PRACE NAUKOWE
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RESEARCH PAPERS
of Wroclaw University of Economics and Business

Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu
Research Papers of Wroclaw University of Economics nad Business
Year 2023, Vol. 67, No. 2
ISSN 2392-0041

Credit Rating Agencies in the Face of the War in Ukraine

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Quote as: Wołoszczenko-Hołda, Ł., and Niedziółka, P. (2023). Credit rating agencies in the face of the war in Ukraine. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, *67*(2).

DOI: 10.15611/pn.2023.2.13
JEL Classification: F51, G23

Abstract: The aim of this study was to find evidence of whether the ratings prior to Russia's reinvasion of Ukraine in 2022 reflected the geopolitical risks, and if the rating actions taken in response to the aggression accurately informed the financial market participants of the conflict's spillover impacts, transmitting them to the credit risk assessment. The rating actions in response to the Russia's reinvasion in 2022 indicate a considerable shock from the underestimation of geopolitical and political risks in Russia, including autocracy risks. The pattern of the rating actions differed from those in response to the invasion in 2014, and also varied from those used over the past two decades during the outbreak of crises with underlying economic drivers. The CRAs signalled a high level of geopolitical uncertainty which may involve a necessary shift to 'point-in-time' ratings, as 'through-the-cycle' ratings could have little relevance due to the lasting geopolitical risk.

Keywords: credit rating agency (CRA), rating, war in Ukraine, Big Three.

1. Introduction

Russia's armed aggression in Ukraine, which took place on 24th February 2022, has had tangible effects not only of a political and social, but also of an economic nature. The economic impact has a direct and indirect dimension – the first related to the financial standing of entities from the conflict countries, those with strong commercial ties to stakeholders from the aforementioned states as well as those on which the sanctions were imposed. The indirect effect is understood here as the expected decline in economic growth, the deterioration of public finances, persistently high inflation and the worsening of the financial standing of companies in energy-intensive industries, as well as companies and individuals with a high level of debt. These indirect consequences also refer to the impact of rating agencies' decisions on the availability and cost of debt and the credibility of those affected by the war. According to Moody's assessments, more than a quarter of non-financial companies rated by this agency will be significantly affected by the realisation of the downside scenario associated with Russia's military aggression in Ukraine (Moody's, 2022a). By region, such assessments primarily affect companies in EMEA (Europe, the Middle East and Africa); by industry, those characterised by high energy intensity and cyclicality. The perception of CRAs (Credit Rating Agencies) is interesting and different from, for example, the outlook presented by European banks, as CRAs are based on forward looking scenario analysis covering up to several years.

The aim of this study was to find evidence whether the ratings prior to Russia's 'reinvasion' of Ukraine in 2022 reflected the growing geopolitical risks and the rating actions taken in response to the aggression accurately inform the financial market participants of the conflict's spillovers, transmitting them to the credit risk assessment. The US, Chinese and Russian CRAs were all considered during a nine-month period, i.e. three months before and six months after the Russian aggression in Ukraine. The analysis covered four groups of entities: sovereigns, banks (the quality of their loan and investment portfolios reflects the health of the economy), and companies in the automotive and energy sectors as potentially being most affected by the war. The Big Three rating agencies, after downgrading Russia in response to the triggering of the military conflict on Ukrainian territory, already withdrew ratings for it and entities originating from that country at the end of March 2022 due to the sanctions imposed. The study also considered the ratings of CEE countries bordering Ukraine, Belarus and Russia, as well as of the entities originating from these countries.

The first research question concerned determining to what extent the response of the leading CRAs (the Big Three) was similar in terms of the timing of the decision and its nature, and whether the rationale for the changes in ratings in the case of individual agencies for specific groups of entities was similar, and if not, what these differences were due to. The second research question asked whether, and (if so), why US and Chinese CRAs reactions differed in their perceptions of the economic impact of the outbreak of the war in Ukraine.

The paper used a method of critical review of the subject literature, a comparative analysis of all relevant CRAs' communications, such as reports, statements and announcements, an analysis of statistical data, and the inferring from them a multivariate comparative analysis.

The results of the study may be useful for capital market investors (due to the impact of CRAs' decisions on the debt market risk premium), and also for regulatory and supervisory institutions (due to the continuing high dependence of quantitative norms on external ratings), in order to better understand the CRAs' approach for addressing the economic and geopolitical risks associated with Russia's reinvasion of Ukraine in 2022.

This article is the first analysis of the reaction of rating agencies to the outbreak of war in Ukraine. Its originality also lies in the fact that not only the leading US rating agencies were taken into account, but also Chinese and Russian agencies, and a wide spectrum of rating types was analysed.

2. Rating and credit rating agencies – review of the literature

A credit rating is an alphanumeric designation of the level of credit risk used by credit rating agencies. A credit rating is a comprehensive assessment of an issuer's financial credit-worthiness or an evaluation of a particular issue. This assessment is made according to a specific methodology used by a given credit rating agency and placed on a scale that the agency uses for a specific group of entities or issues. It is therefore a relative assessment. The rating informs about the risk of default of the issuer (Dziawgo, 1998). These entities originated in the US market in the mid-19th century as a response to the demand for synthetic risk information displayed by investors guided by portfolio analysis principles (Korzeb, Kulpaka, and Niedziółka, 2021; Pruchnicka-Grabias and Szelągowska, 2019). Although CRAs are now quite transparent about their general methodological assumptions, there is still room for subjectivity in the ratings' granting procedures, hence the research into the actual determinants of credit ratings (e.g. Chodnicka-Jaworska, 2019). The business model of such financial institutions has evolved over quite a long period of time. Currently, despite criticism, the issuer pays formula is dominant (Kashyap and Kovrijnykh, 2013), although comparative studies are conducted on the impact of the business model on the quality of ratings (Xia, 2014). Ratings are assessments that should be stable throughout the business cycle, although in practice they are sometimes characterised by procyclicality; such research was conducted by Amato and Furfine (2003) and Bar-Isaac and Shapiro (2013), among others.

A review of the literature suggests that studies dedicated to the agencies' response to successive financial crises dominate: the subprime crisis (De Vincentiis and Pia, 2014; Mika, 2010), the sovereign debt crisis (Bartholomew, 2013; Baum et al., 2014) and the pandemic crisis (Jones, 2020; Kraemer, 2021; Portes, 2020). Relatively most prominence was attributed to credit rating agencies when analysing the causes of the subprime crisis. CRAs were identified as the actors whose decisions contributed to its emergence and escalation (Frost, 2009; Mullard, 2012), while emphasising the interdependence of the ratings assigned by the agencies that make up the Big Three (Gomes, 2015). A number of studies emphasised the sharp decline in trust in rating agencies, triggered by the decline in their reputational capital in the wake of the subprime crisis (GTNEWS, 2019 and Han, Pagano, and Shin 2010). Even before the outbreak of the aforementioned crisis, attention was drawn to the potential negative consequences of conflicts of interest arising from the dominant business model in this sector (Kraft, 2010) and the phenomenon of rating shopping (Adelson, 2006).

