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CORPORATE GREEN INVESTMENT IMPERATIVE AND RISK OF A CREDIT CRUNCH IN POLAND

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Purpose: The main subject of the article is a phenomenon that is increasingly common in countries of the global economy referred to as the so-called credit crunch. The study analyses the reasons that favour the escalation of risk of a credit crunch in the banking systems. The main objective of the article is to expose them as widely as possible, combining it with verification of the determinants of a credit crunch.
Design approach: The empirical research conducted in this study focuses on the Polish banking system. For the first time the credit crunch was observed there in the second half of 2008. It was then that lending to households decreased by 25% and to enterprises by as much as 33%. In the Polish banking system, a drop in the volume of loans to enterprises has been observed for a long time, favouring the increase in risk of a credit crunch.
Findings: The article evaluates the potential risk of a credit crunch in the Polish banking system pointing out their links resulting from the implementation of the new climate policy in the European Union as well as the COVID-19 pandemic. This is caused by the fact that during the COVID-19 crisis, credit rating of Polish enterprises decreased significantly, causing partial restrictions or even elimination of bank loan in industries threatened by the crisis.
Research implication: The Polish economy is facing a significant challenge of meeting the EU criteria for limiting CO2 emissions, which will force domestic enterprises to invest considerably in environmental protection and will increase their demand for debt financing, including bank loans. Banks are preparing for green lending to the Polish economy which signifies a strong transition of loans to investments which meet the taxonomy criteria and are therefore subject to climate objectives.
Practical and social implication: Industry risk will determine lending of Polish enterprises under the conditions of the European Green Deal. Green financing of investments of Polish enterprises is therefore becoming a significant potential cause of increasing risk of a credit crunch in the Polish banking sector.
Originality/value: Presentation of the enterprise credit dilemmas in the conditions of financial instability of the global economy in the perspective of credit-crunch in Poland is a novel, original and contemporary subject.
The diagnosis of the determinants of this threat has facilitated their positioning relatively to the risk of credit-crunch in the Polish banking sector. The results of this analysis underline the risks in this sector and the consequences of introducing European taxonomy of green investments as factors limiting credit actions and enterprise credits in banks.

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Keywords: credit-crunch; corporate green credits; credit policy; new EU climate policy; COVID-19 crisis.

Article category: general review.

1. Introduction

A bank loan was in the past and remains the basic instrument for financing business entities which contributes to the strengthening of their development potential and thus the country's economy (Mishikin, 2002; Freixas, Rochet, 2007; De Soto, 2009). Economic, financial, and social functions of a bank loan make the issue of lending to business entities a constant focus of research interest (Kasiewicz, Kurkliński, Marcinkowska, 2013; Bednarz, Gostomski, 2006; Próchicka-Grabias, Szelągowska, 2006; Duliniec, 2011; Kołosowska, Tokarski, A., Tokarski, M., Chojnacka, 2006; Kosowska, 2009). The relation between economic investments and the business cycle first outlined in J.M. Keynes' macroeconomic theory remains an undisputed paradigm of modern economic thought (Keynes, 2003; Belka, 1990, p. 611; Zagóra-Jonszta, 2003). When analysing the relation between debt and investment, H. Minsky formulated the hypothesis of financial instability indicating the role of faulty incentive systems in financial institutions that favour financial crises and destabilise the real economy (Minsky, 1992). While recognising that the financial sector plays a crucial role during the business cycle, he defined the economic and social consequences resulting from the disruptions in bank lending (Minsky, 1992). The theory of financial instability also became a source of recommendations to reduce the procyclicality of loan in the global economy and the methods of stabilising the financial system implemented in it after the financial crisis of the 21st century (Calomiris. 2008; Kindleberger, Aliber, 2005). The international community associating lending activity with the return of the economy to growth was taken by surprise by the persistence for a long time of a strong mismatch between the supply of credit and economically reasonable demand for credit in many countries, including highly developed ones. The observed phenomenon known as a credit crunch occurred despite drastic reduction in interest rates and numerous quantitative easing programmes of central banks and therefore the application of extraordinary monetary policy instruments aimed at activating commercial bank lending.

Central banks have been signalling the possibility of excessive reduction in the availability of credits to the economy for a long time. However, till now, they have regarded a drastic decrease in lending activity caused by an unjustified drop of demand for bank loans as a phenomenon accompanying recessionary shocks in the economy (Berger, Udel, 1994; Bernanke, Lawn, 1991; Kilesen, Tatom, 1992; Gern, Jannsen, 2009). The COVID-19 pandemic has strengthened this point of view by connecting a credit crunch with the impact of the systemic risk in the social sector. The COVID-19 crisis arose due to the fact that the global

community had been infected by coronavirus causing lockdown of the global economy which entailed a demand shock and a high level of liquidity risk among business entities. As a result, their instant demand for cash increased while slowing the demand for bank loans. However, the large volume of public aid measures launched by governments within the framework of anti-pandemic shields did not stimulate the demand for bank loans. Quite the opposite, banks have tightened their credit policies by reducing the interest of business entities in new loans.

