGENCIES ALLOW FOR A COORDINATION OF INVESTORS' BELIEFS AND A MONITORING OF ISSUERS VIA THE WATCH LIST PROCEDURE.**

According to W.A. Boot, T. T. Milbourn and A. Schmeits (2006), credit ratings provide "focal points" for firms and investors and help fix an equilibrium in an environment for which multiple equilibria exist. If a sizeable proportion of investors (e.g. pension funds) bases its investment decisions on the rating, other investors will

follow as well and their beliefs will be coordinated with the beliefs of the first group of investors. Another function of rating agencies is to monitor issuers via the watch list. The credit watch allows for an implicit contract with the issuer where the issuer promises to undertake recovery efforts to mitigate the possible deterioration of its rating.

Over the period 1982-2004 in the United States, C. Bannier and C. Hirsch (2010) show that in case of downgradings of issuers with low initial ratings, the reaction of investors is much higher if the issuer was previously on a credit watch list. They conclude that one role of rating agencies is to monitor low quality issuer.

Concerning CDS market, M. Micu, E. Remolona and P. Wooldridge (2006) do not conclude in the same way. A change in outlook, an inscription on a watch list or a change in rating have a significant impact on CDS prices. This impact is not modified when the rating action is preceded by another rating action.

On the European bond market, J.N. Ory, P. Raimbourg and A. Salvi (2011) stress the fact that an inscription on a watch list has the same effect on bond prices as a one-notch downgrading.

### **III.4 A THIRD RATING BY FITCH IS USEFUL ONLY IN ORDER TO ASSERT THE CREDIT QUALITY OF BONDS WHICH ARE RATED "INVESTMENT GRADE" BY MOODY'S (OR STANDARD AND POOR'S) AND "SPECULATIVE" BY STANDARD AND POOR'S (OR MOODY'S).**

Fitch ratings are on average more positive than Moody's or Standard and Poor's ratings. But there is no evidence that Fitch ratings provide additional information incorporated in bond prices. This rules out the "rating shopping" hypothesis. A bond spread reaction is observed only in case of split ratings by Moody's and Standard and Poor's and when the bond is rated "investment grade" by one agency and "speculative" by the other. In this case, when Fitch rating pushes the bond in the "investment grade" category, there is a decrease in spread by 45 basis points in average. And there is no evidence that Fitch ratings are better when these ratings are decisive for the investment grade classification (D. Bongaerts, K. J. Martijn Cremers, W. N. Goetzmann, 2012).

## **IV. CONCLUSION : HOW TO REFORM RATING AGENCIES ?**

### **IV.1 SHOULD WE ENCOURAGE UNSOLICITED RATINGS ? UNSOLICITED RATINGS ARE USUALLY TOUGHER THAN USUAL ONES, AND WE MAY THINK THEY ONLY AIM AT INCREASING THE MARKET SHARES OF RATING AGENCIES.**

Rating agencies argue that unsolicited ratings help investors to deal with bond credit risk. W. Poon (2003)

studied unsolicited ratings by Standard and Poor's over the period 1998-2000. These ratings are characterized by a downward bias, thus confirming the hypothesis that their only *raison d'être* is to encourage issuers to ask for a traditional rating.

### **IV.2 DUE TO FREE-RIDING RISKS, AN INVESTOR-PAY SYSTEM SEEMS IMPOSSIBLE FOR RATING AGENCIES.**

Given that ratings are costly and information about credit risk is transmitted for free via bond prices, there is no incentive for an investor to buy a rating. In order an investor-pay system to work, no one should know which investors have bought a rating, and the rating buyers should be forbidden to sell back their ratings, which seems quite difficult (V. Skreta and L. Veldkamp, 2009).

### **IV.3 REPUTATIONAL EFFECTS ARE NOT STRONG ENOUGH TO PREVENT RATING AGENCIES FROM BEHAVING BADLY**

Traditionally, rating agencies argue that it would be unprofitable to behave badly because, doing so, they would destroy the asset without which they are not able to work: their reputation. Thanks to a theoretical analysis, J. Mathis, J. McAndrews and J.C. Rochet (2009) demonstrate that as soon as their reputation is important and the profits from a lax behaviour are big enough, rating agencies had better not to give up these profits.

