

Expected effects of the opening of the on-shore credit ratings' market in China for the Big Three and its rationale

Paweł Niedziółka*

Submitted: 1 August 2019. Accepted: 4 December 2019.

Abstract

The research focuses on the determination of the directions of development of the CRA market in China in the context of its opening for the Big Three as well as current economic challenges. Two sets of hypotheses are being considered. The first one assumes that the liberalisation of access rules for foreign CRAs is designed to attract foreign capital and direct it to the sectors characterised by relatively high indebtedness. The second hypothesis states that the certification effect and credibility to be gained by Chinese CRAs in the corporate bond markets due to the improvement of their competencies, fiercer competition and tightening of supervisory approach may be transferred to the sovereign ratings segment.

Keywords: rating, sovereign risk, China, bond market, Big Three

JEL: F34, G01

1 Introduction

The aim of this article is to answer the question about the current and future role of Chinese rating agencies in the global market against competition from the leading rating agencies with American roots (the Big Three). It also focuses on defining the potential directions of the development of the Chinese rating agency market in view of political and economic interest of the Chinese authorities. The author has attempted to determine the extent to which the support of the Chinese authorities for credit rating agencies set up in this country is aimed at stopping the expansion of American credit risk rating institutions, regardless of the quality of services provided by the entities controlled by the government of the Middle Kingdom, and the extent to which there is a real demand for objective information about the credit risk of entities registered in China and securities issued by these institutions. If China seeks to build an alternative rating agency (or a network of such agencies) with a significant market share and prestige on the basis of the existing entities, then another question arises – this time about the conditions for the success of such a project. Among the determinants of a credit rating agency's success in its ambition to compete with leading institutions of this type independence, accuracy of forecasts, capital base and human capital must all be considered, as well as, and perhaps above all, the involvement of new technologies. The opening of the Chinese credit rating agency market should also be seen in the context of the situation on the corporate and local government debt market, its scale and quality, as well as the potential impact of further debt escalation on the stability of the Chinese banking sector in the context of slowing economic growth. Another, but equally important, issue seems to be the use of local rating agencies by the Chinese authorities for political purposes, since the reputation of those entities is likely to increase due to their need to position themselves on the corporate and municipal debt market vis-à-vis global US agencies. This is undoubtedly related to an attempt to undermine confidence in the Big Three ratings by publishing autonomous and entirely different opinions in the form of sovereign ratings.

The author introduces the hypothesis that the opening of the Chinese rating agency market for globally active actors is designed to attract foreign capital and direct it exactly to those sectors that are characterised by excessive indebtedness and serious demand for additional financing (mainly local governments suffering from a lower GDP pace). This would be possible since the convergence of corporate and local government ratings granted by Chinese agencies and their American counterparts is expected. It is also assumed that similarly as in the case of the Big Three, which used their reputation built on the market of single name bonds for expansion in the complex asset-backed securities market, the growing trust and reputation resulting from accurate ratings granted to corporates and local governments will be used to convince investors of the credibility of sovereign ratings, which may yield China significant political power.

As regards the structure of this study, its first section presents the effects of the rating crisis caused by inadequate valuation of the risk of subprime securities in the form of the decline of confidence in credit rating agencies' competencies regarding credit risk evaluation as well as initiatives aimed at finding a counterbalance to the Big Three's dominance. Having analysed the regulatory conditions for the development of the Chinese credit rating agency market, the author undertakes to answer the question about the reasons for opening the Chinese market to foreign credit rating agencies. The article also examines the country ratings issued by US credit rating agencies and Dagong to show the dissonance in the Chinese authorities' approach to both spheres of credit rating agencies' activity. It also focuses on the determination of the possible role of Chinese CRAs in the global market.

2 Literature review

The most important topics for research related to the activities of credit rating agencies in China include:

- the determinants of capital market development and the influence of credit rating agencies on such development,
- the evolution of regulatory architecture,
- the impact of government authorities on the methodologies and decisions of credit rating agencies,
- the quality and informative value of credit rating agencies,
- the effectiveness of business models used by credit rating agencies.

The regulatory framework of the Chinese credit rating agencies was laid down by Bian (2015) who also examined the rating methodologies of the above mentioned entities. Some regulatory ordinances concerning credit rating agencies were issued over the years but only the so-called Interim Measures introduced clear rules to which the CRAs operating on the Chinese market must adapt. According to Xu, Xiao-Chuan and Weng (2011), the above mentioned regulation had some defects, out of which they mentioned high entrance requirements, both financial (net assets not lower than RMB 20 million) and in terms of human resources (at least 20 experienced risk analysts). Additionally, Interim Measures provide a list of detailed procedural obligations and require applicants to disclose their methodologies and other sensitive information without laying out the criteria used to assess the agencies vying for entry into the Chinese market. On the other hand, one has to appreciate the ban imposed on rating agencies from assessing entities in which CRAs (or their employees) have more than 5% of shares or with which they are personally related. The Interim Measures initially did not include restrictions addressing a possible indirect conflict of interest like rendering advisory services to the rated entities. Apart from regulations that did not foster competition, the development of the Chinese credit rating agency market was slowed down by legal provisions allowing each business organization to claim defamation. The risk of the latter doing so clearly increased significantly if it was granted a speculative rating by the rating agencies.

The relationship patterns between stakeholders and Chinese CRAs in the form of expectations regarding the agencies' responsibilities were investigated by Sun and Smith (2015), who found that the role of Chinese rating agencies is quite different from that played by the Big Three treated as independent gatekeepers. This results from rather complex ethical considerations and relationships among stakeholders (CRAs' staff, the government, investors and issuers). The authors state that the implementation of the CRA reform in China should be preceded by extensive consultation of investors, issuers, regulators and credit rating agencies. This touches upon such issues as the targeted level of competition and 'the fixed fees apply to all' payment model with an increased role of payments from investors. In close correspondence with the above mentioned research Hu and Shi (2016) investigated the changes of strategies by Chinese credit rating agencies using the issuer-pay business model following the establishment of the China Bond Rating Corporation by NAFMII in 2010, which decided to apply a model combining the public utility and investor-pay scheme. They found that in view of the stricter rating scale applied by the CBRC running 2–3 notches below the issuer pay model, the incumbent rating agencies changed their policies, which resulted in the reduction of information asymmetry in the market. The scope of the above mentioned benefit depends on the information scenario and

the reputation of raters. This also allowed researchers to generally conclude that entry of a new credit rating agency representing a different business model improves the quality of ratings.

The relationship between Chinese credit rating agencies and Chinese government is rather tight as a consequence of the historical influence of authorities in all the domains of economy (Sun, Smith 2015). The control of the Chinese government over rating agencies as well as insufficient experience, the short track record of Chinese CRAs and the low level of development of the bond market in China – mainly in terms of quality and completeness of data provided by the rated entities – affected the quality of credit ratings (Kennedy 2008). Having analyzed short term financing bonds traded in China, Zhu (2013) pointed out that almost all of them were rated A-1, i.e. at the highest possible level. This confirmed the critical opinions on the information value of the assessments provided by Chinese credit rating agencies. At the same time ratings assigned to issuers are more differentiated and reflect credit risk much better. This justified the rising reliability of Chinese CRAs despite the early stage of their development. In the conclusions Zhu on the one hand questions the quality of ratings granted by Chinese CRAs but on the other proves a logical relation between the rating level and the underlying credit risk, thus confirming a certain heterogeneity of opinions on the quality of ratings granted by Chinese credit rating agencies and the value of information provided by these ratings. Dhawan and Yu (2015) on the basis of data starting in 2005 argue that investors discount the opinions of Chinese CRAs (adjusting the risk premiums on Chinese corporate bonds to ratings) and that spreads and bond ratings are subject to similar dependences like those identified in the case of the Big Three. Also Chodnicka-Jaworska and Jaworski (2019) notice that share prices are influenced by decisions taken by both the Chinese and global credit rating agencies, however, a stronger reaction is observed following the decisions taken by the Chinese entities. This pattern also applies to debt instruments. The research based on data collected from the Thomson Reuters Database for the period between 1990 and 2016 also allows us to conclude that the reaction to rating changes is stronger in the case of non-financial and medium-sized as well as large entities. A similar opinion was expressed by Poon and Chan (2008) who following the analysis of 170 companies listed on the Shanghai and Shenzhen Stock Exchanges from 2002 to July 2006 came to the conclusion that the certification effect of initial rating decisions is asymmetric. They proved that ratings given by Chinese credit rating agencies had an information content, they also found some negative signaling effects in the rating downgrades.

