





Available online at www.sciencedirect.com

ScienceDirect

Procedia Economics and Finance 30 (2015) 631 - 642



www.elsevier.com/locate/procedia

3rd Economics & Finance Conference, Rome, Italy, April 14-17, 2015 and 4th Economics & Finance Conference, London, UK, August 25-28, 2015

Credit rating agency performance in terms of profit

Marioara (Orheian) Oana Mihaelajméno

Academy of Economic Studies, 6 Piata Romana, 1st district, Bucharest, Romania

Abstract

This article aims to answer to certain issues of great interest: how profitable are rating agencies, that are their operating incomes, how a credit rating is assigned, who pays credit rating. This study follows the evolution of the three major agencies rating. Standard & Poor's, Moody's, Fitch, during 2003-2012, data were collected from official websites of the agencies published from annual

Article is structure on two parts. The first part describes the agencies, their role in the market, what is their purpose. The second part presents the performance indicators and their evolution, and then presents the main strategies of agencies achieved through product diversification, increasing the quality agencies, etc.

© 2015 Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).
Peer-review under responsibility of IISES-International Institute for Social and Economics Sciences.

Keywords: CRA; profitability; operating income; labor productivity

1. Introduction

Credit rating agencies are considered intermediaries of information as pursuing long-term evolution of a debt. Mostly, the rating agencies do not supervise short-term market and thus they do not respond to them in a short period fluctuations. Credit rating agencies are known as independent providers of credit opinions and play an important role in the market. Credit ratings agencies provide an assessment of the creditworthiness of issuers, which is essentially an assessment they made timely payment of debt, loans in general (Rousseau, 2009).

All the credit rating agencies listed below appear registered or certified in accordance with Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies on the ESMA official web site (European Securities and Markets Authority).

Table 1.List of registered and certified CRAs

| Name of CRA | Country of residence | Status | Effective date | | |
|--|----------------------|------------|------------------|--|--|
| | Germany | Registered | 16 | | |
| Euler Hermes Rating GmbH | • | - | November2010 | | |
| Japan Credit Rating Agency Ltd | Japan | Certified | 6 January 2011 | | |
| Feri EuroRating Services AG | Germany | Registered | 14 April 2011 | | |
| BCRA-Credit Rating Agency AD | Bulgaria | Registered | 6 April 2011 | | |
| Creditreform Rating AG | Germany | Registered | 18 May 2011 | | |
| Scope Ratings AG (previously PSR Rating GmbH) | Germany | Registered | 24 May 2011 | | |
| ICAP Group SA | Greece | Registered | 7 July 2011 | | |
| GBB-Rating Gesellschaft für Bonitätsbeurteilung GmbH | Germany | Registered | 28 July 2011 | | |
| ASSEKURATA Assekuranz Rating-Agentur GmbH | Germany | Registered | 18 August 2011 | | |
| ARC Ratings, S.A. (previously Companhia Portuguesa de Rating, S.A) | Portugal | Registered | 26 August 2011 | | |
| AM Best Europe-Rating Services Ltd. (AMBERS) | UK | Registered | 8 September 2011 | | |
| DBRS Ratings Limited | UK | Registered | 31 October 2011 | | |
| Fitch France S.A.S. | France | Registered | 31 October 2011 | | |
| Fitch Deutschland GmbH | Germany | Registered | 31 October 2011 | | |
| Fitch Italia S.p.A. | Italy | Registered | 31 October 2011 | | |
| Fitch Polska S.A. | Poland | Registered | 31 October 2011 | | |
| Fitch Ratings España S.A.U. | Spain | Registered | 31 October 2011 | | |
| Fitch Ratings Limited | UK | Registered | 31 October 2011 | | |
| Fitch Ratings CIS Limited | UK | Registered | 31 October 2011 | | |
| Moody's Investors Service Cyprus Ltd | Cyprus | Registered | 31 October 2011 | | |
| Moody's France S.A.S. | France | Registered | 31 October 2011 | | |
| Moody's Deutschland GmbH | Germany | Registered | 31 October 2011 | | |
| Moody's Italia S.r.l. | Italy | Registered | 31 October 2011 | | |
| Moody's Investors Service España S.A. | Spain | Registered | 31 October 2011 | | |
| Moody's Investors Service Ltd | UK | Registered | 31 October 2011 | | |