CRAs create systemic risk (Pym, 2012; Tichy, 2011; Wołoszczenko-Hołda and Niedziółka, 2017), hence, in order to limit their potentially negative impact on financial stability, as discussed, among others, by Niedziółka (2013), a number of regulatory and supervisory initiatives were decided (Jollineau, Tanllu, and Winn, 2013). Among these, the deoligopolisation of a hitherto highly concentrated market comes to the fore, albeit in this context raising the question of the relation between the level of market competition and the quality of ratings (Becker and Milbourn, 2008). Solutions have also emerged to reduce the reliance of supervisory regulation on ratings (Partnoy, 2009). CRAs were subjected to supervision (Darbellay, 2013; Niedziółka 2015), with an increased emphasis on augmentation of the transparency of rating methodologies, raising the predictability of rating changes, reducing conflicts of interest (Covitz and Harrison, 2003), strengthening of the independence of decisions, and the need to clearly distinguish between solicited and unsolicited ratings (Byoun, Fulkerson, Han, and Shin, 2014). There were been proposals to replace US-based CRAs with newly established European agencies and to assign ratings to CRAs (Mathis, McAndrews, and Rochet, 2009).

The carried out review shows that the issue of the impact of the outbreak of armed conflict on CRA decisions is virtually absent from the literature. However, the outbreak of war is taken into account in CRA methodologies. Most often, war is considered in the context of the materialisation of geopolitical risk and the impact of this event on a country's ability to settle its obligations, yet agencies distinguish between the reasons for the lack of debt servicing in times of war. These can be: political (if the debtor and creditor are in conflict or the government decides to spend funds for a purpose other than debt servicing); economic (the lack of funds to service the debt); technical, determined, for example, by sanctions or the lack of adequate functionality on the part of the payment systems (Scope Ratings, 2021).

3. Data and methods

The survey covered a period of nine months: three months before Russia's invasion of Ukraine and six months after it began. Four groups of actors were taken into account:

- countries directly engaged in the war (Russia and Ukraine) and European countries bordering with Ukraine and Russia (Belarus, Poland, Lithuania, Latvia, Estonia, Hungary, Slovakia and Moldova),

- banks registered in Russia, Belarus and Ukraine as sanctioned entities with key importance for financial stability and the real sphere of the economy,
- oil, gas and energy companies from Russia (Novatek, Gazprom, Lukoil, Sovcomflot, Transneft) and from countries not directly participating in the war, but whose energy and fuel systems depend heavily on Russian energy resources: Poland (PGNIG), Bulgaria (BEH) and Kazakhstan (Tengizchevroil),
- global automobile companies (Mercedes Benz Group SA, Toyota, Volkswagen, General Motors, Hyundai Motor Group, Stellantis, Ford Motor Company) due to the potential severance of supply chains from factories in Ukraine and Russia, and the sanctions imposed on Russia and Belarus (closure of businesses in the above mentioned jurisdictions).

Decisions made by the leading credit rating agencies (the so-called Big Three, i.e. S&P, Moody's and Fitch Ratings), as well as agencies from China (Chengxin) and Russia (ACRA). Reports, announcements, analyses and justifications for decisions made by CRAs were the subject of this research. In addition to changes in credit ratings, assessments subsidiary to ratings (credit watch, credit outlook) were monitored. The analysis covered the migration processes of ratings and assessments with special attention to the following issues:

- the logic of the decision sequence,
- the time schedules of the decisions (also in relation to the schedules of other rating agencies),
- a comparison of actions with the decisions made in 2014 (the annexation of Crimea),
- the mutual positioning of sovereign ratings (before and after the outbreak of war).

Another research area concerned the risks associated with autocratic governments and to what extent they were reflected in ESG ratings and whether, after Russia's invasion of Ukraine, the rating agencies revised these ratings (S and G factors). Three providers of ESG ratings were considered: Sustainalytics, MSCI and S&P, and the following financial entities: Moscow Stock Exchange, Russian banks (Sberbank, VTB) and European and US banks that had ESG ratings comparable to those of Russian banks before the outbreak of war (peer ESG banks).

The paper used a method of critical review of the subject literature, a comparative analysis of all relevant CRAs' communications such as reports, statements and announcements, as well as academic publications involving the analysis of statistical data, and the inferring from them multivariate comparative analysis.

4. Results

All the Big Three credit rating agencies downgraded the ratings of the countries directly involved in the war. Given the strong political, military and economic ties with Russia, the reduction also affected Belarus. S&P (ratings of Russia and Ukraine) and Fitch Ratings (rating of Ukraine) were the fastest to react, as shown in Table 1. The logic of Fitch Ratings seems to indicate that only the announcement of sanctions was a negative factor for the Russian economy.

Table 1. Timeline of the first rating downgrades by CRAs of the Big Three in response to the war's outbreak

	Russia	Ukraine	Belarus
S&P	25.02.2022	25.02.2022	04.03.2022
Moody's	03.03.2022	04.03.2022	20.03.2022
Fitch	02.03.2022	25.02.2022	07.03.2022

Source: own elaboration.

At the same time, there were no rating changes for the Central and Eastern European countries bordering onto Russia, Ukraine and Belarus (see Figure 1).

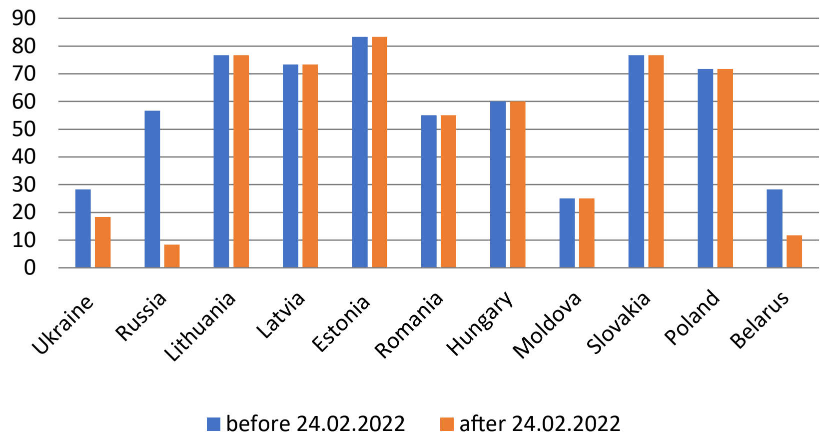

Fig. 1. Sovereign ratings granted by the Big Three (average rating, scale 0-100*)

* – scale used by Trading Economics (2022).

Source: own elaboration based on data provided by S&P, Moody's and Fitch.

Table 2 shows a comparison of the decisions made by the US entities (Big Three) and the Chinese credit rating agency (Chengxin). The above yields two types of information. Firstly, information about the possible future economic impact of the war. Taking into account the predictive function of the credit rating, according to the Chinese credit rating agency, the conflict will result in a relatively better condition of the Russian economy (compared to the Ukrainian one). Secondly, only Chengxin considers Belarus as a country that will not be affected by the war in Ukraine (no change of the assessment upon the break of the war). However, Russia's standing will deteriorate more than Ukraine's and will equal Belarus' performance.

Table 2. Comparison of sovereign rating actions of the CRAs of the Big Three and Chengxin in response to the war's outbreak (on 24 Feb 2022)

CRA	Downgrade of ratings of Russia	Downgrade of ratings of Ukraine	Downgrade of Belarus	Russia's rating versus Ukraine's rating
S&P	yes	yes	yes	worse
Moody's				
Fitch				
Chengxin			no	better

Source: own elaboration.