Hu (2017) examined the consequences of the reform of the credit rating industry in China in terms of the quality of ratings. The reform assumes a creation of a new business model of CRAs based on the combination of public utility (with government's support) and investor paid approach. The first entity that has applied the new business model is the China Bond Rating Corporation (CBRC). The concept assumes that the agency will be financed by subscribers, the potential shortage of funding to be covered by the government. This in turn, according to the promoters of the concept, should discipline issuer pay agencies and contribute to the improvement of the information quality of ratings. Hu states that the above mentioned mechanism works since the rating inflation in the case of companies rated only by the incumbent issuer-paid CRAs is higher than for entities assessed both by the China Bond Rating Corporation and agencies operating in the classical business model. The introduction of a new business model will increase the differentiation of Chinese credit rating agencies since the CBRC is for the time being the only one operating in the investor-pay model. This should also change the picture of the Chinese credit rating agency market where methodologies, timing, fees and reputation of existing market players differ only marginally (Amstad, He 2019).

3 Crisis of confidence in the credit rating agency market and search for the counterbalancing of the Big Three

The main reasons for the high concentration in the CRA market are barriers to entry, low recognition of other CRAs than the Big Three, supervisory and licensing policies in the United States and numerous mergers and acquisitions (Korzeb et al. 2019). Data outlined in Table 1 confirm this high concentration.

Despite many examples of inadequate risk assessment or delayed decisions to correct a rating, the position of the largest CRAs has not been undermined. Reputation does not turn out to be a decisive determinant of the performance of credit rating agencies, as despite its erosion after the subprime crisis, demand for the services provided by credit ratings agencies has not diminished. Quite on the contrary, the new demand translated into steadily increasing revenues per rating.

The figures and tendency presented on Figure 1 can be explained by the lack of incentives to seek an objective risk assessment, both on the part of issuers (the possibility of issuing securities at a relatively low cost) and financial institutional investors (exposures with high ratings testify to the good quality of the portfolio, requiring relatively low regulatory capital coverage). In this situation, due to the significant influence of credit rating agencies on systemic risk (Niedziółka 2019) and the interest of individual investors, it is the national and international supervisory authorities that take the responsibility for creating incentives encouraging credit rating agencies to improve the quality of their ratings.

The solution of the crisis of confidence in credit rating agencies relies on four measures, the first two of which are regulatory initiatives. A key change is the introduction of an obligation to register rating activities and intensify the supervision of credit rating agencies, which includes the non-recognition of ratings issued by the given agency for regulatory purposes in the spectrum of possible sanctions. These sanctions are itemised in section 7 of this paper. This is a serious threat as issuers would not be interested in obtaining a rating in such a situation due to the inconsequentiality of such an assessment on the calculation of regulatory capital or liquidity requirements by credit institutions. The second area of change is that regulators (mainly ESMA) support competition in the credit rating agency market by liberalising the requirements for the so-called smaller credit rating agencies (i.e. CRAs with a total market share lower than 10%) and recommending issuers to use at least one smaller credit rating agency if they intend to obtain at least two ratings. The above solutions are top-down in nature and are recommended by international regulatory bodies. The next two directions of changes should be classified as bottom-up initiatives. This is, for example, the idea of creating a network of small private credit rating agencies, i.e. coordinating and strengthening the cooperation between some operational entities, thereby creating a fourth player in the credit rating agency market (Möllers, Niedorf 2014; Niedziółka 2017). The last option is to set up a credit rating agency that would be a viable alternative and competitive to the Big Three. The following initiatives can be mentioned in this area:

- A project created by Roland Berger Strategy Consultants involving the establishment of a foundation (the so-called European Rating Foundation) by the 30 largest German and French banks (with the support of EU funds) which would become an independent European rating agency. This concept was ultimately not realised (Korzeb, Kulpaka, Niedziółka 2019).

- An agency whose shareholders would include 25 leading European banks and which would raise funds for its activities from investors (as opposed to the Big Three, which uses the issuer paid model). Its credibility would be confirmed by its location outside the EU, e.g. in Switzerland (Godziński 2011).

- Setting up credit rating agencies controlled by the member states and networking them. This solution is in line with the idea of creating a Polish state rating agency based on the Institute of Analysis and Rating, whose shareholders are to be the Warsaw Stock Exchange (GPW), the Credit Information Bureau (BiK) and the Polish Development Fund (PFR). The Agency is expected to start operating in 2019, but potential conflicts of interest related to the adopted ownership structure of the Agency and the reputational risk which may be borne by the sponsors of this project create some doubts (Fryc 2018).

The latter trend is also mirrored by the activities carried out by Russia and China, consisting either in the creation of their own rating agencies from scratch (e.g. the ACRA established in Russia at the end of 2015) or in activating, strengthening and broadening the spectrum of activity of the existing rating agencies (China).

4 Chinese credit rating agencies – regulatory framework and scope of activities

Demand for CRA services has become a function of the scale of the debt market, regulatory requirements and the need for synthetic, up-to-date and updated information on credit risk associated with issues or issuers. The first credit rating agency originated in China to start granting bank ratings in 1987 was the Jilin Province Credit Rating Company. Also in 1987 the Shanghai Fareast was established. China's corporate debt securities market was established in the mid-1980s and the set-up of rating agencies just after the creation of the capital market can be seen as filling a certain gap, a necessary move to attract interest from domestic and foreign investors. In 1987 the State Council issued the "Regulatory Guidelines of Enterprise Bonds" – it was the first regulatory document to mention ratings. Initially ratings were granted by provincial branches of the People's Bank of China (Amstad, He 2019). A fierce development of credit rating agency market in China took place in the first half of 1990s, a few years after the establishment of the capital market in which the key role was reserved for debt instruments. Until 1997 there were no specific requirements for qualification and certification in the rating industry in China (Kennedy 2008). To reduce credit rationing after the subprime crisis Chinese government carried out a wide-ranging reform of the financial system introducing transparent bankruptcy and insolvency rules, event-risk provisions in the bond market as well as new regulatory framework for credit rating agencies (Chen, Mazumdar, Surana 2011), while simultaneously bringing in a requirement for corporate issuers to be rated by a credit rating agency approved by the PBC. At the same time, to encourage investors to buy securities, by 2006 every issue had to be accompanied by redemption guarantees, mainly issued by state-controlled banks. Until then, the State also determined the amount of coupons on individual issues (Livingston, Poon, Zhou 2018). 2006 was an important year for the Chinese capital market inasmuch as China undertook, in the context of its entry to the WTO, to strengthen transparency and supervision of the capital market and to intensify competition in the domestic market by allowing foreign credit institutions on an equal footing with Chinese banks (Keidel 2007). Although most of the major Chinese CRAs were established in the early 1990s, the actual demand for their services did not arise until 1997, when the Chinese authorities introduced a rating requirement from a recognised (certified) CRA for all public bond issues. Previously (since 1992) this requirement had been informal and boiled down to the recommendation that all issues should have a rating. It can therefore be concluded that the collateralisation of public bond issues in the form of

