



Market Structure Development in a Regulated Market: The Case of the EU Rating Agencies

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Abstract

Background: The motivation for this article is the observation of political and private efforts to establish an EU-based rating agency as a counterweight to the three major agencies and observe other approaches to increase competition in the rating market.

Objectives: This article aims to analyse the potential regulatory impact of the oligopolistic situation on the European Union (EU) rating market in the regulation imposed on the agencies. **Methods/Approach:** Selected key figures are applied to observe if and how the dominance has changed. The different rating service range offered by the registered rating agencies in the EU is also considered in the analysis. **Results:** The research results show that new agencies potentially impact the EU rating market. While the three major rating agencies still dominate the market, they do so within a changing environment. **Conclusions:** The employment of external ratings is significant in the financial sector. Ratings provide relevant information on the default risk of financial instruments and assess the solvency of issuers. The market for external ratings thereby can be classified as oligopolistic. Turbulences during the financial crisis of 2008 triggered stricter regulation of the credit rating agencies. Such regulation has now been in force for a good decade.

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Introduction

The market for external ratings is dominated at the global and EU levels by the three large credit rating agencies Standard & Poor's (S&P), Moody's, and Fitch Ratings ("Big Three"¹). The purpose of a credit rating is to assess the default risk of financial instruments. In addition, a rating may provide a relevant assessment of the ability of an issuer to meet future payment obligations. Therefore, a rating for issuers facilitates access to the capital market as it contributes significantly to transparency for investors. The use of external ratings has been established as a regulatory requirement, in particular with the framework of Basel II (Basel Committee on Banking Supervision, 2004) and the equity capital regulations contained therein. This framework had been adopted in the EU. External ratings have thus gained importance by providing input for the supervision of financial institutions. In the financial crisis, the rating agencies and the oligopolistic market structure have been criticized for incorrect ratings. Stricter regulatory provisions are also followed at the EU level to strengthen competition among rating agencies, diversification, and transparency (Beck et al., 2010; Deipenbrock, 2010; Brieger, 2012; Blaurock, 2012; Blaurock, 2013).

In addition to the focus on ratings of financial instruments, the importance of sustainability ratings has recently been growing. With the Green Deal for the EU, the European Commission emphasizes its efforts to achieve the climate goals. The issue of sustainability is to be included in all EU policy areas. Considerable investments are necessary to achieve the climate goals, and hence, funds need to be directed into this area. This is also linked to the importance of sustainability ratings, which are currently largely unregulated compared to financial ratings (European Commission, 2019; Autorité des marchés financiers (AMF), Autoriteit Financiële Markten (AFM), 2020). Thus, it will be important for the established rating agencies to prepare and offer sustainability ratings. Significant activity can already be traced.

Based on the regulatory efforts and the associated intent to increase competition on the one hand and reduce the dependence on external ratings on the other, this article analyses the competitive situation in the EU rating market. Selected key figures check whether the market structure has changed over a specified period. Associated with this is whether regulation has brought about a change in the oligopolistic market structure. This article is based on a contribution to Entrenova Virtual Conference 2020 (Meeh-Bunse et al., 2020).

The following chapter explains the evolution of the oligopolistic market structure with the major dominance of the Big Three. The empirical analysis shows the market situation over time. Then, in the next chapter, potential competitive alternatives in the rating market are discussed. The conclusion summarizes the essential findings and provides an outlook on further research opportunities in this subject area.

The oligopolistic market structure

An important aspect of the prevailing market structure lies in the regulatory institutionalization of ratings for the financial markets. For the first time in 1936, the US "Controller of the Currency" stipulated that purchasing securities that are largely speculative and do not meet a certain standard is prohibited. The governing body did not publish a more detailed definition but referred in a footnote that the terms used can be found in recognized rating agencies' manuals (Harold, 1938).

Much later, in 1975, the recognition as U.S. Nationally Recognized Statistical Rating Organization (NRSRO) was awarded for the first time by the U.S. supervisory authority

¹ The term "Big Three" in this context refers to the rating agencies Standard & Poor's, Moody's and Fitch Ratings.