### **IV.4 ABS CDO CRISIS AND RATING SHOPPING**

At the beginning of 2009, bank losses from credit crisis were about USD 500 billions, 2/5 of which coming from ABS CDO. The ABS CDO crisis has many roots, but it seems the main ones are the following ones: a too high concentration of assets, the use by rating agencies of valuation models very sensitive to correlation hypotheses when empirical data about correlation were lacking, lax valuation hypotheses leading to issue AAA CDO tranches up to 70% of the whole issue when the mean rating of assets was B, little public information about the securitization process. Have the rating agencies been the victim of too complex new financial products or did they assign too generous ratings knowingly, this laxity going together with rating shopping behaviours from issuers? Today, no empirical study gives an answer to that question (E. Benmelech, 2010).

### **IV.5 CONCERNING COMPLEX ASSETS, AN INTENSIFIED COMPETITION BETWEEN AGENCIES MAY INCREASE RATING SHOPPING PHENOMENA.**

The agencies' oligopoly grants them with a high demand which may rule out accommodative ratings. Nevertheless, rating shopping may still exist. With complex assets (CDO, CLO,...), sincere rating agencies may assess differently the credit risk of an issue. So, increasing the complexity

of the financial products may be a mean for issuers to have an encouraging rating, and the more so that many agencies are competing: with complex assets, an intensification of competition may give rise to rating shopping bias (V. Skreta and L. Veldkamp, 2009).

#### **IV.6 CONCERNING CORPORATE BOND MARKETS, AN INTENSIFIED COMPETITION BETWEEN AGENCIES MAY RESULT IN A DECREASE OF RATING QUALITY.**

Thanks to a theoretical model, P. Bolton, X. Freixas and J. Shapiro (2012) reach the same conclusion for corporate bonds as V. Skreta and L. Veldkamp. In general, a duopoly rating industry is less efficient than a monopoly, because an issuer has more opportunities to shop for a good rating. Examining the reforms to the industry, the authors assess that an upfront payment for a rating (instead of a payment contingent on the report) as advocated by the Cuomo plan, may eliminate rating inflation but not rating shopping. To achieve this goal, the regulator must make compulsory the disclosure of any rating that was paid for by an issuer. Such a regulation should be accompanied by an oversight of minimum analytical standards for the rating agencies.

Observing ratings by the three international agencies over the period 1995-2006 (period during which Fitch business increased a lot), B. Becker and T. Milbourn, 2011 noticed that ratings by Standard & Poor's and Moody's came closer to AAA rating as competition increased, and their ability to account for bond spreads and default risk decreased. This can be due to reputational effects (from the point of view of a rating agency, an accurate and fair rating is worth only if it allows a long term profitable activity unlowered by competitors) as well as rating shopping behaviour. Corporate ratings being quite simple, the authors argue the first explanation is the best one.

#### **IV.7 THE MULTIPLICITY OF RATINGS IS AN INDICATOR OF THEIR QUALITY.**

E. Benmelech (2010) looked at the downgrading of CDO tranches during the 2007 crisis and showed that the probability that a tranche will be downgraded within a year after issuance is higher if it has been rated by only one rating agency. Moreover, tranches rated by only one agency experience more severe drops in creditworthiness when compared to tranches rated by more than one agency. This seems to give evidence of rating inflation in case of a single rating.

A. Croce, S. Lugo and R. Faff (2011) studied downgradings by Moody's and Standard & Poor's on non prime RMBS markets over the period 2005-2008. Split ratings (for which we know investors ask for a specific return - M. Livingston et L. Zhou, 2010) were much more important after the crisis and, according to the authors, this is due to a healthy competition between these two agencies. As ratings by Standard & Poor's were higher than those of Moody's before the crisis, the downgradings by Standard & Poor's were more severe than those of its competitor. Besides, Moody's downgraded more strongly the securities it rated alone than the ones rated by both agencies. According to the authors, this is the evidence of a rating inflation in case of an only rating.