bank guarantees marginalised the importance of ratings and it was only in 2006 that the departure from this requirement drew investors' attention to the information provided by the Chinese credit rating agencies. However, it seems that having a rating enforced by supervisory regulations or, possibly, well perceived by investors does not necessarily reflect an intrinsic need on part of debt issuers, as evidenced by the fact that the vast majority of public companies makes do with a rating given by a single credit rating agency only (Livingston, Poon, Zhou 2018). Some Chinese rating agencies (Brilliance, Chengxin and Lianhe) had in the past or still have a global rating agency partner belonging to the Big Three (strategic cooperation or minority stake). To answer the question about the reasons why state-controlled Chinese credit rating agencies cooperate with the Big Three, we must turn to the results of research aimed at understanding the information load and the quality of ratings given by Chinese agencies. A study by Livingston, Poon and Zhou (2018) on the Chinese corporate bond quotations in 2009–2015 showed that the ratings given by Chinese rating agencies were correlated with the yields of the rated bonds (the higher the rating, the lower the rate of return). Although Chinese rating agencies use the same scales as their American counterparts, the ratings were higher than those of the Big Three. The requirement for all Chinese rating agencies to apply the same scale (identical to that applied by Standard & Poor's) was introduced by the People's Bank of China in 2006 (Jiang, Packer 2017). The difference in the Chinese CRA assessment of one notch corresponds to a disparity of three notches in the case of US-originating CRAs. For example, the spread between yields for bonds that differed by one notch in the assessment of Chinese rating agencies was as high as 58 basis points, while the same difference for the same differential in the Big Three rating of investment securities ranged from 9 to 18 basis points. This proves an upside bias with regard to ratings granted by Chinese credit rating agencies. To clarify the discrepancies one has to point out two main differences in rating scales used by the Chinese and American CRAs. In China AA is the lowest investment rating whereas in the case of the Big Three it is BBB. Despite a higher threshold the share of speculative bonds in China is much lower than in other markets. Additionally, Chinese investors use informal "AAA+" or "SuperAAA" labels for some issuers rated AAA by rating agencies. Such exposures enjoy high weights in valuation indices and their associated credit risk is considered on par with government bond risk (Amstad, He 2019).

Bonds rated by Chinese CRAs in cooperation with a global partner (one of the Big Three) were also characterised by lower spreads than other issues. This shows the impact of the certification effect from global agencies and their better reputation. Entities with comparable credit risk but rated by Chinese CRAs co-operating with global partners had an average margin lower by 18 basis points than their competitors. The certification effect for exposures with a higher credit risk was stronger than in the case of bonds with a better rating. It can, therefore, be concluded that the intention of Chinese credit rating agencies is to reflect credit risk in the form of ratings, although the quality of ratings and investor confidence are still lower than for the US-origin rating agencies. The issue of relatively high ratings given by Chinese rating agencies to Chinese issuers of securities, despite signals from numerous market monitoring institutions indicating that this practice may be a premise for another financial crisis, is quite clearly and negatively assessed (e.g. Galbraith 2018). The distribution of ratings may be questionable: in 2017 as many as 17% of Chinese bond issues had an AAA rating and 76% an AA rating, while Standard & Poor's granted an AAA rating to two non-financial companies only (Microsoft Corp. and Johnson & Johnson), and about half of American non-financial companies and local governments had a speculative rating (Dalal, Xie 2018). As of the end of 2018 the situation had not changed

significantly: 97% of the outstanding bond balance and 86% of issuers respectively had a rating higher or equal to AA (Amstad, He 2019). The People's Bank of China has undertaken the task of explaining the differences between the ratings given by Chinese rating agencies and agencies of American origin. A study was published by Packer (2017), who showed that the scale of differences is larger than the one determined solely on the basis of the bonds' yields criterion described earlier. Packer comes to the conclusion that the average deviation is 6–7 notches. Among the methodological components that account for this difference is a greater (positive) importance given to the value of assets (size of the company) by local Chinese credit rating agencies and lower importance attached to the leverage (as a factor that negatively affects a rating). At the same time global credit rating agencies attach greater importance to determinants (positively correlated with the rating) such as profitability and state control of the entity (Wong 2017). Jiang and Packer (2017), when examining ratings given to Chinese companies issuing bonds both in the internal market and in the off-shore formula, also conclude that the impact of the observed variables on both local and international (global) rating agencies' ratings is stable and both types of ratings have been included in bond prices.

The last five years of the Chinese credit rating agency market have been marked by a three-pronged trend. Firstly, Chinese credit rating agencies are seeking to expand their activities to other countries. In 2012, Dagong Europe Credit Rating was established with a base in Milan, in June 2013 this credit rating agency was registered by ESMA and it was granted an ECAI status (ESMA 2019) after a previous unsuccessful attempt to obtain a license in the US market (Jones 2013). The agency's representative office was opened in Frankfurt in 2016. Interestingly, already in January 2013 Dagong researched one of the Polish raw materials companies in order to give it a rating, while in official announcements the agency pointed to issuer ratings of banks and insurance companies as the main focus of interest (Jones 2013). Although representatives of the European Dagong branch did not present the methodology used by the agency in detail, they announced a 'more friendly' approach than their American competitors and a different risk analysis in the long run. Since 2014 Dagong has also been authorised by Hong Kong supervisory authorities.

Secondly, Chinese credit rating agencies are trying to find partners in potentially attractive markets where the Big Three's business is either underdeveloped or their ratings are being questioned. An example was provided in 2015 by the joint establishment with the Russian RusRating agency and the American Egan Jones Rating agency of the Universal Credit Rating Group meant to compete with the Big Three. The official reason for this alliance was the need to create an independent rating agency which would neither make mistakes in assessing the credibility of states nor intentionally lower or raise certain ratings, as allegedly done by the leading rating agencies of American origin (Sputnik 2015).

Thirdly, in 2018, the Chinese authorities allowed global rating agencies to set up their own companies in China and apply for licences issued by the Chinese regulatory authorities. Shortly after the introduction of rules liberalising access to the Chinese market, Fitch Ratings and Standard & Poor's announced that they would apply for such licenses and start the process of building their own agencies in China (Jia, Yanfei 2018). New entrants may issue ratings for Chinese bond issuers and for individual debt issues. Previously the Big Three agencies could not assess the local on-shore issues of Chinese entities but only their foreign issues. It was not until 2017 that the Chinese rating agency China Chengxin (Asia Pacific) Credit Ratings Company Ltd assessed the foreign bond issue of a Chinese corporation for the first time (Xueqing 2018). The reasons for the opening of the market include the intention to increase its transparency and competitiveness. The idea to establish a fully controlled

company was announced by Standard & Poor's and Fitch Ratings in mid-2018, after they previously sold their minority stake in Lianhe Credit Rating Co Ltd to a Singaporean SWF called GIC. Moody's, which invested in Chengxin International Credit Rating Co considered continuing with the current formula or following in the footsteps of its competitors (Jia, Yanfei 2018). Finally, in early 2019, Moody's also decided to build a fully controlled local credit rating agency from scratch. Already at the end of January 2019, Standard & Poor's was the first rating agency among the Big Three to be licensed by the Chinese supervisory authorities to operate its own independent rating agency (Sun 2019). The intensification of competition in the Chinese credit rating agency market is accompanied by an improvement in the quality of supervision and actions demonstrating the objectivity of regulatory institutions. For example, in August 2018 the CSRC and NAFMII banned Dagong from granting new ratings to Chinese entities for the next 12 months. The above mentioned sanctions combined with an emphasis on the replacement of the agency's managerial staff are perceived as very restrictive and according to some analysts their implementation even calls into question the future of Dagong (Galbraith 2018). The reason for imposing sanctions was the practice of overrating entities with whom the agency had previously signed advisory contracts, misrepresentation, unsatisfactory predictive power of the rating models (wrong assumptions and algorithms) and poor quality of internal procedures for managing risks and conflicts of interest (Korzeb, Kulpaka, Niedziółka 2019). Disclosure of irregularities in China's largest credit rating agency has become a premise for regulatory changes. As early as the beginning of January 2019, NAFMII (a body controlled by the People's Bank of China) announced its intention to introduce solutions to reduce the scale of conflicts of interest (for example by prohibiting the provision of advisory services by credit rating agencies as well as entities and persons associated with them and the requirement to disclose all conflicts of interest). The new rules are intended to promote independence, objectivity of ratings and the impartiality of credit rating agencies. They are also being introduced because of the record level of defaults in the bond market (to the amount of ca. USD 8.3 billion in 2018) and the fact that a significant number of issuers that went bankrupt had high investment ratings (Chinaknowledge 2019).