Securities and Exchange Commission (SEC). Consequently, only ratings of companies with NRSRO status could be used to determine banks' capital requirements. In this context, the SEC directly determined the agencies S&P, Moody's, and Fitch Ratings (U.S. Securities and Exchange Commission (SEC), 2005). The basis of the market-dominant position was thus laid for regulatory purposes. Since 1975, for over 25 years, until February 2003, the SEC has granted NRSRO status to four other agencies, which, however, had been merged or been taken over (U.S. Securities and Exchange Commission (SEC), 2003). Accordingly, only three large NRSROs existed sustainably until then. At this time, Dominion Bond Ratings Service (DBRS) (February 2003) and A.M. Best Company, Inc. (March 2005) became other agencies recognized as NRSROs by the SEC. They entered the market of regulatory recognized agencies (Langohr et al., 2008). Currently, nine rating agencies are registered as NRSROs (U.S. Securities and Exchange Commission (SEC), 2020). With the so-called "Credit Rating Agency Reform Act" (U.S. Credit Rating Agency, 2006), enacted in 2006, rating agencies were able to register with the US Register SEC as a "Nationally Recognized Statistical Rating Organization" (NRSRO) instead of being nominated. The law made it possible for smaller rating agencies to register under certain conditions, opening the market to many rating agencies.

The EU Rating Regulation (European Union, 2009) entered into force at European Union (EU) level three years later in 2009. The regulation aims to ensure a high level of consumer and investor protection by applying common quality requirements for ratings given within the EU. The regulation also stipulates that a rating agency must apply for registration to be recognized as an external rating agency (External Credit Assessment Institution (ECAI)). Thus, the status as ECAI represents the European Union counterpart to the NRSRO of the U.S. SEC. The European Securities and Markets Authority (ESMA) (Regulation (EU) No 1095/2010), established on January 01, 2011, has powers over credit rating agencies with regards to registration and ongoing supervision. The admission requirements and the necessary associated information for the registration of rating agencies can be seen as an obstacle to entering the rating market. Newly established rating agencies are particularly affected because they do not yet have sufficient experience and the necessary organizational requirements. However, the regulation for the registration of rating agencies enables exemption from certain information details or requirements. Given the demand for more competition on the rating market, high entry barriers for start-up agencies have been intended to be avoided (European Union, 2012).

A second important aspect of the oligopolistic market structure is that the effectiveness of ratings can only be observed ex-post. Consequently, taking the rating into account when regulating or making investment decisions requires trust in the solvency analysis. The agencies can acquire this trust through many years of experience, using statistically valid methods, and correct credit ratings in the past (Haar, 2009). This results in a reputation for the quality of the rating, which is crucial for the agencies' success. The historical development and the aspect of reputation illustrate the difficult successful market entry of new rating agencies and their establishment in the market. Once an issuer has decided on obtaining a rating from an agency with a corresponding reputation, any change in agency or unsubscribing is potentially questioned by investors. The assumption may be made that a possible "downgrading" should be avoided, which will force a concentration effect on the rating market (Lerch, 2010).

Empirical analysis

With the EU Rating Regulation of 2009 and its amendments in 2011 and 2013, numerous objectives and sub-objectives are pursued. Besides high consumer and investor protection, the promotion of competition, independence from rating agencies, preventing the excessive use of ratings by market participants, and a regular rotation of rating agencies are cited. In particular, the 2013 amendment aims to strengthen competition between rating agencies and to encourage the use of smaller ones. For example, by Article 8c of the current EU Rating Regulation for Structured Financial Products (SFI), issuers are required to request double ratings to guarantee a second, independent rating (European Union, 2013). Article 8d also determines the selection method when mandating rating agencies for SFI.

Consequently, if an issuer commissions at least two rating agencies to issue a rating for the same structured financial product, one of the two commissioned rating agencies may have a maximum market share of 10 percent (European Union, 2013). A structured financial product is a financial product "that consists of one or several base-line values and a derivative component" (Bundesanstalt für Finanzdienstleistungsaufsicht, 2014). Therefore, traditional financial products such as corporate bonds are exempt from this double rating (agency) requirement. The SFI market segment is the second-largest contributor to revenues at Moody's, though, after the corporate finance segment (Moody's, 2018).