The rating industry structure seems to be a controversial subject. Does competition increase rating shopping risk or prevent from rating inflation? The answer may be the actual structure, that is an oligopoly with a few companies working at the international level. Anyhow, the banishment of unsolicited ratings, the Cuomo's recommendation of an upfront payment and an oversight of agencies' analytical standards seem agreed by everyone. The compulsory disclosure of any rating bought by an issuer is more disputable as it may reduce strongly the rating demand from issuers. ■

## Appendix 1

### Overview of the main studies about ratings and stock return

Study	Data	Method	Main results
Pinches and Singleton (1978)	Jan. 1950-Sept. 1972, monthly data, 111 upgradings and 96 downgradings	Cumulative abnormal residuals over CAPM returns.	Upgradings: cumulative residuals rose from month (-26) to month(0) Downgradings: cumulative residuals decreased from month (-25) to month (0)
Griffin and Sanvicente (1982)	1960-1975, monthly data, 180 upgradings and downgradings from Moody's and Standard and Poor's	Residuals are computed from the one-factor model, the two-factor model and from matched control firms.	Upgradings: positive abnormal returns during the eleven months preceding the upgrading. Downgradings: significant negative response in the month of the event.
Holthausen and Leftwich (1986)	1977-1982, daily data, 1014 rating actions.	Abnormal stock returns adjusted for concurrent disclosures	Upgradings: no significant abnormal returns. Downgradings: significant negative abnormal returns.
Hand, Holthausen and Leftwich (1992)	250 credit watch placements by Standard and Poor's over Nov. 1981 - Dec. 1983, 1100 rating changes by Moody's and Standard and Poor's over 1977 - 1982, daily data.	Abnormal stock returns on [0, 1].	Credit watch: significant abnormal stock returns only in the case of an unexpected placement. Upgradings: no significant abnormal returns. Downgradings: significant negative excess returns
Goh and Ederington (1993)	Period: 1984-1986. 243 downgrades and 185 upgrades from Moody's. Daily data.	Cumulative abnormal stock returns over [- 30, 30].	Downgradings: significant negative abnormal returns on [0, 1] only in the case of a deterioration of the operational performance. Downgradings resulting from an increase in the leverage, or upgradings: no significant abnormal returns.
Nayar and Rozeff (1994)	Period: Jan. 1977-Dec. 1985. 29 upgrades and 44 downgrades from Moody's. Daily data.	Cumulative abnormal stock returns over [- 40, 40].	Commercial paper downgradings: significant negative abnormal stock returns over [-2, 1]. Commercial paper upgradings: no significant abnormal stock returns.
Barron, Clare and Thomas (1997)	Period: 1984-1992. Daily data on 87 companies rated by Standard & Poor's.	Cumulative abnormal stock returns over [0, 30].	Long-term debt downgradings: significant negative abnormal stock returns over [0, 2]. Upgradings, short-term debt downgradings and new ratings: no significant abnormal stock returns.
Follwill and Martell (1997)	Period: Dec. 1985-May 1988. Daily data on 64 corporate bonds rated by Moody's .	Abnormal stock returns over [-5, 5].	Review for downgrades: significant negative stock excess returns on the date of the press release. No significant excess returns for actual downgrades, for review for upgrades and actual upgrades.
Goh and Ederington (1999)	Period: Jan. 1984-Dec. 1990. 483 corporate downgrades and 312 corporate upgrades from Moody's. Daily data.	Abnormal stock returns over [-45, 1].	Downgradings: significant negative stock returns over [-45, 1]. Market reaction depends on the 'surprise' the downgrade creates. Upgradings: significant positive stock returns over [-45, -1].
Dichev and Piotroski (2001)	Period: 1970-1997. Daily data. 4727 rating changes from Moody's.	Stock abnormal returns over 3 years.	Downgradings: significant negative abnormal returns over [+3, +36] months. Upgradings: no significant impact.
Gropp and Richards (2001)	Period: 1989-2000. 32 European banks and 163 rating actions.	Abnormal stock returns over [-1, 1].	Upgradings and downgradings: significant stock abnormal returns on the date of the rating action.
Elayan, Hsu, Meyer (2003)	Period: Jan. 1990-June 2000. Daily data. 179 rating announcements for New Zealand companies.	Equity abnormal returns over [-1, 0]	Rating assignment: significant positive reaction. Positive (negative) watch placement: significant positive (negative) reaction. Upgrading and downgrading: significant abnormal reaction. Non-ADR cumulative abnormal returns are more significant than ADRones.
Choy, Gray, Ragunathan (2006)	Period: 1989-2003. 127 rating changes for 63 Australian companies, rated by Moody's and Standard & Poor's. Daily data.	Abnormal stock returns during [-10, 10].	Downgradings: significant response on [-1, 0]. (mostly, when the downgrading is unanticipated). Upgradings: no significant abnormal returns..

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