| Standard & Poor's Credit Market Services France S.A.S. | France | Registered | 31 October 2011 |
|--|----------|------------|---------------------|
| Standard & Poor's Credit Market Services Italy S.r.l. | Italy | Registered | 31 October 2011 |
| Standard & Poor's Credit Market Services Europe Limited | UK | Registered | 31 October 2011 |
| CRIF S.p.A. | Italy | Registered | 22 December 2011 |
| Capital Intelligence (Cyprus) Ltd | Cyprus | Registered | 8 May 2012 |
| European Rating Agency, a.s. | Slovakia | Registered | 30 July 2012 |
| Axesor SA | Spain | Registered | 1 October 2012 |
| Cerved Rating Agency S.p.A. (previoulsy CERVED Group S.p.A.) | Italy | Registered | 20 December 2012 |
| Kroll Bond Rating Agency | USA | Certified | 20 March 2013 |
| The Economist Intelligence Unit Ltd | UK | Registered | 3 June 2013 |
| Dagong Europe Credit Rating Srl (Dagong Europe) | Italy | Registered | 13 June 2013 |
| Spread Research | France | Registered | 1 July 2013 |
| EuroRating Sp. z o.o. | Poland | Registered | 7 May 2014 |
| HR Ratings de México, S.A. de C.V. (HR Ratings) | Mexico | Certified | 7 November 2014 |
| Moody's Investors Service EMEA Ltd | UK | Registered | 24 November 2014 |
| Egan-Jones Ratings Co. (EJR) | USA | Certified | 12 December 2014 |

Source: http://www.esma.europa.eu (update: 12 December 2014)

The market for fundamental credit ratings cannot sustain a large number of agencies. The market will remain an oligopoly where CRAs tend to compete for the market (to become a standard) rather than in the market. However, competitive dynamics amongst even a small number of CRAs can be based on building a reputation for rating quality.

The credit rating industry is a global business, but controlled by only a few players. Two of US parentage (Moody's and Standard & Poor's) control over 80% of the market. Fitch was the third entrant into the market, and its ultimate owner is headquartered in Paris so in principle European. With Fitch, the three leading players control over 94% of the global market. Since 2007 all three groups suffered a serious decline in revenue and profits. However it was Fitch which suffered the most, suggesting that more competition may not be the answer to improving the status of the market.

Table 2. Structure of rating agencies

| McGraw Hill Financial | Moody's Corporation | Fitch Group (until 2005 Fitch Ratings) |
|---------------------------------|---------------------------|--|
| S&P Ratings Services | Moody's Investors Service | Fitch Ratings |
| S&P Dow Jones Indices | Moody's Analytics | Fitch Learning |
| S&P Capital IQ | | Fitch Solutions |

Source: www.orbis.com

Besides these three agencies, a very small part of the market is occupied by small specialized companies, most organized nationally. Basel Committee on Banking Supervision has estimated that it would be around 130 agencies worldwide.

There are 10 agencies NRSRO according to the organization's annual report of 13 dec.2013: AM Best Company Inc., registered on 24 September. 2007; DBRS Inc., registered in 24 Sept.2007; Egan-Jones Rating Company, registered on 21 Dec.2007,; Fitch Rating Inc., registered in 24 Sept.2007; Japan Credit Rating Agency Ltd, registered on 24 Sept.2007; Moody's Investors Service Inc., registered on 24 September. 2007 Morningstar Credit Rating LLC, registered on 23 June 2008, Kroll Bond Rating Agency Inc., registered on 11 Febr. 2008, S & P Ratings Services, filed 24 Sept.2007; hr Ratings de Mexico SA The C.V., registered on 5 nov.2012. Most have as headquarters US, excluding Japan Credit Rating Agency Ltd, with headquarters in Japan and HR Ratings de Mexico SA The C.V, with headquarters in Mexico.