These regulatory measures at the EU level clarify, among other things, efforts to increase competition on the rating market while reducing the dominance of the three major rating agencies. From this, the research hypothesis can be derived whether the EU regulatory provisions affect the oligopolistic market structure of the rating market and the market shares of the Big Three:

- *Since the EU Rating Regulation came into force, the market shares of the three major rating agencies and the oligopolistic market structure of the rating market in the EU have remained unchanged.*

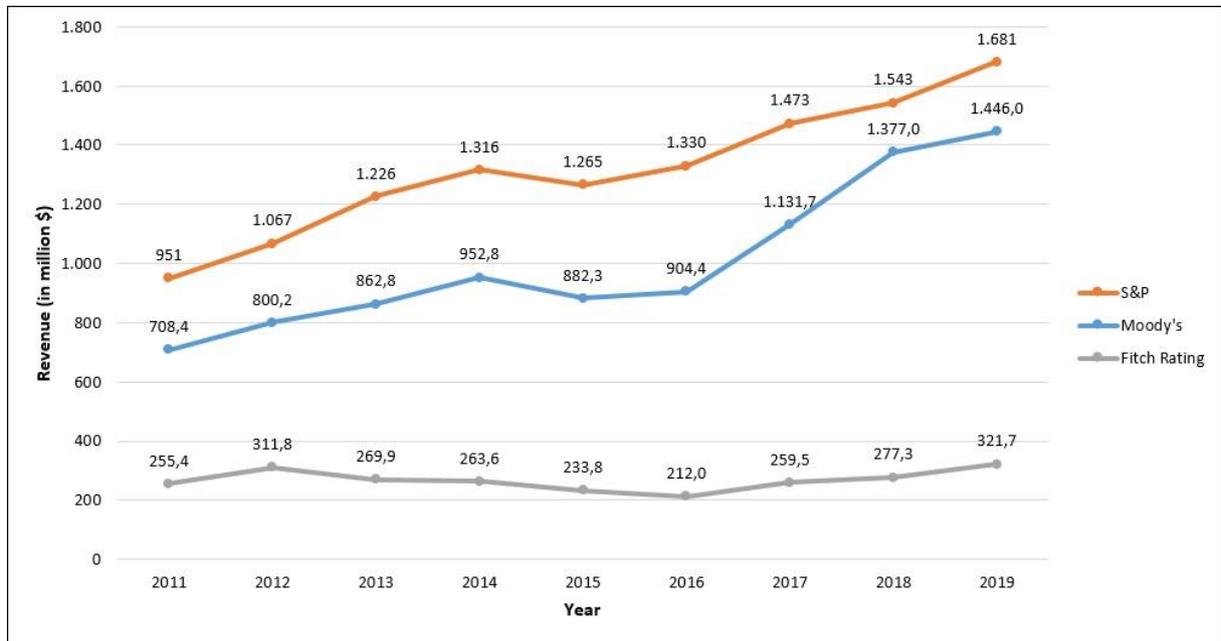
The research hypothesis aims to analyse the dominance or the oligopolistic market structure of the rating market at the level of the EU. To test the hypothesis, key figures from the overall rating market and the three major rating agencies are determined over a certain period. The time series analysis represents the revenues of the Big Three on the EU market, amongst other things. The market share of the respective rating agency is also shown over time. The analysis relates to the rating agencies registered by ESMA to operate on accredited regulatory status within the EU. The analysis results can be used to validate or refute the hypothesis. First, the revenues of the Big Three are presented.

Figure 1 essentially shows a continuous increase in revenues over the observation period. S&P and Moody's, in particular, have been able to increase their revenues in recent years significantly. Fitch Ratings remain constant with a slight increase at the end of the observation period. However, with these data, it should be noted that the European Union market for the three major rating agencies is not consistently narrowed down in terms of revenues in the respective annual reporting segments. S&P reports the revenue for the European region, whereas Moody's reports the revenue of the EMEA (Europe, Middle East, Africa) economic area. Fitch Ratings, on the other hand, refers to its registered rating agencies in the EU when reporting revenues (McGraw Hill Financial et al., 2013-2019; Moody's, 2013-2019; Fitch Ratings, 2012-2020). The latter agency has published the so-called EU Transparency Report since 2012 for 2011. Moody's (from 2010) and S&P (from 2015) also publish such a report, which is likewise a basis for assessing the market situation (market shares) in the EU and confirms

the authors' argumentation and hypothesis (McGraw Hill Financial et al., 2015-2019; Moody's et al., 2010-2019). A trend is discernible.

Figure 1

Revenues of the Big Three in reporting segments including the EU 2011-2019



Source: McGraw Hill Financial et al., 2013-2019, Moody's et al., 2013-2019, Fitch Ratings, 2012-2020.