China's supervisory and regulatory architecture for the corporate debt securities market is quite complex. The type of license required depends on two factors: the market segment on which the bonds will be traded and the type of bonds. A simplified summary outlining the licensing requirements is presented in Table 2.

In addition to the seven dominant CRAs shown in Table 2, there are around 70 credit rating agencies in the Chinese market. Each of them has a marginal significance and fills a certain market niche left by the main players (Murakami 2009; Kennedy 2008). Synthetic information on the largest Chinese rating agencies is presented in Table 3.

As of the end of 2018 the credit rating agencies itemized in Table 3 accounted for approx. 97% of the China's domestic corporate bonds' market. The leading position belonged to China Chengxin, both in terms of bonds outstanding (41.4%) and the number of issuers (28.7%) (Amstad, He 2019).

5 Is the development of the credit rating agency market in China driven and targeted?

Opening up the Chinese market to foreign credit rating agencies is seen as a measure to improve the quality of ratings, increase competition and transparency. However, the most important objective

remains to increase foreign investors' confidence in the Chinese non-Treasury bond market (Jia, Yanfei 2018). Their market share is estimated at only about 2%, while in the case of Chinese Treasury bonds it amounts to ca. 7% (Tan 2018). This is a low level also when compared to other Asian countries where the relevant figure ranges from 10% to 40%. The process of internationalisation of the debt securities market, which is to be supported by measures to improve its liquidity and fiscal incentives, is part of the idea of the internationalisation of the renminbi. The inclusion of Chinese bonds in the FTSE Russell's World Government Bond Index (WGCI), JP Morgan's Government Bond Index – Emerging Markets (GBI-EM) and indices made up of corporate bonds and shares should also be considered in this context. According to data for the first half of 2018, the Chinese non-Treasury bond market is the second largest in the world after the American one, reaching a capitalization of approximately USD 12 trillion, and together with issues placed outside China approximately USD 13 trillion (Chong 2018). Sanctions imposed by Chinese regulators on Dagong in 2018 can also be seen as an expression of the Chinese authorities' intention to deleverage the economy and as intolerance of actions aimed at misrepresenting the actual level of debt of the assessed entities in terms of their ability to service it. Activities towards Dagong are treated as part of financial stability risk management for which one of the most prominent threats is the high indebtedness of Chinese companies and financial institutions (Jia 2018). The Dagong sanctions and the initiative to make the Chinese bond quality rating more realistic are measures meant to correct the effects of decisions taken by the Chinese authorities in the past, which had de facto led to the inflation of ratings. These cover in particular (Jiang, Packer 2017, p. 8):

- liberalisation of the rules for the admission of high-rated bonds to public trading by the NDRC in 2013 and 2015,
- admission to public trading restricted to AAA rated bonds by the decision taken by the CSRC in 2015,
- inclusion of ratings in the list of key determinants of capital requirements as well as in other supervisory guidelines.

A certain doubt among investors should be aroused by the announcement of Standard & Poor's in the light of which the agency intends to shape the rating methodology to the specificity and scale of the Chinese bond market leaving unchanged the applied rating scale. This means that in terms of credit risk the AAA rating given to a Chinese entity will probably not correspond to the same rating given to a US or British company. This can be seen as a kind of concession towards Chinese rating agencies, which will definitely be more liberal in their assessment of local companies while still using the same scale as their global counterparts of American origin. On the other hand, however, Standard & Poor's approach described above may result in a reduction of confidence in the agency's own ratings. The potential difficulty in persuading Chinese issuers to use the services of an American agency if their Chinese counterparts give higher ratings ('rating shopping') may be a factor liberalising Standard & Poor's approach in practice. However, pressure on high ratings comes not only from issuers but also from investors (mainly banks and insurance companies). This is due to the inclusion of external ratings in the capital requirements estimation process and other local regulators' guidelines on the spectrum of allowable investments (de facto limited to securities with high investment ratings). One solution used by credit rating agencies for developing markets are national ratings, which de facto disregard the country ceiling principle and are based on individually defined methodologies. Such ratings are additionally marked and are mapped to commonly used international ratings. Standard & Poor's announces, however, that despite the implementation of a separate methodology for the Chinese market these ratings will not be specially marked and will not be subject to mapping (Dalal, Xie 2018).

When analysing the process of liberalising the Chinese credit rating agency market, it should be noted that it is taking place in conditions of dynamic growth of the scale of operations and of the importance of local credit rating agencies and that one of its objectives is the market valuation of the debt of Chinese local governments. In addition, there will also be opinions that opening up the market to global credit rating agencies serves primarily to strengthen indigenous entities and encourage technology transfer. Yet, the arrival of American rating agencies will not improve the quality of bonds. This is particularly true in the case of local governments where various accounting measures aimed at improving the image of issuers have not helped. The indebtedness of municipalities has increased substantially (vide Figure 2), due to the fact that Chinese local governments have financed their expenditure with funds borrowed from commercial banks without any meaningful restrictions. Actions to make the bond market more attractive to foreign investors may therefore also serve to implement a plan to convert low quality bank loans granted by local commercial banks into debt securities.

The problem of growing Chinese debt is becoming an increasingly important issue. The total debt of the government, local governments, households, non-financial and financial entities as at the end of 2018 may reach 350% of GDP, while in 1995 it stood at a mere 130%. Such a dynamic growth of the indicator results on the one hand from the fact that the Chinese economy's debt soars much faster than the GDP growth rate and on the other hand from the disclosure of data not yet included in the statistics. The case in point is the debt of local government financing vehicles (LGFV) debt, which amounts to USD 6 trillion. Its quality is systematically deteriorating, as Standard & Poor's pointed out in October 2018 (Durdin 2019).

This is taking place in an environment of reform aimed at a new distribution of budget revenues between central and local budgets in which local governments will lose a part of their revenues while bearing all the risks associated with the issuance of bonds intended to cover deficits. Therefore, even making the valuation of local government debt realistic by subjecting them to a more objective assessment by US credit rating agencies will not improve their difficult situation resulting from high debt. Yet, it may allow some diversification on the part of capital providers and will relieve local banks in this respect (Kenderdine 2017). The importance of the debt problem for Chinese companies and local governments seems to be confirmed by the growing cost of obtaining financing on the local market in relation to foreign markets. Amidst the support of the Chinese authorities for this type of projects and the growing interest of investors willing to invest in the debt of Chinese corporations and local governments expressed in USD, this will encourage the escalation of off-shore issues, a trend which has already been noticed by the Chinese rating agencies. Prior to 2017 they showed little interest in evaluating such projects, but for the last two years they have clearly been treating this market segment as promising (Xueqing 2018). Inducing an incentive for the inflow of foreign capital to the Chinese market by supplying the crucial missing piece in the form of reliable information on the quality of assets can also be explained by the decreasing rate of economic growth, as presented in Figure 1. The data for 2018 indicate the lowest level of growth in 28 years, i.e. 6.6% (Tan 2019).

6 Sovereign ratings granted by Dagong compared to the Big Three's assessments (end of 2018)

Dagong Global enhanced its international market position after the release of sovereign rating methodology in 2010 (Sun, Smith 2015). The potential increasing importance of Chinese credit rating

agencies or institutions set up with the support of Chinese agencies (like the Sino-Russian joint venture Universal Credit Rating Group) was mentioned e.g. by Humphrey (2016).

In the Chinese corporate and local government debt securities market, the global and local (Chinese) rating agencies are expected to converge as previously indicated. The situation with regard to sovereign ratings is different, as shown in Table 4.