Nationally Recognized Statistical Rating Organization (NRSRO) nationally recognized statistical rating organization is a credit rating agency which issues credit ratings certified by qualified institutional buyers on: (I) financial institutions, brokers, dealers or; (ii) insurance companies; (iii) corporate issuers; (iv) issuers of asset-backed securities; (v) issuers of government securities, municipal securities, or securities issued by a foreign government; (vi) a combination of one or more categories of borrowers described in any of clauses (i) through (v) above.

The first credit ratings (1909) occurred after the panic of 1907 in the US, who trained alteration of investor confidence in financial markets and the regulation of it and the emergence need to provide impartial information by neutral entity, the financial creditworthiness of borrowers. Rating activity has grown tremendously since the '80s, with the development of international financial markets and the increasing complexity of loan products.

Table 3. Number of Outstanding Credit Ratings by Category of Credit Rating

| NRSRO | Financial Institutions | Insurance Companies | Corporate Issuers | Asset- Backed Securities | Government Securities | Total Ratings |
|-------------|---------------------------|------------------------|----------------------|--------------------------------|--------------------------|------------------|
| A.M. Best | N/R | 4,610 | 1,787 | 55 | N/R | 6,452 |
| DBRS | 16,222 | 148 | 3,736 | 10,054 | 15,952 | 46,112 |
| EJR | 109 | 48 | 1,004 | N/R | N/R | 1,161 |
| Fitch | 51,718 | 3,786 | 15,367 | 56,311 | 223,188 | 350,370 |
| HR Ratings | N/R | N/R | N/R | N/R | 184 | 184 |
| JCR | 159 | 27 | 472 | N/R | 56 | 714 |
| KBRA | 15,646 | 50 | 1,000 | 352 | 1,945 | 18,993 |
| Moody's | 50,795 | 3,639 | 32,510 | 82,357 | 754,062 | 923,363 |
| Morningstar | N/R | N/R | N/R | 13,935 | N/R | 13,935 |
| S&P | 60,300 | 7,600 | 47,400 | 97,500 | 930,500 | 1,143,300 |
| Total | 194,949 | 19,908 | 103,276 | 260,564 | 1,925,887 | 2,504,584 |

Source: NRSRO Annual Report 2013

Of the total of 2,504,584 issued ratings, S & P holds 45, 6%, ie 1,143,300 issued ratings, most ratings of government securities being issued, 930500. On the second place is Moody's by having 923,363 ratings issued, where 754,062

were issued for government securities and 82,357 were asset-backed securities. The third place is occupied by Fitch, 14% of all ratings issued, most of them 223,188 are government securities.

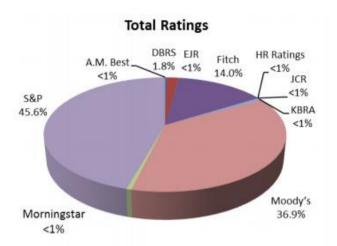


Chart 1. The percent of the credit ratings in total for all NRSRO agencies

The pie charts above show that, S&P and Moody's continue to be the two NRSROs with the highest number of ratings reported to be outstanding as of December 31, 2012, accounting for about 45.6% and 36.9%, respectively, of all outstanding ratings. Fitch reported having the third highest number of outstanding ratings, accounting for about 14.0% of all outstanding ratings. In total, these three NRSROs issued about 96.5% of all the ratings that were reported to be outstanding as of December 31, 2012. This is the lowest percentage of outstanding ratings issued in the aggregate by such NRSROs since 2007, which is the year when NRSROs began reporting outstanding ratings on Form NRSRO. As of the 2007 year end, these three NRSROs accounted for about 98.8% of all outstanding ratings.

Credit rating agencies have a similar **role** of external auditors. Therefore, the rating can be used as a tool in transactions with companies (mergers and acquisitions), strengthens contracts, reduce transaction costs and monitoring.

Role of rating agencies is to assess objectively and independently the risk of bankruptcy or default of an economic actor issuer of debt securities or bonds. Agencies inform investors about the risks they are subject when borrowing a company or state.

The relationship between rating and reputation of rating agencies is shown in the following figure.

debt security (credit rating agency's reputation) payment, information Issuer Credit Rating Agency Investors rating, reputation rating, monitoring

investment (trust in rating)

Fig. 1. Information intermediation

Source: Dittrich, 2007, p.10

Through the credit rating debtor's companies benefit from the credibility of rating agencies. Transfer of credibility is ensured by the main service offered by agencies: indicator services (Dittrich, 2007).