The data presented in Figure 2 corresponds with Table 2,concluding that Chengxin believes that of the CEE countries, Ukraine will be the most affected by the war. It is also interesting to note that the ratings of Romania and Hungary were placed just above those of Russia and Belarus.

The Russian credit rating agency, ACRA, withdrew sovereign ratings almost two years before the Russian invasion in Ukraine, so its reaction to the outbreak of war cannot be analysed. However, based on recent rating levels, it is interesting to note the convergence of views with Chengxin's position in at least two areas: (i) the low rating of Romania and Hungary, (ii) the significantly lower rating of Belarus than Russia (see Figure 3).

Table 3 and Table 4 show the decisions of the credit rating agencies constituting the Big Three with regard to Russian, Ukrainian and Belarusian banks. For Russian banks, ratings were withdrawn following a downgrade, which can be linked to the intensification of international sanctions. The ratings of Ukrainian and Belarusian banks, on the other hand, were downgraded to the lowest level, indicating a high probability of default.

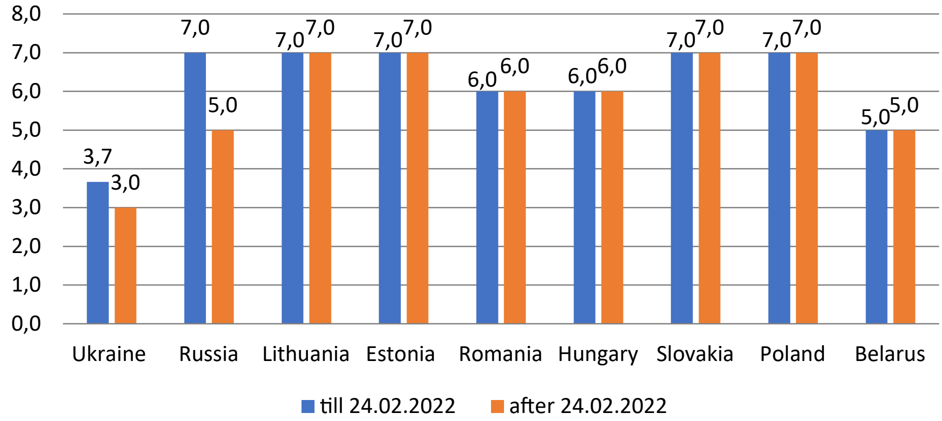

Fig. 2. Sovereign ratings granted by China Chengxin International (scale 1-9*)

* – own scale: from 1 (lowest C) up to 9 (highest AAA).

Source: own elaboration based on data retrieved from: https://www.ccxi.com.cn/ (11.07.2022).

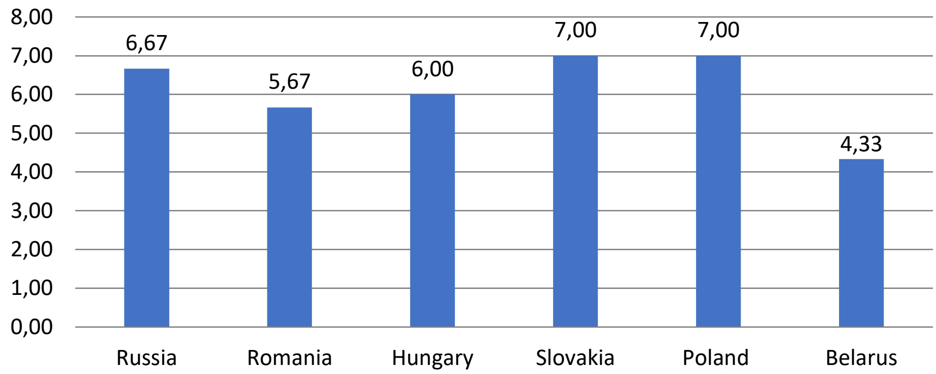

Fig. 3. Sovereign ratings granted by ACRA (before withdrawal on 20.05.2020; scale 1-9*)

* – own scale: from 1 (lowest C) up to 9 (highest AAA).

Source: own elaboration based on data retrieved from: https://acra-ratings.ru/ratings/issuers/?text=&sectors[]=sovereigns&activities[]=&countries[]=&forecasts[]=&on_revision=0&rating_scale=0&rate_from=0&rate_to=0&page=1&sort=&count=30& (07.07.2022).

Table 3. Migration of Long-Term Issuer Ratings by the Big Three for Russia and its resident banks after 24 Feb 2022

s&P:	Sovereign	Feb 25th: D (BB+)	Mar 4th: D (B+)	Mar 18th: D (CCC)	Apr 6th: D (C)	Apr 14th: WR
	Banks	Feb 28th: A (BB+-B+)	Mar 7th: D (CCC-)	Mar 31st: WD	–	–
Moody's:	Sovereign	Mar 3rd: D (B3)	Mar 6th: D (Caa2)	Mar 31st: WR	–	–
	Banks	–	Mar 10th: D (Caa3)	Mar 31st: WR	–	–
Fitch	Sovereign Banks	Mar 2nd: D (B+) Mar 4th: D (B)	Mar 8th: D (C)* Mar 15th: D (CC–C)	Mar 25th: WD Mar 29th: WD	– –	– –

D – downgrade; A-affirmed; WR, WD – withdrawn rating; * – meanwhile lowering the Country Ceiling to (B-) only. Such differential to the Long-Term IDRs is explained by "the potential for a degree of selective enforcement of capital controls or the potential ability for some entities to make payments".

Source: own elaboration.

Table 4. Migration of Long-Term Issuer Ratings by the Big Three for Ukraine and Belarus and their resident banks after 24 Feb 2022

Ukraine*				
Moody's	Sovereign: Banks:	Mar 4th: D (Caa2) Mar 10th: D (Caa2)	May 20th: D (Caa3) May 24th: D (Caa3)	– –
Fitch	Sovereign: Banks:	Feb 25th: D (CCC) Mar 1st: D (CCC)	Jul 22nd: D (C) –	– –
Belarus**				
S&P	Sovereign: Banks:	– Mar 1st: A(B)	Mar 4th: D (CCC) Mar 09th: D (CCC)	May 05th: D (CC) May 13th: D (CC)
Moody's	Sovereign: Banks:	Mar 10th: D (Ca) Mar 15th: D (Ca)	–	–

* – S&P rates only one small bank from Ukraine – Alliance Bank JSC. S&P downgraded its rating on 28.02 to CCC, but rather for distortions not caused by the conflict. This is why S&P was not covered in the case of Ukraine. ** – Fitch does not rate banks from Belarus.

Source: own elaboration.

The risk response to Russia's autocratic form of government, its failure to respect human rights and the politicisation of the economy only occurred after the Russian invasion of Ukraine. Prior to this, Russian financial institutions (banks and stock exchange) enjoyed ESG ratings close to those held by their US and European peers (Table 5).