This raises the question of the reasons for the discrepancies and the likely intentions behind Dagong's decisions. The assessment of countries is not highly standardised or dependent on qualitative variables, as evidenced by numerous research results (e.g. Standard & Poor's 2017; Moody's 2018). Determinants are not stable over time. They differ depending on the region and the group to which the examined country belongs. It is therefore more difficult than in the case of corporate ratings to verify the correctness of the analysis. It should therefore be assumed that the decisions of Dagong, an agency controlled by the Chinese authorities, are aimed at shattering the confidence in the ratings given quite uniformly by the Big Three. Dagong ratings favour large emerging economies (China, Russia), indicating at the same time an increased risk associated with investing in the debt of Western European countries and the United States. Officially according to the methodology published by Dagong in 2010 (Dagong 2010) sovereign creditworthiness is affected mainly by the relation between the growth rate of government debt and the pace of change of economic output and increase/decrease in fiscal revenues. Most of the industrial and developed countries fail to comply with this rule, whereas emerging economies display a relatively stable ratio of government debt to GDP. According to Dagong this is the main reason why the industrialised countries are rated more severely than it is done by global American-origin CRAs. On the other hand, Dagong's methodology favours large and medium-sized emerging markets (Gaillard 2012).

While presently the importance of these opinions may be significant for Chinese investors only, as the credibility of Chinese rating agencies increases – a development to be expected as the result of competition in the corporate debt rating market – their opinions on the solvency of countries will also be treated with greater attention than at present by investors from Western European countries and the United States. The Big Three's persistence in maintaining high investment ratings of at least one of the Southern European countries – even though their increased debt or budget deficits should eventually translate into difficulties in rolling bonds at similar price conditions – may act as a catalyst for such a shift.

7 The potential role of Chinese CRAs in the global market

Ratings should play a predictive role. Their changes should be treated as early warning signals (Niedziółka 2013) and covenant triggers (Niedziółka 2014). Dagong also shares the opinion that the growth potential and the fiscal position of individual countries (their creditworthiness) remain key determinants behind the ratings. However, statistical research does not support this otherwise logical explanation. Taking into account such measures as GDP growth rate, debt/GDP, level of wealth and others one comes to the conclusion that none of the differences between Dagong's and the Big Three's assessments can be explained by a specific and unique economic variable. In fact, the only clear determining factor affecting ratings is political. Dagong gave a higher rating than the Big Three to authoritarian regimes and a correspondingly lower rating to democratic states. The above mentioned

conclusion is based on the analysis and classification of political freedom conducted by the Freedom House and the Economist Intelligence Unit (Kennedy 2019). Currently, the picture is rather clear, but one can imagine a situation in which the Dagong's rating model will be adjusted in such a way that independent research will be able to identify specific economic variables as determinants of differences between Dagong and the Big Three ratings with final ratings remaining unchanged.

At the same time, a question arises about the future role of Chinese credit rating agencies, particularly Dagong. This question is closely linked to the question of conditions potentially enabling Chinese credit rating agencies to build a strong position on the global market. The future role of these agencies in the global market depends on five factors. Firstly, confidence in and trustworthiness of the currently leading US credit rating agencies. Despite late rating downgrades, underestimation of risk, inadequate monitoring, methodological errors, low transparency of processes and revealed conflicts of interest leading to over-rating, investors still use ratings. A lot of studies were conducted evidencing numerous dependencies between the decisions of rating agencies and the profitability of securities. This is because, so far, no alternative solution has been found that would have all the advantages of ratings and, at the same time, would be free of its disadvantages. The market deoligopolisation process is slow and entry barriers (regulatory, capital as well as reputational) for new entrants are relatively high. It was therefore sensible to introduce the supervision of credit rating agencies (SEC in the United States and ESMA in the European Union) and to take steps to improve the quality of ratings. Those actions included:

- increasing the focus on internal control,
- separation of the sales and marketing divisions from rating decision-makers,
- imposing an obligation to verify the information provided by the rated entity,
- including at least two independent persons among the rating decision-makers (their revenues are not to depend on the financial performance of the agency),
- introducing a proviso that ratings used for regulatory purposes may only be issued by registered and supervised credit rating agencies,
- the possibility of legal action against credit rating agencies,
- credit rating agencies losing the right to provide advice to their clients,
- an obligation to disclose the basic assumptions of the methodology used at the rating and review stage,
- a ban on rating if the information is not sufficient,
- recommendation to use separate rating scales for structured instruments,
- stipulating the need to manage conflicts of interest,
- underscoring the mandatory nature of periodic rating reviews,
- separate identification of solicited and unsolicited ratings.

Sanctions threatening credit rating agencies that have been assessed negatively by supervisors include:

- financial penalties,
- requesting the rectification of irregularities,
- suspension of the activities of the credit rating agency,
- a ban on issuing ratings for a particular asset class,
- the deletion from the NRSRO (United States)/CRA (European Union) list, which would mean that ratings issued by such an agency would not be viable for regulatory purposes.

If US-based agencies do not strengthen their credibility by following supervisors' guidelines, it will be difficult for issuers to justify entrusting them with ratings. Also for investors a rating given by an unreliable agency will not bring any measurable benefits, as its level and changes will probably

be weakly correlated with profitability. If a rating is viable for regulatory reasons, the entity granting the highest ratings will be selected from among the agencies on the SEC or ESMA list. Therefore, firstly, an 'opportunity' for Chinese credit rating agencies would present itself if in an environment of regulatory preference for rated securities, the credibility of US agencies weakened. It should be remembered that among the agencies registered by ESMA we find DG International Rating, which has been using the new name since 30 September 2019 (formerly Dagong Europe Credit Rating Srl). In May 2019 Dagong announced the sale of shares in the European company to Spanish and Portuguese investors, however, the actual beneficiaries are not known and DG International Rating declares its willingness to continue cooperation with Dagong. For the time being, DG International Rating only gives corporate and financial institution ratings, but it is not certain that it will extend its activities to sovereign ratings. The second factor is related to the pace and scope of Chinese economic expansion in democratic countries. The consequence of the strengthening China's position in the economy of a given country is China's growing political influence in that country. One can therefore imagine pressure to use the sovereign rating given by Dagong (or DG International Rating) as a complement or alternative to the Big Three. Thirdly, the strength of Chinese rating agencies in the global market will be determined by the dynamics of political change. Countries with authoritarian rule have relatively better Dagong ratings than the Big Three ratings, so it would be natural for those with authoritarian rule to prefer Dagong. One of ESMA's policy directions is to deoligopolize the rating agency market. It is expressed in various preferences for the so-called small rating agencies already mentioned in this paper. Thus, there are regulatory grounds for strengthening such agencies as the aforementioned DG International Rating. It is worth mentioning as an aside that the increase in competition in the CRA market is accompanied by a deterioration in the quality of ratings (e.g. Bae, Driss, Roberts 2019). Finally, what remains is for Chinese CRAs to build credibility in the corporate rating market and then transfer their reputation into the sovereign rating market. These issues have been described in this article.

What is supposed to convince investors that the reforms are aimed at improving the quality of corporate ratings are:

- The reduction of the share of corporate issues with at least AA ratings to ca. 70% in 2019. As already mentioned, in 2017 the figure stood at about 93% (Hornby 2019).
- The acquisition of direct control over Dagong by the Chinese authorities in April 2019, which is intended to demonstrate the determination to reform rating methodologies in order to ensure higher quality ratings. On the other hand the lack of independence of the Chinese rating agencies (a majority of them belongs to the state, the remaining ones are politically inspired) and the conflict of interest are significant concerns (Jaquet 2019).

There are at least three reasons for the Chinese authorities' desire to control sovereign ratings:

- to have a political impact on the profitability of government securities issued by specific countries,
- to reduce the profitability of Chinese debt,
- to maintain control over the profitability of debt securities issued by Chinese local government units and Chinese companies (in order not to escalate the debt problem) and, at the same time, to disperse exposures.