The role of rating agencies is to objectively and independently assess the risk of bankruptcy or default of an economic actor issuing debt securities or bonds. These inform investors about the risks they are subject when borrowing a company or state.

Another important role of agencies is to facilitate contracting because letters / rating scale are effective criteria for assessing credit quality. The private contracting of basic restrictions ratings appear in contracts for loans, payment commitments and other financial instruments.

Rating agencies were those that made possible the existence and development of structured finance securities market, according to Utzig (2010, p. 1), because ratings have guaranteed the interpretation of new products for investors safety. The rating has become an referential for active package structuring and rating agencies have provided support services to issuers (paying rating) to this effect, which opened the way the manifestation of conflicts of interest.

2. Performance indicators

Table 4. CRA market share on 2013

| Registered Credit Rating Agency | Market share % |
|---|----------------|
| AM Best Europe-Rating Services Ltd. (AMBERS) | 0.72 |
| ARC Ratings, S.A. | 0.03 |
| ASSEKURATA Assekuranz Rating-Agentur GmbH | 0.26 |
| Axesor S.A. | 0.58 |
| BCRA-Credit Rating Agency AD | 0.03 |
| Capital Intelligence (Cyprus) Ltd | 0.13 |
| CERVED Group S.p.A. | 2.19 |
| Creditreform Rating AG | 0.53 |
| CRIF S.p.A. | 0.76 |
| Dagong Europe Credit Rating Srl (Dagong Europe) | <0.01 |
| DBRS Ratings Limited | 1.27 |
| Euler Hermes Rating GmbH | 0.24 |
| European Rating Agency, a.s. | <0.01 |
| EuroRating Sp. Zo.o. | <0.01 |
| Feri EuroRating Services AG | 0.67 |
| Fitch Group | 16.22 |
| GBB-Rating Gesellschaft für Bonitätsbeurteilung mbH | 0.33 |
| ICAP Group SA | 0.75 |
| Moody's Group | 34.53 |
| Scope Credit Rating GmbH | 0.14 |
| Spread Research SAS | 0.09 |
| Standard & Poor's Group | 39.69 |
| The Economist Intelligence Unit Ltd | 0.83 |
| TOTAL | 100 |

Source: http://www.esma.europa.eu

In generally we measure *industry concentration*, which indicates the competitiveness of an industry, by using the Herfindahl-Hirschman Index ("HHI").

The inverse of the HHI ("HHI Inverse") can be used to represent the number of equally sized firms necessary to replicate the degree of concentration in a particular industry. The HHI Inverse is calculated by dividing 10,000 by the HHI. In other words, an industry with an HHI Inverse of 3.0 would have a concentration that is equal to an industry where the entire market is evenly divided among three firms.

Calculations of the HHI and HHI Inverse confirm the results included in table 3 of this article. Based on the number of outstanding ratings included there, the HHI indicates that the NRSRO industry constitutes a "concentrated" market, and is the equivalent concentration of an industry with approximately 2.75 equally sized firms.

Table 5. HHI Inverse for each rating category from 2008 to 2012

| Year | Financial Institutions | Insurance Companies | Corporate Issuers | Asset- Backed Securities | Government Securities | Total (all rating categories) | Total Excluding Government Securities |
|------|---------------------------|------------------------|----------------------|--------------------------------|--------------------------|-------------------------------------|--|
| 2008 | 3.72 | 4.05 | 3.79 | 2.82 | 2.83 | 2.99 | 3.56 |
| 2009 | 3.85 | 3.84 | 3.18 | 3.18 | 2.65 | 2.86 | 3.58 |
| 2010 | 3.99 | 3.37 | 3.17 | 3.20 | 2.69 | 2.88 | 3.55 |
| 2011 | 4.16 | 3.76 | 3.02 | 3.38 | 2.47 | 2.74 | 3.70 |
| 2012 | 4.02 | 3.72 | 3.00 | 3.44 | 2.50 | 2.75 | 3.68 |

Source: NRSRO Annual Report 2013

The table shows that since 2008, the HHI Inverse for all rating categories in total and the rating categories of insurance, corporate and government securities has declined, indicating that NRSRO industry concentration has increased in those rating categories. Since 2008, the HHI Inverse for financial institutions and asset-backed securities has increased, indicating that NRSRO industry concentration has declined for those rating categories.