Table 5. ESG ratings of financial sector entities of Russia and its peers from Europe and North America, 2022

Company*	% Government Agency Ownership**	Sustainalytics ESG Risk Rating[a)]	MSCI ESG Rating[b)]	S&P ESG Scores[c)]
Moscow Exchange	11.78	As of Feb 24, 2022: 14,2 Upgraded to: 22.7	As of Feb 24, 2022: B Downgraded to: BBB	As of Feb 24, 2022: 29 Has been removed
PKO BP	31.39	20.7	A	32
Commerzbank	15.60	21.3	AA	49
Sberbank of Russia	52.32	As of Feb 24, 2022: 21,5 Upgraded to: 33,4	As of Feb 24, 2022: A Downgraded to: B	As of Feb 24, 2022: 41 Has been removed
Swedbank	N/A	24.9	AA	84
BNP Paribas	8.81	25	AA	82
Citigroup, Inc.	N/A	27.1	A	66
Deutsche Bank	N/A	29	A	58
JPMorgan Chase & Co.	N/A	29	A	40
VTB Bank	60.93	As of Feb 24, 2022: 34.6 Upgraded to: 43.0	CCC	–

* – the entities order is in accordance with the Sustainalytics ESG Risk Rating from the lowest to the highest; ** – the attached data omits an implicit government's participation, which is derived through an ownership by a company controlled by a government (source: data from Thompson Reuters Eikon platform); [a)] – Sustainalytics assesses the level of risk, so the fewer points the better; [b)] – AAA (highest) to CCC (lowest); [c)] – from 1 to 100 points, the more points, the higher the rating.

Source: own elaboration.

Despite the disruption of supply chains from Ukrainian and Russian factories and the closure of businesses in these countries (in Russia due to international sanctions, in Ukraine due to the ongoing war on its territory), leading credit rating agencies have not downgraded the ratings of global automotive companies, although there are differences in the perception of risk associated with these capital groups.

Table 6. Migration of long-term issuer ratings by the Big Three for Russian energy companies after 24 Feb 2022

Company	S&P	Moody's	Fitch
NOVATEK, GAZPROM, LUKOIL, Sovcomflot	Mar, 7th 2022: D(CCC-) Apr, 1st 2022: NR	Mar, 10th 2022: WR	Mar, 4th 2022: D(B) Apr, 1st 2022: WD
Transneft	Mar, 7th 2022: D(CCC-) Mar, 17th 2022: NR	Mar, 10th 2022: WR	–

D – downgrade; WR, WD – withdrawn rating.

Source: own elaboration.

The Big Three's position on Russian energy, gas and oil companies is not clear. Following downgrades, ratings were withdrawn (see the list of decisions outlined in Table 6).

5. Discussion

Decisions of credit rating agencies regarding sovereign ratings following the outbreak of the war in Ukraine

The leading rating agencies, i.e. agencies of American origin that have oligopolised the market for many decades, called the Big Three (S&P, Moody's and Fitch) reacted in a similar but not uniform way to the outbreak of war in Ukraine. The ratings of Ukraine and Russia were downgraded, as well as those of Belarus, which the agencies treat as a state completely subordinate to Russia, whose territory and infrastructure are used by Russia for military purposes. Remarkably, while prior to 24 February 2022, Russia's sovereign rating was higher than that of Ukraine and Ukraine's sovereign rating was comparable to that of Belarus, after the war's outbreak, mainly due to expected effects of sanctions on Russia and Belarus, Ukraine's rating was at a higher level than those of Russia and Belarus. All these assessments are speculative. When analysing the behaviour of the individual agencies that make up the Big Three, certain differences can be observed. Even before the outbreak of the war, Russia, Belarus and Ukraine were relatively the most conservatively rated by Moody's, although it should be added that the differences in rating levels was one 'notch'. The quickest response (the largest scale of downgrades) for Russia and Ukraine to the outbreak of war was that of Fitch. Moody's and S&P, on the other hand, downgraded Belarus' rating the most, close to the level of Russia's. The downgrading of Belarus' rating by all CRAs of the Big Three occurred with some delay compared to the decisions relating to Russia and Ukraine (see Table 1).

The escalation of sanctions imposed on Russia and Belarus resulted (especially for Russia) in successive rating downgrades, while Ukraine's rating was downgraded only once at that time. During the first two months after the war's outbreak:

- S&P downgraded Russia three times and Belarus twice,
- Moody's downgraded Russia twice and Belarus once,
- Fitch downgraded Russia twice and Belarus once.

In the meantime, the CRAs of the Big Three did not carry out rating actions changing the sovereign ratings of the CEE countries neighbouring with the zone of armed conflict. This could be explained by their weaker economic ties with Russia, Ukraine and Belarus compared to those within the European single market. On the other hand, due to the high uncertainty associated with the armed conflict its long-term consequences are difficult to assess. It is likely that the 2023 revisions will bring the first signals of a downgrade, as more reliable data on projected inflation, energy prices, economic growth and unemployment will then also be available.

The Chinese and Russian rating agency decisions over the same period were also analysed. China Chengxin International (Chengxin), in operation since 1992, downgraded Ukraine's rating by as much as two notches, to the junk level CCCg, two days after the war broke out. The decision was justified by expectations of a deep recession, a sharp increase in fiscal burdens and growing debt servicing problems as a result of the ongoing armed conflict on its territory (Ukraine's foreign exchange reserves of around USD 27.7 billion were estimated to be insufficient to service debt maturing in 2022). Ukraine's rating was placed at the same level as Venezuela's, with the announcement of no further downgrades (Tang, 2022).

China has a so-called position of neutrality and has never condemned Russia's invasion of Ukraine. To find out if and how China's external policy on this conflict was reflected in the rating actions of its resident CRA, Chengxin rating actions in response to the war's outbreak were compared to those of the CRAs of the Big Three (Table 2).

An analysis of Chengxin's communications and reports provided a few major observations:

- before the war's outbreak (in contrast to the Big Three), Russia's rating was aligned with the ratings of most of the CEE countries-EU members, including those belonging to the Eurozone: Russia's rating was then higher than those of Romania and Hungary,
- before and after the war's outbreak, the agency rated Belarus better than Ukraine,
- the outbreak of the war triggered rating reductions only for countries directly involved in the conflict. On 29 June 2022, Russia's rating was withdrawn. The last rating was BB (see Figure 2), i.e. at the level of Belarus' rating and significantly higher than Ukraine's, although it should also be added that the scale of Ukraine's rating downgrade was relatively small compared to the decision regarding Russia.

Russia's largest rating agency ACRA (founded in 2015 after the first invasion of Ukraine), suspended ratings for five countries (of ten countries assessed). One of the few countries that are still rated is Belarus, for which only the rating perspective was changed from stable to developing. Before the ratings were withdrawn, ACRA rated Russia comparable to Slovakia and Poland and better than Romania and Hungary and significantly better than Belarus.

Resident banks of the states directly and indirectly involved in the conflict

In approaching the study of rating actions in the banking sector, it is first necessary to point out what is known about the interrelation between sovereign and bank ratings. This research question was of particular interest in connection with the financial crisis and, later, the sovereign debt crisis. At that time, there were identified four channels whereby a deterioration in sovereign creditworthiness may affect banks' funding (BIS, 2011), namely: 1) large banks' exposures to the domestic sovereign; 2) reduction of the value of the collateral that banks can use to obtain liquidity from the central bank; 3) sovereign rating downgrades typically results in ratings downgrades for domestic banks; 4) reduction of the funding benefits that banks derive from implicit and explicit government guarantees. The banking sector, compared to other sectors, is considered to be one most vulnerable to sovereign distress in the absence of the possibility of being isolated from it. In support of this thesis, the largest amount of data on S&P's rating actions related to Russia's military invasion of Ukraine in the period from its start on 24.02.2022 to July 19, 2022, concerned banks (50 out of 225), which is almost twice as many as in the next sector with the most numerous rating actions – utilities (S&P, 2022c). CRAs typically consider three components in their banks' rating methodologies: the sovereign risk of a home country, the strength of its banking sector and the bank's individual creditworthiness. The results of Al-Sakka et al. (2014) indicate that there was an observed trend during the crisis period (2008-2013) of rating downgrades for banks with "the average bank ratings are lower than the average sovereign ratings by two notches." Sometimes CRAs in their press releases explicitly link bank downgrades with prior sovereign rating downgrades (Al-Sakka, Gwilym, and Tuyey, 2014, p. 237). Chodnicka-Jaworska's (2016) results also indicate that there is a positive correlation between a bank's individual creditworthiness rating and the strength of the domestic banking sector.