8 Conclusions

China is opening its rating agency market to competition from the Big Three. The official reasons for this decision is the intention to improve the transparency of the capital market and its competitiveness. It seems, however, that the rationale may be more nuanced. A sine qua non condition for the involvement of foreign institutional investors in the purchase of Chinese corporate and local government bonds is to have reliable information about credit risk. Chinese rating agencies, using the same scales as the Big Three, positioned the rated entities and issues mainly within the group of safe investment exposures, with a much milder risk rating than their US competitors. These conclusions could only be drawn on the basis of a small number of institutions placing both off-shore and on-shore issues and by confronting the ratings with the yields of debt securities or by trying to determine such ratings with the use of the Big Three methodology. Market opening means assessing the same entities and issuances using the same scales. Following the tightening of CRA supervision in China and given the above mentioned market opening, a convergence of views between Chinese and US CRAs on the risk of rated entities or issues can be expected. This convergence is likely to result, on the one hand, from the tightening of the methodologies used by Chinese credit rating agencies and, on the other hand, from the creation of a rating procedure dedicated exclusively to the Chinese market, a move that has already been signalled by some agencies of American origin and which can be read as a sign of a relaxation of standards in this particular case. However, the opening up of the market and the creation of regulatory and supervisory incentives for Chinese CRAs to issue ratings that reflect the actual credit risk more precisely may have different reasons from those officially presented. These probably include the intention to transfer part of the debt of local governments and corporations from Chinese banks and to find an additional source of financing for these entities. The still instrumental treatment of credit rating agencies and ratings by Chinese authorities is evidenced by the lack of decisive action in the area of country ratings. Dagong ratings are significantly different from the Big Three's ratings. Dagong's assessment of developed countries which are not China's political allies and of large developing economies with which China plans to extend political and economic cooperation is much lower than that of American agencies. It seems that after the decrease of trust in the assessments of credit risk carried out by the Big Three Dagong was designated to propose a new approach as regards the quantification of sovereign creditworthiness. A different methodology is a must in order to attract the interest of market participants and Dagong as a sole new entrant trying to sway investors widely criticizes the Big Three. For the time being, institutional investors do not regard Dagong's opinion as equally credible vis-à-vis leading global rating agencies but the trust capital built on the corporate and local government market, ESMA accreditation of Dagong, as well as upward biased ratings granted by the Big Three to developed economies may change this state of affairs.

References

- Amstad M., He Z. (2019), *Chinese bond market and interbank market*, National Bureau of Economic Research, Working Paper, 25549, <http://www.nber.org/papers/25549>.
- Bae K.-H., Driss H., Roberts G.S. (2019), Does competition affect ratings quality? Evidence from Canadian corporate bonds, *Journal of Corporate Finance*, 58, 605–623.
- Bian J. (2015), Regulating the Chinese credit rating agencies: progress and challenges, *Journal of Money Laundering Control*, 18(1), 66–80.
- Chen A.H., Mazumdar S.C., Surana R. (2011), China's corporate bond market development. Security design implications of information asymmetry, *the Chinese Economy*, 44(5), 6–33.
- Chinaknowledge (2019), *New rules expected for China's credit rating agencies to curb conflict of interest in the industry*, <https://www.chinaknowledge.com/News/DetailNews/84162/Credit-rating>.
- Chodnicka-Jaworska P., Jaworski P. (2019), *The Chinese and the Big Three credit rating agencies – their impact on stock prices*, UW Faculty of Management Working Paper Series, 5, http://www.wz.uw.edu.pl/portaleFiles/5630-Faculty%20of%20M/WP/WPS_5_2019_Patrycja_Chodnicka-Jaworska,_Piotr_Jaworski.pdf.
- Chong F. (2018), *Chinese bonds: Too big to ignore?*, <https://www.ipe.com/investment/briefing-investment/chinese-bonds-too-big-to-ignore/www.ipe.com/investment/briefing-investment/chinese-bonds-too-big-to-ignore/10026874.fullarticle>.
- Dagong (2010), *Sovereign Credit Rating Report of 50 Countries in 2010*, July, Dagong International Credit Rating Company, <https://www.interest.co.nz/sites/default/files/Sovereign%20Credit%20Rating%20Report%20of%2050%20Countries%20in%202010.pdf>.
- Dalal M., Xie S.Y. (2018), Off the scale: S&P's China-ratings plan risks too many triple-A's, *The Wall Street Journal*, 6 September, <https://www.wsj.com/articles/off-the-scale-s-ps-china-ratings-plan-risks-too-many-triple-as-1536232943>.
- Dhawan R., Yu F. (2015), Are credit ratings relevant in China's corporate bond market?, *The Chinese Economy*, 48(3), 235–250.
- Durden T. (2019), *China scrambles to defuse \$6 trillion "Hidden Debt Bomb" with "Titanic Credit Risk"*, <https://www.zerohedge.com/news/2019-03-12/china-scrambles-defuse-6-trillion-hidden-debt-bomb-titanic-credit-risk>.
- ESMA (2019), *CRA Authorisation*, <https://www.esma.europa.eu/supervision/credit-rating-agencies/risk>.
- Fryc J. (2018), *Państwo będzie oceniać wiarygodność kredytową firm. Powstaje państwowa agencja ratingowa*, <https://businessinsider.com.pl/firmy/panstwowa-agencja-ratingowa-umowa-gpw-pfr-i-bik/ls06plx>.
- Gaillard N. (2012), A century of sovereign ratings, *Springer Sciences + Business Media*, LLC, 81–90.
- Galbraith A. (2018), *In rare move, China punishes ratings agency Dagong over violations*, <https://www.reuters.com/article/us-china-bonds-ratings/in-rare-move-china-punishes-ratings-agency-dagong-over-violations-idUSKBN1L20K7>.
- Godziński L. (2011), *Rating własny, ale jaki?*, <https://www.obserwatorfinansowy.pl/tematyka/rynki-finansowe/europejska-agencja-ratingowa-pomysly-krytyka-agencji-amerykanskich>.
- Hornby L. (2019), *China's Dagong rating agency taken over by state-owned investor*, <https://www.ft.com/content/7079c7aa-6265-11e9-b285-3acd5d43599e>.