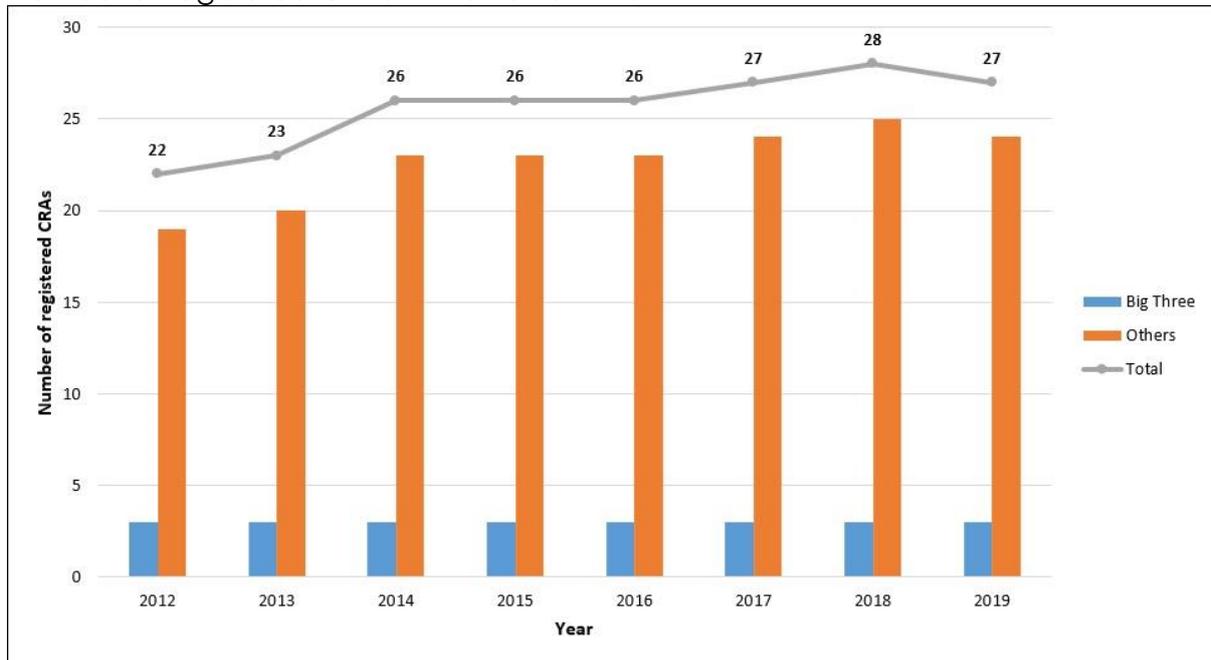
Another key figure that reflects the competitive situation of the rating market in the EU is the number of rating agencies registered by ESMA. As ESMA only started its work on January 1, 2011, the data published by the institution only is available from 2012 onwards. Figure 2 shows the number of registered rating agencies, with the three major rating agencies being grouped under "Big Three" and the other agencies under "Others".

Figure 2, based on the sheer number of registered rating agencies, does not suggest that the rating market has an oligopolistic market structure but suggests healthy competition. In addition to the three major rating agencies, over 20 other agencies are active on the market. Throughout 2012, other agencies entered the market, on average one agency per year. It should be emphasized that not all rating agencies offer all rating services. It is rather that the majority of these agencies only offer certain rating services (European Securities and Markets Authority, 2019). Despite the number of rating agencies, the existing oligopolistic market structure is based on a further key figure.

In addition to the presentation of revenues over the period and the number of registered rating agencies in the EU, the market shares (here based on annual revenues in the EU) are another important key figure for analyzing the competitive situation. The three major rating agencies are shown individually and accumulated, whereas all other registered agencies are summarized again under "Others".