According to data on S&P's rating actions related to Russia's armed invasion in Ukraine since it began, more than half of them (138 out of 225) involved entities from Russia[1], of which a third involved banks. The CRAs response to Russia's invasion of Ukraine in 2022, which unlike the events of 2014 had much larger global repercussions, followed a different algorithm than the economic crises of the past two decades. With the exception of Fitch, whose actions in the case of banks from Russia, however, seem to follow most closely the logic of the CRAs' actions in response to the crisis in its early stages – after sovereign rating downgrades, a short period of time is followed by downgrades of resident banks by 1-2 notches. Following a similar pattern, the Big Three responded to Russia's invasion of Ukrainian territory in 2014. At that time, the Russia-induced conflict took on a more local character, sanctions on Russia were imposed gradually over the two years i.e. 2014-2015, and their scale was much smaller than in 2022. The CRAs of the Big Three then downgraded their ratings of sovereign creditworthiness twice in April 2014 and January 2015 by 1 grade. Each downgrade of the sovereign rating was shortly followed by a downgrade for domestic banks by 1-2 notches. A similar logic was observed in Moody's rating actions towards banks from Belarus and Ukraine in response to the reinvasion in February 2022.

An analysis of CRAs rating actions after 24 Feb2022 towards banks from Russia, Ukraine and Belarus tend to indicate a lack of the coordinated actions one would expect from the Big Three oligopoly. This kind of behaviour was previously indicated by some researchers (see e.g. Al-Sakka et al., 2014; Gomes, 2015). No "ratings leadership" is observed this time, which would be followed by the other CRAs. What was observed instead, were the differences in timing of the actions, in gaps between the local-currency ceiling and the sovereign ratings, as well as between the sovereign ratings and banks' ratings, etc. For example, Moody's downgraded Russia's sovereign rating 6 March2022 (Ca), which in its view reflects "the elevated unpredictability of the government's actions and high political risk that could affect all Russian issuers." Concurrently it set the local-currency ceiling with the two-notch gap (Caa2), which is rather typical (usually it is about 2-3 notches). Fitch, in the same case only two days later, set the local--currency ceiling (C) and the sovereign rating (B-) with the gap between them, against existing practice, by as much as a rather extraordinary 5 notches.

Unlike the situation in 2014, when the Russian invasion of Ukraine came as a big shock, in 2022 Russia's plans to invade Ukraine again were already known to the wider public since late 2021, with indications of the very high probability of such an attack, possible dates for the invasion, and the inevitability of sanctions hitting the aggressor hard on its economy if the aggression eventually occurred. Thus, the war unleashed by Russia in Ukraine in 2022, belongs to the "grey rhino" type of events with an obvious increase in political risks for the countries directly involved in the war even before it became a reality. This is in contrast with the "black swan" type events that were characteristic for the economic crises of the last two decades. At the time, it was noted that this type of crisis is associated with the fact that "ratings tend to be sticky, lagging markets, and overreact when they do change" (Elkhoury, 2008). Noteworthy was S&P's decision on the second day of the invasion to maintain ratings for resident banks of Russia or downgrade some of them by only 1 notch, and to maintain ratings for banks from Belarus only with their credit watch placement. On the following business day, Monday 28 Feb2022, in its February update for Banking Industry Country Risk Assessment (BICRA), S&P also left unchanged its assessment of banking industry risk and economic risk for Russia, indicating an upward shift in risk only a month later in its March update[2]. If such conservative actions were not a case of "ratings stickiness," especially considering that S&P is historically marked by its role as the more independent actor among CRAs of the Big Three, with its characteristic "ratings leadership"[3], then what rationales were behind these decisions? It is possible that the conservativeness was the result of previous indications against CRAs about overreacting at the outbreaks of past crises, which reflected negatively on the perception of their ratings as through-the-cycle

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1 Actions were also taken towards companies related to financial institutions from Russia, but registered in other jurisdictions, such as RBC Bank Ltd. registered in Cyprus, but controlled by Russia's VTB Bank.

2 "We have revised our BICRA for Russia to Group '10' from Group '7', our economic risk score to '10' from '7', our industry risk score to '9'" (S&P, 2022a).

3 "S&P has most evidence of acting as a first mover in bank rating downgrades" (Al-Sakka et al., 2014).

measures, which in principle should be much less exposed to volatility than in the case of market-based risk signals (market prices and credit spreads). As for S&P's placement of Belarusbank and Belagroprombank ratings on watch negative, the agency pointed to the need for sufficient information on the risks, whether they would materializs, and their likely impact, hence the fact of the invasion in the agency's view does not yet indicate the materialisation of very significant political risks. Most likely, economic reasons also played their role in this decision. The results of Chodnicka-Jaworska's (2016) study indicate that S&P, compared to the other CRAs of the Big Three, tends to give higher ratings to banks with state capital participation (which is typical especially of the largest banks from Russia and Belarus), considering this a greater guarantee of the stability of such institutions. In the case of maintaining the banking industry risk rating for Russia, the key rationale is that the sanctions of 2014-2015 led to a reduction in the reliance of the banking system in Russia on external funding and assets, making it more resilient to further and even more restrictive sanctions (S&P, 2022a).

With regard to the other countries in the region indirectly affected by the war, the likelihood of the transmission of risks arising from the conflict to the credit risk of their banks in the first six months after the start of the war was assessed by the CRAs of the Big Three as rather low, as evidenced by the mostly neutral nature of their rating actions, as well as the findings in numerous reports and communications. At the same time, they point out that "the Russia-Ukraine conflict bears downside risks to ratings" of the banks (S&P, 2022b). Among the main transmission channels, all the CRAs of the Big Three also point to the downside risks from the conflict, which further drives inflation and increases disruptions in the global supply chains, while adding that in general the banking systems in European countries seem to be resilient to these risks, having their balance sheets in reasonably good shape to face these challenges. Among the European countries, Moody's considered that the Baltic states (Estonia, Latvia and Lithuania) were particularly likely to be affected by the increase in economic risks associated with the conflict, which it reflected at the end of April 2022 in negative outlooks for their banking systems. S&P signalled growing economic risks to Germany's economy (which S&P has so far rated at the lowest level under its BICRA rating) due to the country's substantial exposure to Russian energy as late as July 2022. In the second half of 2022, as energy consumption grew , one could expect a reassessment of economics risk for European countries, which could lead to negative outlooks for their banking systems, especially in countries with greater exposure to Russian energy and higher inflationary dynamics.