- Hu X. (2017), *Information Quality of Credit Ratings and the Role of Credit Rating Agencies: The Impact of Rating Agency Reform in China*. A thesis submitted in fulfilment of the requirements for the Doctor of Philosophy, RMIT University, <https://researchbank.rmit.edu.au/eserv/rmit:162162/Hu.pdf>.
- Hu X., Shi J. (2016), *Information asymmetry and credit rating? Evidence from a quasi-natural experiment in China*, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2813906.
- Humphrey Ch. (2016), *The principal in the shadows: credit rating agencies and multilateral development banks*, <https://ecpr.eu/Filestore/PaperProposal/6012d674-0a83-472e-9116-9b9d654fce8e.pdf>.
- Jaquet K. (2019), *Understanding China's bond ratings*, 27 June, <https://thedi diplomat.com/2019/06/understanding-chinas-bond-ratings/>.
- Jia Ch., Yanfei W. (2018), Overseas ratings agencies to launch units in China, *China Daily*, 31 May, <http://www.chinadaily.com.cn/a/201805/31/WS5b0f4cbca31001b82571d555.html>.
- Jia W. (2018), CSRC suspends ratings agency for violations, *China Daily*, 18 August, <http://www.chinadaily.com.cn/a/201808/18/WS5b77854aa310add14f386776.html>.
- Jiang X., Packer F. (2017), *Credit ratings of domestic and global agencies: What drives the differences in China and how are they priced?*, BIS Working Papers, 648, June <https://www.bis.org/publ/work648.pdf>.
- Jones H. (2013), *Chinese rating agency Dagong gets EU approval*, <http://www.albertoforchielli.com/chinese-rating-agency-dagong-gets-eu-approval/>.
- Keidel A. (2007), *China's financial sector: contributions to growth and downside risks*, <https://pdfs.semanticscholar.org/e2f3/40cf2cb875f970c3022536f93fd05ce697b8.pdf>.
- Kenderine T. (2017), *Why is China building its own domestic credit ratings architecture?*, <https://thedi diplomat.com/2017/09/why-is-china-building-its-own-domestic-credit-ratings-architecture/>.
- Kennedy S. (2008), China's emerging credit rating industry: the official foundations of private authority, *The China Quarterly*, 193 (March), 65–83.
- Kennedy S. (2019), *In China's credit ratings, democracies pay a price*, <https://foreignpolicy.com/2019/08/08/976045-china-dagong-credit-creditratings-democracy/>.
- Korzeb Z., Kulpaka P., Niedziółka P. (2019), *Deoligopolizacja rynku agencji ratingowych oraz inne inicjatywy na rzecz poprawy jakości ratingów zewnętrznych w kontekście oddziaływania agencji ratingowych na stabilność finansową*, *Materiały i Studia*, 333, Narodowy Bank Polski.
- Livingston M., Poon W.P.H., Zhou L. (2018), Are Chinese credit ratings relevant? A study of the Chinese bond market and credit rating industry, *Journal of Banking & Finance*, 87, February, 216–232.
- Möllers M.J., Niedorf C. (2014), Regulation and liability of credit rating agencies – a more efficient European law?, *European Company and Financial Law Review*, 11(3), 333–363.
- Moody's (2018), *Sovereign Bond Ratings*, https://www.moody's.com/researchdocumentcontentpage.aspx?docid=PBC_1151027.
- Murakami N. (2009), *The capital market and credit rating in China*, http://www.eco.nihon-u.ac.jp/center/ccas/pdf/ccas_wp013.pdf.
- Niedziółka P. (2013), Agencje ratingowe – instytucje wczesnego ostrzegania przed kryzysem czy podmioty destabilizujące rynki finansowe, *Zarządzanie i Finanse*, 2, Wydawnictwo Uniwersytetu Gdańskiego.
- Niedziółka P. (2014), *Zastosowanie kowenantów finansowych w bankowości korporacyjnej*, *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie*, 10 (934), 135–145.

- Niedziółka P. (2017), *Konflikty interesów wpisane w działalność agencji ratingowych oraz koncepcje ukierunkowane na ich pokonywanie*, *Studia i Prace Kolegium Zarządzania i Finansów*, 158, Oficyna Wydawnicza SGH, 95–116.
- Niedziółka P. (2019), *Ryzyko systemowe oraz reputacyjne w działalności agencji ratingowych*, *Gospodarka Narodowa*, 298(2), 127–148.
- Packer F. (2017), *Credit ratings of Chinese firms by domestic and foreign rating agencies – differences and determinants*, Working Paper WP, 2017/5, People's Bank of China.
- Poon W.P.H., Chan K.C. (2008), *An empirical examination of the informational content of credit ratings in China*, *Journal of Business Research*, 61(7), 790–797.
- Solon O. (2017), *Credit firm Equifax says 143m Americans' social security numbers exposed in hack*, *The Guardian*, 29 September.
- Sputnik (2015), *Russian, Chinese Rating Agencies to Rival S&P, Moody's, Fitch*, <https://sputniknews.com/analysis/201502021017659988>.
- Standard & Poor's (2017), *Sovereign Rating Methodology*, <https://www.spratings.com/documents/20184/4432051/Sovereign+Rating+Methodology/5f8c852c-108d-46d2-add1-4c20c3304725>.
- Sun N. (2019), *China picks S&P Global as first foreign bond rating agency*, <https://asia.nikkei.com/Business/Markets/China-picks-S-P-Global-as-first-foreign-bond-rating-agency>.
- Sun S.W., Smith M.W. (2015), *Market participants' perceptions of the role of Chinese credit rating agencies: an exploration of the complex ethical relationships*, <https://www.researchgate.net/publication/315498314>.
- Tan H. (2018), *American ratings giant S&P sees major opportunity in China's \$11 trillion bond market*, <https://www.cnbc.com/2018/09/14/ratings-agency-sp-global-is-eyeing-chinas-11-trillion-bond-market.html>.
- Tan H. (2019), *China's economy grew 6.6% in 2018, the lowest pace in 28 years*, <https://www.cnbc.com/2019/01/21/china-2018-gdp-china-reports-economic-growth-for-fourth-quarter-year.html>.
- Wong I. (2017), *Why are China onshore and global credit ratings different?*, <https://fundselectorasia.com/china-onshore-global-credit-ratings/>.
- Xu Y., Xiao-Chuan Weng C. (2011), *Introduction and suggestions on the Chinese securities credit rating system from a comparative perspective*, *University of Pennsylvania East Asia Law Review*, 6, 217–241.
- Xueqing J. (2018), *Chinese ratings agencies gaining global influence*, *China Daily*, 3 January, http://www.chinadaily.com.cn/newsrepublic/2018-01/03/content_35435050.htm.
- Zhu S. (2013), *Credit rating in China's bond market: evidence from short-term financing bonds*, *Modern Economy*, 2013(4), 119–129.

Appendix

Table 1

HH Inverses* for each rating category

Rating category	2017	2016	2015	2014
Financial institutions	3.88	3.75	3.72	4.30
Insurance companies	3.79	3.82	3.82	3.83
Corporate issuers	3.26	3.26	3.23	3.35
Asset-backed securities	3.79	3.68	3.53	3.34
Government securities	2.44	2.40	2.40	2.40
Total (all rating categories)	2.70	2.67	2.65	2.68
Total (excl. government securities)	3.94	3.78	3.67	3.81

* The HHI Inverse is calculated by dividing 10,000 (i.e., the highest possible HHI) by the HHI. The index shows a number of companies among which the market is divided (the lower the HHI Inverse the more concentrated the market).

Source: Annual Report on Nationally Recognized Statistical Rating Organizations as Required by Section 6 of the Credit Rating Agency Reform Act of 2006, December 2018, <https://www.sec.gov/oct/reportspubs/annual-reports/2018-annual-report-on-nrsros.pdf>.

Table 2

Licensing requirements in the Chinese corporate bond market

	Interbank bond market	Exchange bond market
Commercial papers, medium-term notes, private placement notes	PBC, NAFMII	CSRC, NAFMII
Asset-backed securities	PBC, CBIRC	CSRC, CBIRC, PBC
Enterprise bonds	PBC, CSRC	CSRC, PBC
International institution bonds	PBC, NDRC, CSRC and Ministry of Finance	CSRC, PBC, NDRC and Ministry of Finance
Convertible bonds	PBC, CSRC	CSRC, PBC
Exchange-traded corporate bonds	PBC, CSRC	CSRC
Privately placed small and medium enterprise notes	PBC, Shanghai and Shenzhen Stock Exchange	CSRC, Shanghai and Shenzhen Stock Exchange

Source: own elaboration based on Amstad, He (2019) and updated.

Table 3
Major Chinese credit rating agencies

CRA	Year of creation	Seat	Acceptance of the supervisory authority/ membership					Main shareholders
			PBoC	CBIRC	CSRC	NDRC	NAFMII	
Shanghai Brilliance Credit Rating & Investors Service Co., Ltd.	1992	Szanghaj	X	X	X	X	X	Chinese authorities (Standard & Poor's as a strategic partner but not a shareholder)*
Dagong Global Credit Rating Co., Ltd.	1994	Beijing	X	X	X	X	X	People's Bank of China and Chinese authorities
China Chengxin Credit Rating Group**	1992	Beijing	X	X	X	X	X	Chinese authorities and Moody's as a minority shareholder in China Chengxin International Credit Rating Company Ltd*
Golden Credit Rating International Co., Ltd ("Orient")	2005	Beijing	X	X	X	X	X	China Orient Asset Management Co., Ltd. (indirect control of Chinese authorities)
China Lianhe Credit Rating Co., Ltd.**	2000	Beijing	X	X	X	X	X	Chinese authorities and Singaporean fund GIC (minority shareholder)
Pengyuan Credit Rating Co., Ltd.	1993	Shenzhen	–	X	X	X	–	China Securities Credit Investments Co (controlled by 35 Chinese companies)

* In mid-2018 U.S. credit rating agencies announced their intention to establish their own branches in China, giving up their partnership/equity stake in Chinese credit rating agencies. Standard & Poor's involvement in Shanghai Brilliance Credit Rating & Investors Service Co., Ltd. was limited to training and technological support and was terminated after 10 years.