Figure 2

Number of registered CRAs in the EU 2012-2019



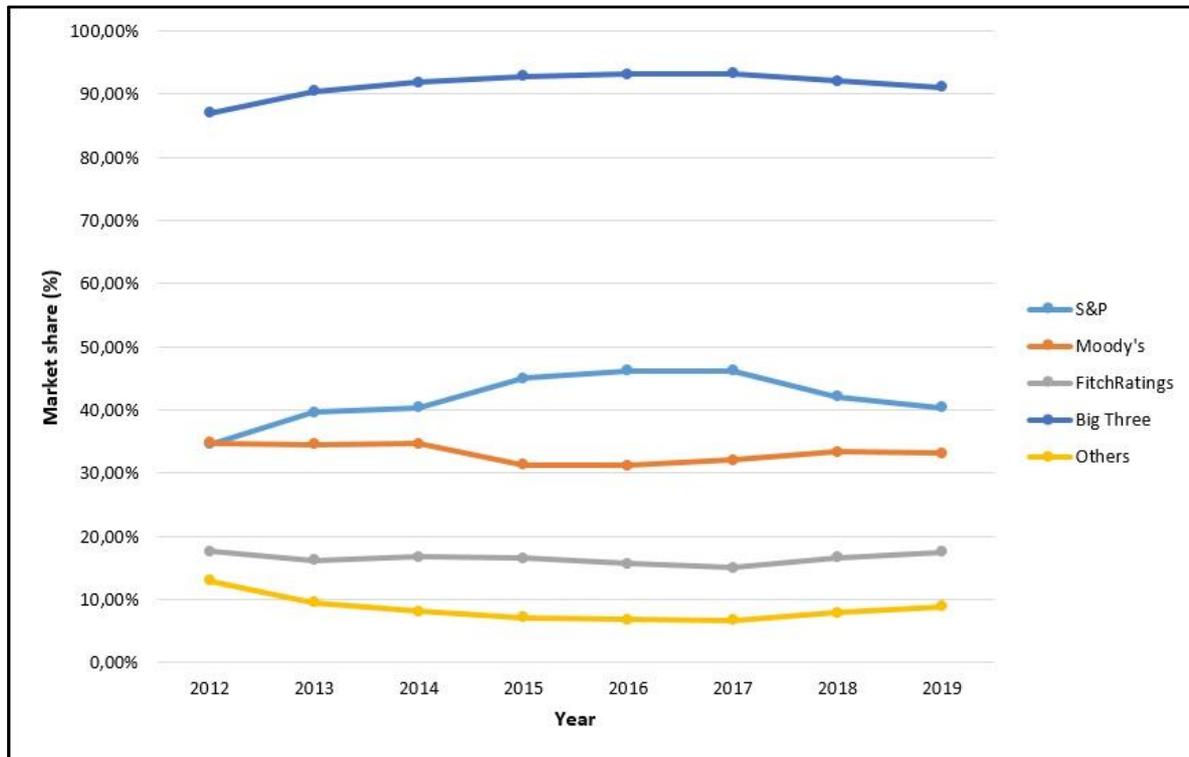
Source: European Securities and Markets Authority, (2013-2020)

The analysis of the market shares from Figure 3 shows (in contrast to the number of rating agencies) the large market share of the Big Three and the oligopolistic market structure. S&P, in particular, was able to increase its market share over the period under review from 2012-to-2019. Overall, the three major rating agencies have a market share of over 90 percent, and in contrast, the remaining agencies pooled have less than ten percent market share. It is noteworthy here that the number of rating agencies, according to Figure 2, has increased. Still, the market share ("Others") has decreased with 2012 as the reference year while showing a slight increase at the end of the observation period.

In comparison to the revenues generated (Figure 1), for which S&P and Moody's showed significant increases at the end of the period under review, it can be seen in connection with the market shares in the EU that the revenues increases tend to have been achieved outside the EU. Otherwise, the respective market share of the corresponding rating agencies in Figure 3 would potentially have increased similarly.

The further analysis focuses on the rating service range offered by the registered rating agencies. This indicates the existing oligopolistic market structure concerning rating segments. If only or mainly the Big Three offer the full rating service range, this reinforces the existing market power as there are no or few alternative full-service providers on the supply side. The rating service range offered by the registered rating agencies in the EU are the five subsequently specified types (European Securities and Markets Authority, 2020): Corporate: Non-Financial, Corporate: Financial, Corporate: Insurance, Sovereign and Public Finance, Structured Finance.

Figure 3
Market share of registered CRAs in the EU 2012-2019



Source: European Securities and Markets Authority, 2013-2019.

Table 1 shows how many registered rating agencies were full-service rating agencies from 2016 to 2019 and how many specialized in one to four types of the service range. The classification is drawn on the "Big Three" and "Others".