The main focus of the study in the three-month pre-invasion period was on whether and how the CRAs of the Big Three reflected in their ratings the spillovers of a material increase in the likelihood of geopolitical risk materialising (Russia's invasion of Ukraine and Belarus' involvement in it with consequences in terms of deepening the economic and political isolation of the aggressor countries), and in terms of domestic politics in the countries directly involved in the conflict (increased risk of destabilisation of the political system) on the creditworthiness of their banks. Within traditional ratings, political risks are taken into account by the CRAs of the Big Three in terms of assessing the institutional component of the sovereign credit risk. The weighting of this component in the overall sovereign risk assessment remains a matter of discussion[4], while the CRAs do not report the weights they use in their methodologies. Some studies indicate a high importance of this component (Chodnicka-Jaworska, 2016).

The analysis of CRAs statements and reports in the three-month pre-invasion period has not revealed any spillovers of a material increase in the likelihood of political risks at that time on the increase in credit risk in the agency's assessment in all groups covered. However, the analyses showed some indirect indication of a possible underestimation by CRAs of the Big Three of geo and intra-political risks just before the war, as well as during the frozen conflict period 2014-2022. An analysis of reports on the rating actions of the CRAs of the Big Three on the largest banks of Russia, Ukraine and Belarus

4 A relevant example is the downgrade of Poland's sovereign rating by S&P in 2016, motivated by undemocratic changes in the judiciary and the threat of the central bank becoming less independent, unannounced by preceding actions such as this negative outlook. The other CRAs of the Big Three behaved more cautiously. Two years later, S&P raised the rating to its pre-January 2016 level, driven by a strong macroeconomic assessment, as questions on the judiciary assessment remained unchanged.

showed that for most of the period of the frozen conflict until Russia's reinvasion on 24 February 2022 (this time aimed at seizing the entire territory of Ukraine), the CRAs' rating actions towards entities in the banking sector (and not only) of Ukraine, as well as Belarus, were carried out by CRAs' offices located in Russian jurisdiction (offices in Moscow). The use of such a business model is indicative of the assessment by these CRAs of political risks in the region. This may indicate two important issues: first, an underestimation of political risks; second, an underestimation of the growing autocracy risk in Russia resulting from the country's policy of deepening isolation after 2014.

CRAs refer to the mechanisms they employ to ensure the independence of their rating actions as the know-how that guarantees the quality of the service offered and constitutes the agency's reputation in the market. In practice, however, the history of CRAs in the 21st century is associated with a series of crises created by ineffective management of conflicts of interest indicating the rather negligible importance of reputational risk for the functioning of the rating services market (see e.g. Chodnicka-Jaworska, 2019). Reputational risk is the only market-based mechanism to control the efficiency of CRAs corporate mechanisms to ensure independence of rating actions. Owing to its ineffectiveness, any potential conflict of interest built into the CRAs' business model may have a negative impact on the independence of its rating actions and lead to a deterioration of CRAs' credibility. An example to illustrate this point is the evidence concerning Fitch's relative independence towards the European countries and banks during the European debt crisis, found by Al-Sakka et al. (2014). The authors suggested that such relative independence of Fitch's rating actions may be behind the fact that Fitch, unlike the other CRAs of the Big Three, has a European owner and dual headquarters. The conflict of interest, when a CRA office located in the jurisdiction of an aggressor country (Russia) carries out rating actions, which ultimately affect the cost of servicing debt on the invaded country (Ukraine) and its domestic entities while a frozen conflict between two countries is ongoing, seems to be more obvious than in the given example of Fitch's relative independence. The CRAs of the Big Three, however, accepted such an obvious conflict of interest in their business models, thus fitting in with the prevailing global trend of underestimating the geopolitical risks associated with Russia, which turned around only after the reinvasion of Ukraine on 24th February 2022.

Another important issue mentioned concerns the credibility of the analysis coming from residents of jurisdictions with high autocracy risk (as in the case of Russia), which runs irrespective of their personal intentions or CRAs' corporate standards on objectivity. This may be the case due to the phenomenon of self-censorship amid strengthening repressions restricting freedom of speech, and the distortion of the information field due to restrictions on media freedom and the dominance of the media by state propaganda. The underestimation of autocracy risk by CRAs in the case of Russia is apparent from the sharp migration of ESG ratings of Russian entities after the reinvasion of Ukraine, including the largest systemic banks (Sberbank – 37.9% of total assets, VTB Bank – 19.6%) controlled by the state.

In the case of ESG ratings, agencies focus on risks that determine the sustainability of an entity's development. Significant autocracy risk indicates the unavoidable shift of risks in sovereign governance to the corporate governance and corporate behaviour of resident entities, this also affects privacy and data security very relevant to the business of banks. Overall, this also undermines the credibility of the data provided by entities from such a jurisdiction. Notwithstanding the significant autocracy risks in Russia, some entities, including the largest state-owned Sberbank of Russia, before the war were enjoying high ESG ratings, which reflected the relatively low agency assessment of their ESG risks, often at a level comparable to Western banks and, in some cases, even better (see Table 5). For example, Sberbank of Russia is still among the leaders of the MSCI ESG rating in the corporate behaviour and the privacy&data security category together with Swedbank. What differs is their corporate governance scores, which most closely reflect sovereign governance: here Swedbank is among the ESG leaders and Sberbank among the ESG 'laggards'. The sharp downgrading of ESG ratings only after the outbreak of the crisis after the reinvasion reminds one of the episode with ratings of the mortgage-backed securities after the financial crisis erupted a decade ago. For instance, MSCI raised Sberbank of Russia's rating from BB to A (the upper average category) in December 2021, and in March 2022 downgraded it immediately by several notches to B (the 'laggard' category). Concerning rating inflation of the mortgage-backed securities associated with the financial crisis, numerous studies highlighted a number of conflicts of interest in the CRAs' operation, including methodologies used that had contributed to this. What exactly caused the above-described 'unsustainability' of ESG ratings, which are intended to provide an assessment of the long-term resilience of companies to ESG risks, in the case of Russian entities has yet to be explored.

Automotive and energy industries – credit rating agencies' perspective

The ratings of automotive manufacturers, despite being revised since Russia invaded Ukraine in February 2022, were not downgraded compared to the end of 2021, and in some cases were even subject to upgrades (e.g. Volkswagen's rating by Fitch). Most of these ratings are characterised by an investment grade. The exceptions were Ford Motor Company, and Stellantis. The Big Three indicated problems for car makers resulting from Russian aggression in Ukraine due to disruption of supply chains, as well as possible shutdowns of facilities producing car components (see PKO BP, 2022), but at the same time experts pointed to the flexibility demonstrated by global car companies in relocating components' production and sales (Fitch Ratings, 2022; Moody's 2022c; Śliwa, 2022). This is the reason for the lack of important changes in the credit ratings of global car manufacturers.

Rating actions related to the military conflict in Ukraine towards companies in the energy sector in the first half of the year mostly concerned companies from Russia. Similar to the banking sector, these actions consisted in a sharp downgrading of the ratings of Russian largest energy companies, ended by the ultimate withdrawal of CRAs from the Russian market. As in the case of the banking sector, in the rating actions of the Big Three towards entities in the energy sector from Russia, there are no follow-up actions with the aforementioned rating leadership. Overall, S&P carried out 21 rating actions related to Russia's military invasion of Ukraine in the period from its start on 24 February 22 to 19 July 2022 towards companies from the energy sector, 13 of which concerned entities from Russia. Three instances of rating actions towards entities from the energy sector in North America (Canada and the USA) involved ratings' upgrades, which fits in with the trend indicating this region as those benefiting most.