** Both Chengxin and Lianhe had domestic CRAs licenced by the CSRC to offer ratings in the exchange market and separate daughter companies with minority stakes owned by global American agencies established in 2006 and 2007, respectively, and licenced by the People's Bank of China to operate in the interbank market (Amstad, He 2019). As outlined in this article the above mentioned joint ventures will probably cease to exist.

PBoC – People's Bank of China. The Chinese central bank which controls trading on the interbank market (mainly short and medium term corporate debt securities and bills of exchange).

CSRC – China Securities Regulatory Commission. The Chinese supervisor of a regulated market mainly trading long-term corporate bonds.

CBIRC – China Banking and Insurance Regulatory Commission. The Chinese insurance and banking industry regulator. In March 2018 a reform of supervisory institutions was implemented in China, merging the insurance market regulator (CIRC) and the banking sector supervisor (CBRC).

NDRC – National Development and Reform Commission of the People's Republic of China. The Chinese central bank development council responsible for formulating economic policy and controlling trading in debt securities issued by local governments, as well as small and medium-size enterprises (trading on interbank and regulated markets).

NAFMII – National Association of Financial Market Institutional Investors. The Chinese association of institutional investors accrediting entities in the interbank market.

Source: own study based on data available on the websites of credit rating agencies and their shareholders, as well as data provided in: Livingston, Poon, Zhou (2018, p. 222).

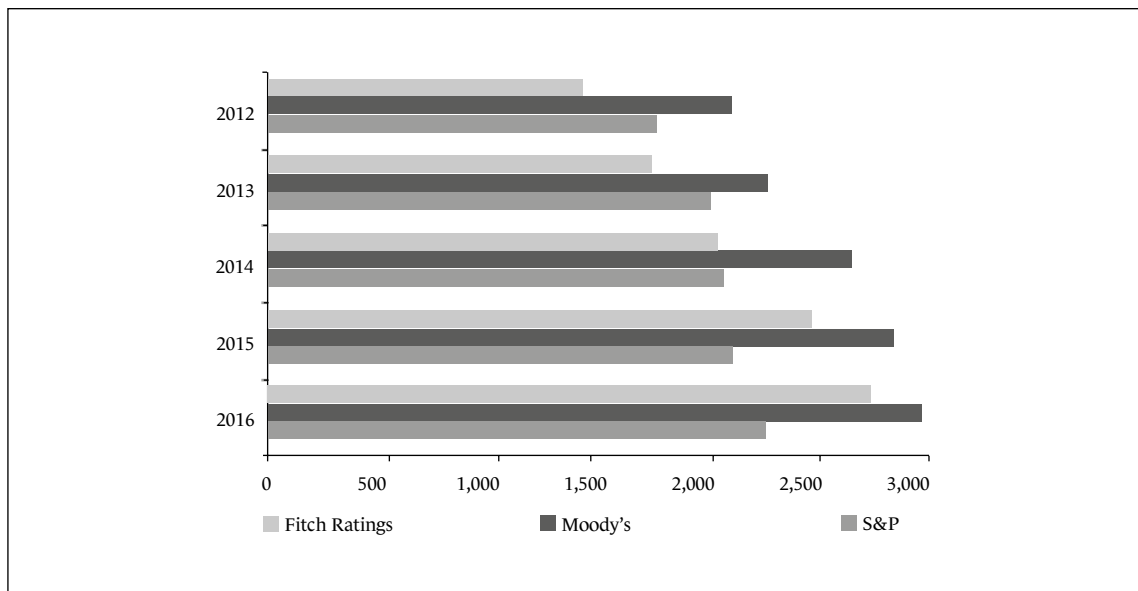
Table 4
Sovereign ratings (as of 31 December 2018)

State	Standard & Poor's	Moody's (...)*	Fitch Ratings	Dagong
United States	AAA	Aaa (AAA)	AAA	BBB+
Russia	BBB-	Baa3 (BBB-)	BBB-	A
India	BBB-	Baa2 (BBB)	BBB-	BBB
China	A+	A1 (A+)	A+	AAA
Germany	AAA	Aaa (AAA)	AAA	AA+
France	AA	Aa2 (AA)	AA	A+
Italy	BBB	Baa3 (BBB-)	BBB	BBB-
United Kingdom	AAA	Aa2 (AA)	AA	A+
Poland	A-	A2 (A)	A-	A-
Spain	A-	Baa1 (BBB+)	A-	BBB+

* Standard & Poor's, Fitch Ratings and Dagong equivalents are given in brackets.

Source: own elaboration based on data available on the websites of the analysed credit rating agencies.

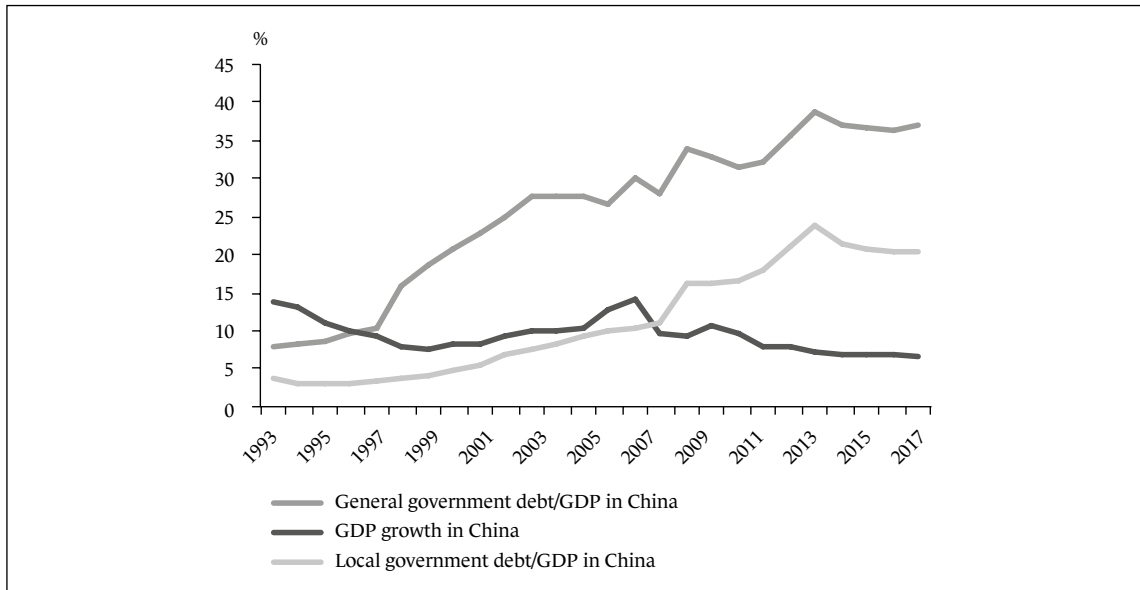
Figure 1
Average revenues (for 1 assessment) of the leading rating agencies (thousands USD)



Source: own elaboration based on annual reports of the credit rating agencies.

Figure 2

GDP growth, local government and total government indebtedness as percentage of GDP in China in 1993–2018



Source: data available on the World Bank website: <https://data.worldbank.org/country/china?view=chart> (7 March 2019) and <https://www.ceicdata.com/en/indicator/china/government-debt-of-nominal-gdp> (7 November 2019).