Table 1
Types of credit ratings offered by EU registered CRAs

CRA	YEAR	Types of credit ratings offered by CRA					Total CRA
		5	4	3	2	1	
Big Three	2016	3	-	-	-	-	3
Others	2016	4	4	3	4	8	23
Big Three	2017	3	-	-	-	-	3
Others	2017	4	5	4	4	7	24
Big Three	2018	3	-	-	-	-	3
Others	2018	4	5	4	4	8	25
Big Three	2019	3	-	-	-	-	3
Others	2019	5	4	3	4	8	24

Source: European Securities and Markets Authority, 2017-2020.

It can be seen that little surprise, the Big Three offered all of the five rating type services mentioned above permanently. In comparison, within the other rating agencies ("Others"), mainly a third of the group members, all under regulation and official acknowledgment, offered just one of the five rating type services. Table 1 also shows that in addition to the Big Three, there are up to five other rating agencies that also

offer the complete range of rating type services. Thus, in addition to the Big Three rating agencies, other providers have the full range of rating type services in their portfolio with an increasing tendency in number.

Interpretation of the results

The starting point of the empirical analysis was the investigation of the competitive situation of the rating market in the EU. From this, the research hypothesis was derived as to whether the entry of the EU Rating Regulation being in force was associated with a change in the market shares of the Big Three and the oligopolistic market structure.

Relevant key figures from the rating market were analyzed to answer this question. First of all, the revenues of the Big Three over the observation period from 2011 to 2019 are shown concerning different delimitations of the European Union market. The results show that S&P and Moody's revenues, in particular, increased considerably in the period. S&P revenues have increased by a total of 77 percent since 2011. The rating agency Moody's almost doubled its revenues. The main revenue increases of Moody's and S&P have been achieved outside the European Union (taking into account the market shares in the EU). Fitch Ratings was able to increase revenues by a total of approx. Twenty-six percent over this period. The reported revenues of the Big Three refer to a different definition in regional segment reporting. In conjunction with the analysis of market shares, the trend is that the revenues of the Big Three in the EU have remained on a constant level. A stagnation or general decline in revenues of the Big Three in the period under review, which could indicate lower market power or increased competition, cannot be identified with this key figure, though.

Furthermore, the number of rating agencies registered in the EU by ESMA has been considered since 2012. The numbers show that in addition to the Big Three, there are 24 other rating agencies in 2019. The total number has increased since 2012 from 22 registered agencies to 27 rating agencies in 2019. This means an increase of approximately 23 percent over the entire period and an average of approximately four percent or one rating agency per year.

The additional inclusion of the market share indicator illustrates, in particular, the competitive situation in the rating market. The results over the observation period from 2012 to 2019 show the expected clear dominance of the Big Three with over 90 percent market share. The slight increase in the number of rating agencies does not affect that they lose market share on a larger scale, and all smaller rating agencies together only have a market share of less than ten percent in the EU. The prevailing oligopolistic market structure can be determined based on this key figure.

Taking into account the results of the empirical analysis, it can be stated about the formulated hypothesis that since the entry of the EU Rating Regulation came into force, the dominant market shares of the Big Three have remained largely unchanged, and the associated oligopolistic market structure has pursued to exist in the EU. To date, efforts to strengthen competition and reduce the dominance of the Big Three associated with the EU regulation have not been achieved. Consequently, the hypothesis formulated at the beginning can be validated.

However, an important and, in the authors' view, significant condition precedent for reducing the market power of the Big Three can be seen in the number of full or almost full-service rating types competitors and its development. Here, the tendency is up, even still on a low level.

It can be said that the oligopolistic market structure and the associated market power of the Big Three continue. Alternative endeavors always have to assert themselves on the market and, according to the authors' view, will find it difficult to form a

competitive alternative. This includes, for example, a network of small rating agencies (Meeh-Bunse et al., 2014). However, efforts with a chance to be operational should continue to be promoted based on self-commitment or regulation, as is already the case with the current EU Rating Regulation and, for example, the associated commissioning of double ratings for issuers of SFI. In the long term, according to the author's view, other rating agencies could assert themselves on the market and build up the necessary reputation leading to more competition and improved market efficiency.