However, there are also risks for energy sector companies that CRAs are signalling to investors. Under any potential scenario for the conflict to materialise, geopolitical uncertainty for teh energy sector will remain high for an extended time horizon, especially for companies of EMEA. An example of the materialisation of geopolitical risk is S&P's placement on 13 July 2022 of Tengizchevroil JV 'BBB-'rating on credit watch with negative implications. The increased geopolitical risk is associated with Russia's attempts to suspend the operations of Caspian Pipeline Consortium (CPC), which would force Tengizchevroil to reduce the scale of its operations drastically. Another example of the materialisation of geopolitical risk is Gazprom's suspension of gas supplies under long-term contracts to Poland and Bulgaria in May 2022. Fitch at the time indicated there was no immediate rating impact for PGNiG and BEH, domestic energy holdings (integrated utilities operating in various energy market segments), but a prolonged suspension may lead to a negative rating action, especially for BEH.

6. Conclusions

With reference to the research questions formulated at the outset, it should be stated that the study carried out demonstrated the dissimilarity of the schedules, sequences and algorithms of the decisions taken by the rating agencies that make up the Big Three. At the same time, the divergence in the perception of the anticipated economic impact of the war in Ukraine on its participants, as expressed in the decisions of the US rating agencies and the Chinese Chengxin agency, was confirmed. The analysis of the rating actions in response to the crisis triggered by Russia's invasion of Ukraine indicates the considerable shock resulting from the underestimation of geopolitical risks and political risks in Russia and Belarus. The pattern of these actions differed from that in response to the invasion in 2014, and also varied from the pattern used over the past two decades during the outbreak of crises with underlying economic drivers.

The external policy of a CRA's home country towards Russia's military conflict in Ukraine may have influenced the timeline and level of downgrades of their resident agencies. The actions of CRA from China tend to reflect the lack of condemnation by the Chinese government of Russia's aggression against its neighbour.

Some evidence indicated that the autocracy risks' impact in the case of Russia has been rather underestimated or not taken into account in credit risk assessments by the Big Three before the war. The underestimation is apparent, among others, from the sharp migration of ESG ratings of Russian entities after the reinvasion of Ukraine, including the largest systemic banks controlled by the state. What exactly caused such "unsustainability" of ESG ratings, which are intended to provide an assessment of the long-term sustainability of companies to ESG risks, in the case of Russian entities has yet to be explored.

The ongoing war in Ukraine has two main transmission channels to credit risk: it increases disruptions in the global supply chains and adds to persistent inflationary pressures. Those spillovers will affect the vast majority of industries, but some, like the energy sector, will probably benefit. The CRAs signal a high level of geopolitical uncertainty with its downside risks to corporate creditworthiness. This may involve a necessary shift to the "point-in-time" ratings, as the "through-the-cycle" ratings could have little relevance due to lasting for an extended period of time uncertainty.

The analysis carried out showed a late reaction by the rating agencies and an underestimation of geopolitical and ESG risks. Consequently, the following recommendations can be made:

- a review by CRAs, ESMA and the SEC of sovereign rating methodologies to take into account scenarios arising from the increased geopolitical and ESG risks (S and G components),
- in view of the increasing uncertainty, shorten the rating horizon and consider changing the rating characteristics to "point-in-time".

This analysis has certain limitations, which at the same time provide directions for further research. At the forefront in this context is the assessment of the effects of changes in credit ratings and ESG ratings in the sense of, for example, linking these ratings to the cost of debt issued by rated entities.

References

Adelson, M. (2006). *Rating shopping – now the consequences*. Nomura Fixed Income Research. Retrieved from www.markadelson.com/pubs/Rating_Shopping.pdf

Al-Sakka, R., Gwilym, O., and Tuyey, N. V. (2014). The sovereign – bank rating channel and rating agencies' downgrades during the European crisis. *Journal of International Money and Finance*, *49*(B), 235-257.

Amato, J. D., and Furfine, C. H. (2003). *Are credit ratings procyclical?* (BIS Working Papers No 129, BIS, February). Retrieved from https://www.bis.org/publ/work129.pdf

Bar-Isaac, H., and Shapiro, J. (2013). Ratings quality over the business cycle. *Journal of Financial Economics,* (108), 62-78.

Baum, C. F., Karapava, M., Schafer, D., and Stephan, A. (2014). *Credit rating agency downgrades and the Eurozone sovereign debt crisis* (NBP Working Paper no. 177). Warsaw: National Bank of Poland.

Becker, B., and Milbourn, T. (2008). *How did increased competition affect credit ratings?* (Working Paper 09-051). Harvard Business School. Retrieved from https://hbswk.hbs.edu/item/reputation-and-competition-evidence-from-the-credit-rating-industry

Byoun, S., Fulkerson, J. A., Han, S. H., and Shin, Y. S. (2014). Are unsolicited ratings biased? Evidence from long-run stock performance. *Journal of Banking and Finance*, (42), 326-338.

Chodnicka-Jaworska, P. (2016). Kondycja finansowa sektora bankowego jako determinanta ratingów kredytowych banków. *Optimum. Studia Ekonomiczne*, (84), 25-43.

Chodnicka-Jaworska, P. (2019). *Determinanty credit ratingów oraz ich wpływ na rynek finansowy*. Warszawa: Polskie Wydawnictwo Ekonomiczne.

Covitz, D. M., Harrison, P. (2003). *Testing conflicts of interest at bond rating agencies with market anticipation: That reputation incentive dominates*. Board of Governors of the Federal Reserve System, no 2003-68, December.

Darbellay, A. (2013). *Regulating credit rating agency*. Cheltenham: Edward Elgar Publishing.