The government securities rating category (which includes sovereigns, U.S. public finance, and international public finance) is the largest class of ratings (comprising approximately 77% of all ratings outstanding as of December 31, 2012) and is dominated by S&P and Moody's (which together issued 87.5% of all outstanding government ratings as of December 31, 2012). The size of the ratings class relates to the large number of municipalities which issue rated securities, often several times a year. Thus, the table shows that the HHI Inverse for all rating categories excluding government securities increased slightly between 2008 and 2012, indicating a slight decline in concentration. While the aggregation of all five rating categories shows that industry concentration has increased since 2008, if the government securities rating category is excluded, industry concentration will be seen to have declined slightly.

The performance of rating agencies is seen from two perspectives: in terms of profit and performance in terms of accuracy.

This article presents the performance of CRA in terms of profit, making an analysis of the following indicators listed below: net turnover, net income, number of employees and I have calculated for all three agencies net margin and labor productivity. Net margin is a financial indicator of profitability, which shows how profitable is a company's of total activity. The higher the percentage is, the company in terms of profitability is more stable and suggests it has a good situation. Labour productivity measures efficiency use of human factor, must be in continuous increase.

Net margin = net income/net turnover*100 (1) Labor productivity=net turnover/employees (2)

Tabel 6. Main performance indicators of Moodys agency during 2012-2003 (thousand dollars).

| MOODYS | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 |
|------------------|----------|---------|-----------|----------|---------|---------|---------|---------|---------|---------|
| NET INCOME | | 571.40 | | | 457.60 | 701.50 | 753.90 | 560.80 | 425.10 | 363.90 |
| | 690.000 | 0 | 507.800 | 402.000 | 0 | 0 | 0 | 0 | 0 | 0 |
| NET | 2.730.30 | 2.280.7 | | 1.797.20 | 1.755.4 | 2.259.0 | 2.037.1 | 1.731.6 | 1.438.3 | 1.246.6 |
| TURNOVER | 0 | 00 | 2.032.000 | 0 | 00 | 00 | 00 | 00 | 00 | 00 |
| NUMBER OF | | | | | | | | | | |
| EMPLOYEES | 6800 | 6100 | 4500 | 4000 | 3900 | 3600 | 3400 | 2900 | 2500 | 2300 |
| NET | 25,27194 | 25,053 | 24,99015 | 22,36812 | 26,068 | 31,053 | 37,008 | 32,386 | 29,555 | 29,191 |
| MARGIN | 81 | 71 | 748 | 82 | 13 | 56 | 49 | 23 | 73 | 4 |
| LABOR | | | | | | | | | | |
| PRODUCTIV | 401,5147 | 373,88 | 451,5555 | | 450,10 | | 599,14 | 597,10 | | |
| ITY | 06 | 52 | 556 | 449,3 | 26 | 627,5 | 71 | 34 | 575,32 | 542 |

Source: www.moodys.com

From the tabel above we can see that the number of employees have increased, but regarding net turnover and net income we see that starting with 2008 they both decreased, and that the financial economic crises started in 2008 influenced the profitability of the company.

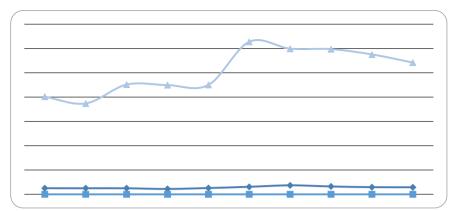


Chart 2. The evolution of labor productivity and net margin of Moodys agency during 2012-2003

Even though the number of employees increased labor productivity has fluctuated various because the net turnover recorded different values during the analised period. In period 2003-2007 labor productivity increased, but starting with 2008, has decreased. However registered a slight stagnation in 2008-2009-2010. Regarding net margin, the biggest value was in 2006, 37%, and the lowest value eas in 2009, 22.36%.