In the context of global sustainable development and the Green Deal of the European Union Commission, the aspect of "sustainability rating" is gaining considerable importance. This can be seen as a further pillar of the rating services offered. Notably, to date, such sustainability rating is not (yet) in the scope of EU Rating Regulation. Hence, the substantially reinforced non-financial reporting within EU accounting regulation has not found its way into the EU Rating Regulation. A substantial part of a rating opinion is based still on financial reporting figures. Accordingly, to the authors' view, the portfolio of regulated rating services and rating agencies active under the regulation should be expanded to include sustainability ratings. With such enhancement and based on the above-mentioned political efforts, there is the potential for the new providers to increase their types of services offered and increase their market share. Hence, this could cause pressure on the existing oligopolistic market structure. Smaller rating agencies would build up a respected reputation in this then regulated service type. They could establish themselves as trustful market competitors to the current "Big Three" in the medium to long term. Of course, this approach also comes with the risk of counteracting a healthy market structure. At least one of the Big Three, namely Fitch Ratings, has already been pushing hard into the sustainability rating service field.

On the one hand, this is assessed positively by the authors. In our view, sustainability awareness is promoted within the rating opinion addressee group. On the other hand, the oligopolistic market structure could expand to sustainability ratings. Regulating this service type by including it into the existing EU Rating Regulation could stimulate concentration. However, the Fitch rating approach focuses on credit default risk triggered by sustainability aspects and less on an issuer's degree of sustainability (Dow, 2020).

Conclusion

The dominance of the major rating agencies S&P, Moody's, and Fitch has been historically established by two features. The first is anchoring their ratings in regulatory procedures primarily implemented by the United States SEC and its forerunner authority, a related registration as an NRSRO in 1975, and subsequent developments. The oligopoly thus solidified over decades. As the second feature, the dominant position can be explained by the reputation of the agencies, which results from their many years of experience. The reputation is reflected in the preference of financial market participants. Credit ratings of issuers, their financial debt, or debt-related instruments can commonly only be broadly beneficially utilized on the financial markets if these are Big Three opinions.

With the ambitions in promoting sustainable development at the global and European Union level, another important potential role is about to land on the lap of rating agencies. Considerable investments are seen necessary to achieve the climate goals on the one hand. On the other hand, established business models have been or may be disrupted while new business models have been invented, impacting issuers' and financial instruments' default probability. Sustainability ratings are a suitable choice for

assessing whether and to which extent an underlying investment project takes relevant aspects of sustainable development into account or how resilient and/or impactful an issuer is to sustainable change. Such rating opinions offer investors the opportunity to be supported in allocating their funds, taking into account sustainability aspects. Therefore, the range of EU Regulated Rating service types should be expanded to sustainability ratings at a good pace after profound consideration of regulation structure. This allows new providers to establish themselves and move towards the role of serious competitors of the Big Three with or without expansion of rating type service. There has been no experience and reputation in this field for decades, as it is with the financial rating service. Sustainability ratings and reports have been recognized in the near past only.

Additionally, there is not yet neither an established methodology nor established measures. Also, the double materiality viewpoint must be instituted as an innovative approach (Verhey, 2020). The authors see it important for new providers and smaller rating agencies to take advantage of this opportunity.

This article analyses the competitive situation of the rating market in the context of EU regulation under limitations. A directly measurable influence of the EU regulations on the competitive situation represents the limits of this article, though. The article is also limited to certain indicators for assessing the competitive situation. Further indicators can be identified and analyzed in future research projects about the EU rating market. Research is also needed to develop and promote further alternative service models to enter the rating market. This could reduce the dependence on the Big Three while it has again to be emphasized that the regulator had strongly caused their dominance. Ideas like a rating cooperative (Meeh-Bunse et al., 2012), a public rating agency, or a network of smaller rating agencies need to be further researched, assessed, and/or promoted.

In summary, it can be stated that bare regulatory requirements neither do automatically change the competitive situation nor that the oligopolistic market structure is necessarily changed as a result. Ex-ante regulatory action expectedly has to be impactful in achieving the political goals. Ex post-implementation of such action consequently needs to be controlled. The biggest difficulty for the small rating agencies will be to build up the necessary reputation and the associated trust in a rating judgment. The creditworthiness opinions require broad acceptance of the financial market participants, which will probably only be possible over a longer period or recourse on valid existing and available data (Meeh-Bunse et al., 2012). Newmarket potentials, such as sustainability ratings, also offer new providers and the already registered smaller rating agencies the opportunity to specialize in this area and, consequently, establish themselves further on the rating market. Building up the necessary reputation catching up to the Big Three is conceivable in this context. The reduction of the current oligopolistic market structure could be reduced, taking into account the actions on sustainable development and the associated framework conditions. However, self-commitment or regulation would have to set the matrix for sound development.

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