Dziawgo, D. (1998). *Credit rating. Ryzyko i obligacje na międzynarodowym rynku finansowym*. Warszawa: Wydawnictwo Naukowe PWN.
Elkhoury, M. (2008). *Credit rating agencies and their potential impact on developing countries* (UNCTAD Discussion Papers, No. 186 January 2008).
Fitch Rating.s (2022). *What investors want to know: Volkswagen AG.* Retrieved from https://www.fitchratings.com/research/corporate-finance/what-investors-want-to-know-volkswagen-ag-09-06-2022
Frost, C. A. (2009). Credit rating agencies in capital markets: a review of research evidence on selected criticisms of the agencies. *Journal of Accounting, Auditing & Finance*, *22*(3), 469-492.
Gomes, P. (2015, August 18). *Do credit rating agencies piggyback? Evidence from sovereign debt ratings*. Retrieved from www.eco.uc3m.es/~pgomes/Papers/Piggybacking_280913.pdf
GTNEWS, (2015, December 11). *Have ratings agencies restored their reputation?* Retrieved from https://www.gtnews.com/articles/have-ratings-agencies-restored-their-reputation/.
Han, S. H., Pagano M. S., and Shin, Y. S. (2010). *Rating agency reputation, the global financial crisis, and the cost of debt*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1680084
Jollineau, S. J., Tanllu, L. J., and Winn, A. (2014). Evaluating proposed remedies for credit rating agencies failures. *Accounting Review*, *89*(4), 1399-1420.
Jones, M. (2020). *How the coronavirus is crushing credit ratings*, Reuters. Retrieved from https://www.reuters.com/article/us-health-coronavirus-ratings-graphic-idUSKCN24U18Y .
Kashyap, A. K., Kovrijnykh, N. (2013). *Who should pay for credit ratings and how?* (NBER Working Paper Series 18923). Retrieved from http://www/nber.org/papers/w18923
Korzeb, Z., Kulpaka, P., and 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, no 333. Warsaw: National Bank of Poland.
Korzeb, Z., Kulpaka, P., and Niedziółka, P. (2021). *Agencje ratingowe oraz ratingi kredytowe - problemy i wyzwania u progu trzeciej dekady XXI wieku*. Warszawa: CeDeWu.
Kraemer, M. (2021). *Leading from behind: rating agencies' relaxed reaction to the pandemic*. Cambridge: Bennet Institute for Public Policy. Retrieved from https://www.bennettinstitute.cam.ac.uk/blog/Sovereign-credit-ratings-during-COVID19/
Kraft, P. (2010). *The role of rating agencies and conflicts of interest: Evidence from rating agency adjustments* (Working Paper. University of Chicago).
Mathis, J., McAndrews, J., and Rochet, J. -C. (2009). Rating the raters. Are reputation concerns powerful enough to discipline rating agencies? *Journal of Monetary Economics*, *56*(5), 657-674.
Mika, A. (2010). Agencje ratingowe a kryzys subprime. *International Journal of Management and Economics,* (27), 249-265.
Moody's. (2022a). *Spillover impact from Russia-Ukraine crisis on global non-financial companies.* Retrieved from https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1330010
Moody's. (2022b). *Vehicle sales to be virtually flat this year on lingering supply chain disruptions.* Retrieved from https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1331439
Moody's. (2022c). *Russia's invasion of Ukraine disrupts supply chain for European automakers, a credit negative*. Retrieved from https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1320965
Mullard, M. (2012). The credit rating agencies and their contribution to the financial crisis. *The Political Quarterly*, *83*(1), 77-95.
Niedziółka, P. (2013). Agencje ratingowe – instytucje wczesnego ostrzegania przed kryzysem czy podmioty destabilizujące rynki finansowe? *Zarządzanie i Finanse*, *2*(1), 395-405.
Niedziółka, P. (2015). *Europejski nadzór nad agencjami ratingowymi*. In M. Zaleska (Ed.), *Europejska Unia Bankowa*. Warszawa: Difin.
Niedziółka, P., and Wołoszczenko-Hołda, Ł. (2017). Agencje ratingowe a ryzyko systemowe. In J. Szlachta, M. Zaleska, K. Żukrowska, and R. Towalski (Eds.), *Społeczny kontekst ekonomii*. Warszawa: Oficyna Wydawnicza SGH.
Partnoy, F. (2009). Overdependence on credit ratings was a primary cause of the crisis. *SSRN Electronic Journal*, http://dx.doi.org/10.2139/ssrn.1427167
Paudyn, B. (2013). Credit rating agencies and the sovereign debt crisis: performing the policies of creditworthiness through risk and uncertainty. *Review of International Political Economy*, *20*(4), 788-818.
PKO BP. (2022). *Monitoring branżowy: konsekwencje wojny w Ukrainie na sektor motoryzacyjny*. Retrieved from https://www.pkobp.pl/centrum-analiz/analizy-sektorowe/transport-i-motoryzacja/monitoring-branzowy-konsekwencje-wojny-w-ukrainie-na-sektor-motoryzacyjny/
Portes, R. (2020). *Credit ratings and the Covid-19 crisis*. London Business School. Retrieved from https://fbf.eui.eu/wp-content/uploads/2020/06/Portes-CRAs-040620.pdf
Pruchnicka-Grabias, I., and Szelągowska, A. (2019). *Agencje ratingowe a rynki akcji i obligacji*. Warszawa: CeDeWu.
Pym, H. (2012). *Do credit rating agencies threaten our financial stability?* 28 February. Retrieved from http://www.bbc.com/news/business-17142170 .
S&P Global. (2022a). *Banking industry country risk assessment update: March 2022.*
S&P Global. (2022b). *Here Comes The Rain Again Global: Banking Outlook–Midyear 2022*.
S&P Global. (2022c). *Rating actions waypoint: The Russia-Ukraine conflict as of July 19, 2022.* Retrieved from spglobal.com
Scope Ratings (2021). *Sovereign rating methodology. Sovereign and public sector*. Retrieved from https://www.scoperatings.com/ScopeRatingsApi/api/downloadmethodology?id=01508950-119c-4ab5-9182-54fffdc1003f

Śliwa, M. (2022). *Jak wojna w Ukrainie wpłynęła na przemysł motoryzacyjny*. Retrieved from https://moto.rp.pl/tu-i-teraz/art36343091-jak-wojna-w-ukrainie-wplynela-na-przemysl-motoryzacyjny
Tang, F. (2022, February 26). Chinese agency lowers Ukraine sovereign debt rating in Russian invasion aftermath. *South China Morning Post*. Retrieved from https://www.scmp.com/economy/china-economy/article/3168524/chinese-agency-lowers-ukraine-sovereign-debt-rating-russian
Tichy, G. (2011). Credit ratings agencies: Part of the solution or part of the problem. *Intereconomics*, *46*(5), 232-262.
Trading Economics. (2022). Retrieved from https://tradingeconomics.com/country-list/rating
Vincentiis, P., and Pia, P. (2016). Does the market trust credit rating agencies after the subprime crisis? A comparison between major and minor agencies. *Eurasian Studies in Business and Economics*, *2*(1), 597-610.
Xia, H. (2014). Can investor-paid credit rating agencies improve the information quality of issuer-paid rating agencies? *Journal of Financial Economics*, (111), 450-468.
Zaleska, M. (red.). (2015). *Europejska Unia Bankowa*. Warszawa: Difin.

Agencje ratingowe wobec wojny w Ukrainie

Streszczenie: Celem artykułu było znalezienie odpowiedzi na pytanie, czy ratingi przed inwazją Rosji na Ukrainę w 2022 r. odzwierciedlały ryzyko geopolityczne oraz czy decyzje agencji ratingowych podjęte w następstwie wybuchu wojny trafnie informowały uczestników rynku finansowego o wpływie ryzyka powstania konfliktu zbrojnego na ryzyko kredytowe. Działania ratingowe w odpowiedzi na agresję Rosji w 2022 r. wskazują na niedoszacowanie ryzyka geopolitycznego oraz ryzyka politycznego w Rosji, w tym ryzyka związanego z rządami autokratycznymi. Schemat działań ratingowych różni się od zastosowanego w 2014 r., a także odbiega od wzorca stosowanego w ostatnich dwóch dekadach podczas wybuchów kryzysów o podłożu ekonomicznym. Agencje ratingowe sygnalizowały wysoki poziom niepewności geopolitycznej, co sugeruje konieczność zmiany podejścia na „point-in-time" ze względu na to, że ryzyko geopolityczne znacząco ogranicza możliwość zastosowania formuły „through-the-cycle".

Słowa kluczowe: agencja ratingowa, rating, wojna w Ukrainie, Wielka Trójka.