Tabel 7. Main performance indicators of Standard&Poors agency during 2012-2003 (thousand dollars).

| S&P M C | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 |
|------------------|----------|---------|-----------|-----------|---------|---------|---------|---------|---------|---------|
| Graw Hill | | | | | | | | | | |
| NET INCOME | | 911.00 | | | 799.49 | 1.013.5 | 882.23 | 844.30 | 755.82 | 687.65 |
| | 437.000 | 0 | 828.000 | 731.000 | 1 | 59 | 1 | 6 | 3 | 0 |
| NET | 4.450.00 | 3.954.0 | | | 6.355.0 | 6.772.2 | 6.255.1 | 6.003.6 | 5.250.5 | 4.890.3 |
| TURNOVER | 0 | 00 | 3.639.000 | 5.870.000 | 55 | 81 | 38 | 42 | 38 | 20 |
| NUMBER OF | | | | | | | | | | |
| EMPLOYEES | 21687 | 22660 | 20755 | 21077 | 21649 | 21171 | 20214 | 19600 | 17253 | 16068 |
| NET | | | | | | | | | | |
| MARGIN | 9,820224 | 23,039 | 22,75350 | 12,45315 | 12,580 | 14,966 | 14,104 | 14,063 | 14,395 | 14,061 |
| | 72 | 96 | 371 | 162 | 39 | 29 | 1 | 23 | 15 | 45 |
| LABOR | | | | | | | | | | |
| PRODUCTIV | 205,1920 | 174,49 | 175,3312 | 278,5026 | 293,54 | 319,88 | 309,44 | 306,30 | 304,32 | 304,35 |
| ITY | 51 | 25 | 455 | 332 | 96 | 48 | 58 | 83 | 61 | 15 |

Source: www.standard&poors.com

Regarding net turnover we see that S&P is the largest agency from all three. Is the largest also regarding the number of employees and from, the table we see it also was in continuous growing.

| Fitch | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 |
|------------------|----------|--------|-----------|-----------|--------|--------|--------|--------|--------|--------|
| NET INCOME | 77.718 | 53.390 | 42.386 | 42.574 | 38.996 | 32.766 | 17.725 | 21.544 | 15.944 | 17.278 |
| NET | | 258.74 | | | 199.49 | 191.76 | 106.50 | 127.49 | 104.66 | |
| TURNOVER | 349.997 | 6 | 227.197 | 214.957 | 1 | 5 | 6 | 5 | 8 | 97.561 |
| NUMBER OF | | | | | | | | | | |
| EMPLOYEES | 1466 | 1426 | 1367 | 1384 | 1404 | 1215 | 1002 | 859 | 733 | 667 |
| NET | | | | | | | | | | |
| MARGIN | 22,20533 | 20,634 | 18,656056 | 19,805821 | 19,547 | 17,086 | 16,642 | 16,897 | 15,232 | 17,709 |
| | 32 | 14 | 2 | 63 | 75 | 54 | 25 | 92 | 93 | 95 |
| LABOR | | | | | | | | | | |
| PRODUCTIV | 238,7428 | 181,44 | 166,20117 | 155,31575 | 142,08 | 157,83 | 106,29 | 148,42 | 142,79 | 146,26 |
| ITY | 38 | 88 | 04 | 14 | 76 | 13 | 34 | 26 | 4 | 84 |

Tabel 8. Main performance indicators of Fitch agency during 2012-2003 (thousand dollars).

Source: www. fitch.com

From the table above we can see that number of employees was in continuous growing but comparing to S&P was much lower. Regarding net income we can see that comparing 2011 with 2003 has tripled and the net turnover in generally has increased, a slight decrease was recorded in 2006.

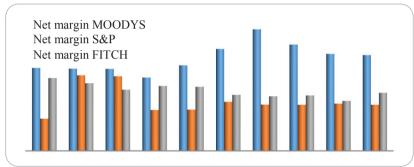


Chart 3. Evolution of net margin of the three major agencies.

A net margin spectacular evolution is recorded by Moodys Agency in 2006. An increasing trend can be observed at Fitch agency for 2009-2012 perioud and for S & P a spectacular decline was recorded in 2012 compared to 2010-2011.

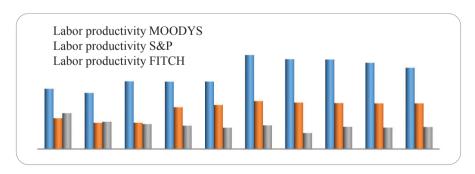


Chart 4. Evolution of the labor productivity of the three major agencies.

From the chart done it appears that in the period 2003-2007, labor productivity is still growing for Moodys, company because the number of agency staff has been growing even registered a double of the number of employees in 2010 compared 2003.

Regarding the S & P there is an increase in labor productivity for the years 2003-2007, a slight decrease, 2008-2009, the year 2010 was marked by a sharp decline.

For Fitch, low productivity was recorded in 2006, and after 2009 has seen an ascending evolution until 2012.

3. Conclusion

Although there is possibility of theoretical conflicts and intuitive, there are no empirical studies to support their materialization in practice. As financial products were new, the rating agencies had the experience, theoretical knowledge and poor historical data about them, which affected negative the technical side rating (models and qualitative assessments).

Rating agencies have increasingly detailed procedures for verifying information received from issuers and monitoring of ratings. In order to ensure competent human resources, agencies have developed, often together with other partners, training programs in the field of credit risk and increased budgets for employee training.

Acknowledgement

This work was cofinanced from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013, project number POSDRU/159/1.5/S/142115 "Performance and excellence in doctoral and postdoctoral research in Romanian economics science domain"

References

Bayar Yılmaz (2014) Recent Financial Crises and Regulations on the Credit Rating Agencies, Research in World Economy Vol. 5, No. 1 Cantor Richard, Frank Packer (1997) Differences of opinion and selection bias in the credit rating industry, Journal of Banking and Finance

Cantor Richard, Christopher Mann (2003), Measuring The Performance Of Corporate Bond Ratings, Electronic copy available at: http://ssrn.com/abstract=996025

Covitz Daniel, Paul Harrison2003, Testing Conflicts of Interest at Bond Rating Agencies with Market Anticipation: Evidence that Reputation Incentives Dominate, Federal Reserve Board

Dittrich, F. (2007). The Credit Rating Industry: Competition and Regulation. http://ssrn.com/991821

Ekins Emily McClintock and Calabria Mark A. (2012), Regulation, Market Structure and Role of the Credit Rating Agencies, Policy Analysis, No.704. Cato Institute

Finch Nigel (2004), International Rating Agencies and Sustainability, MGSM

Joseph E. Stiglitz 1975, The Theory of "Screening", Education, and the Distribution of Income,

Fight Andrew (2000), The rating game, ISBN: 978-0-471-49134-7

Frost Carol Ann (2006) Credit Rating Agencies in Capital Markets: A Review of Research Evidence on Selected Criticisms of the Agencies

Gonzalez, F. et al. (2004). Market Dynamics Associated with Credit Ratings: A Literature Review. Occasional Paper Series No. 16. Frankfurt: European Central Bank.

House Richard (1999), Ratings Trouble, Institutional Investor

Partnoy, F. (2002). The Paradox of Credit Ratings. U San Diego. Law & Econ Research Paper No. 20. Available at SSRN: http://ssrn.com/abstract=285162

Schwarcz Steven (2001), The role of Rating Agencies in Global Market Regulation, în Eilis Ferran, Charles Goodhart, Regulating Financial Services and Markets in the XXIst Century

Utzig Siegfried (2010), The Financial Crisis and the Regulation of Credit Rating Agencies: A European Banking Perspective, ADBI Institute Working Paper Series

European Securities Market Expert Group (ESME). 2008. Role of Credit Rating Agencies.

ESME's report to the European Commission. Brussels: ESME.

European Parliament. (2009). Regulation of the European Parliament and of the Council on

Credit Rating Agencies.

SEC, Annual Report on Nationally Recognized Statistical Rating Organizations as Required by Section of the Credit Rating Agency Reform Act

of 2006, June 2008 [2008 SEC NRSRO Report]
ESMA Report on Trends, Risks and Vulnerabilities, No. 1, 2013
ESME s report to the European Commision, june 2008, Role of credit rating agencies www.standard&poors.com
www.fitch.com
www.moodys.com
www.esma.europa.eu