A credit crunch being the basic research subject in the study, despite its ambiguity in definition (Berger, Udel, 1994), has been the subject of a wide range of interests since the middle of the twentieth century[1]. In this article, a credit crunch refers to an excessive reduction in bank loans caused by a reduction in supply as well as demand (Raport o stabilności systemu finansowego, 2020). The study examined the determinants of the increasingly observed intensification of risk of a credit crunch in the banking sectors. Without doubt they vary although they are most frequently connected with the credit policy pursued by banks. Credit policy, however, is a unique and individualised economic entity which encompasses various regulatory actions concentrated on balancing the credit market. Banks differentiate it in respect of offers, procedures for assessing investment risk or the conditions for concluding contracts with clients. Credit policy is also increasingly conducted by bank stakeholders. In the free financial market of the global economy, they have an opportunity, by bypassing the selection mechanism of companies applying for bank loans, to choose the loan offer which, in their case, may turn out to be the most beneficial. Whereas when applying for bank loans they frequently avoid meeting the formal requirements imposed on them (Freel, Carter, Tagg, Mason, 2012, pp. 399-418). Bank stakeholders in the free financial market also raise more non-bank capital (Wolański, 2013, p. 25). However, the free banking market is dominated by large financial and industrial corporations. Therefore, risk of a credit crunch is concentrated on the domestic market where demand for a bank loan is shaped by strongly diversified stakeholders. Thereby the doctrine of liberalism accompanying the global economy justifies the assessment of the credit crunch phenomenon from the perspective of the theory of choice optimising the behaviour of commercial banks, central banks and their stakeholders making risk of a credit crunch on the domestic financial market to be determined by numerous factors. Their impact over time is variable. The determinants of risk of a credit crunch during the global financial crisis (cf. Figure 1) were different than during the COVID-19 pandemic (cf. Figure 2). Therefore, the expected implementation of the European Green Deal contributing to the increase in risk of a credit crunch will be the result of symptomatic factors only. The main objective in the study is to explore the determinants of risk of a credit crunch on the Polish credit market which is increasingly directed towards sustainable corporate financing. The empirical analysis of changes taking place on the credit market in Poland indicates that the high risk of a credit crunch is becoming a real threat to the banking sector as a consequence of

[1] The term was first used with regard to the measures undertaken by the FED in the 1960s to reduce the level of inflation by reducing consumption.

rapid changes in economic reality. The study intends to indicate that recessionary shocks in the economy on the Polish banking market favouring the occurrence of a credit crunch are accompanied by a range of factors, among which industry plays an increasingly significant role.

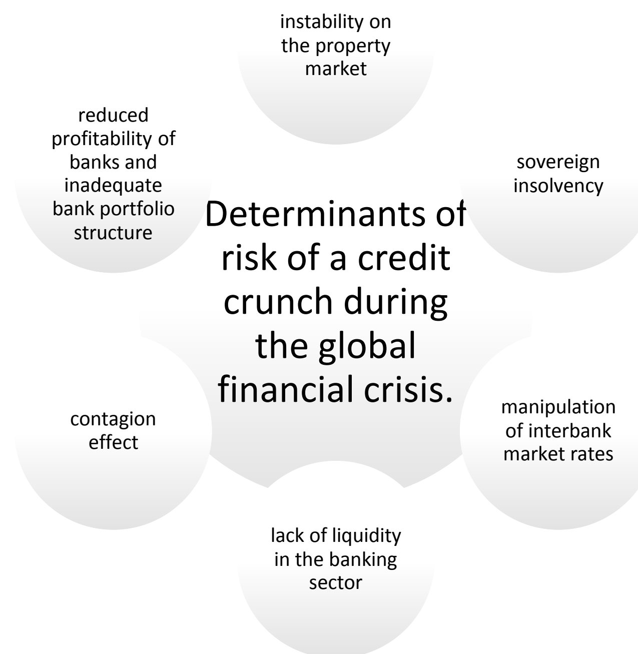

Figure 1. Determinants of risk of a credit crunch during the global financial crisis. Source: own elaboration

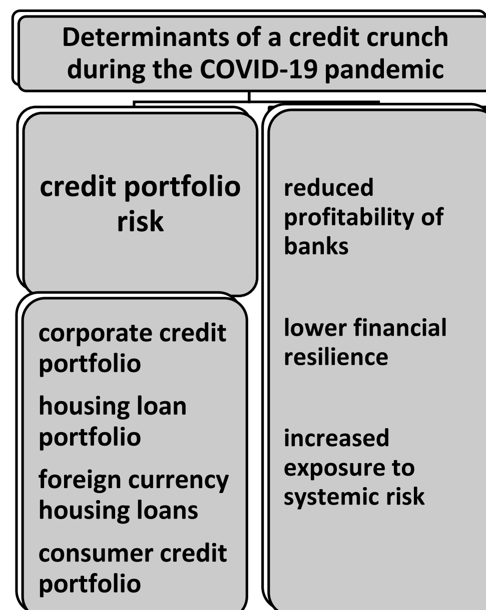

Figure 2. Determinants of risk of a credit crunch during the COVID-19 pandemic. Source: own elaboration

2. Results

Observation of the phenomenon of a credit crunch in the Polish banking sector makes it possible, above all, to draw attention to the absolute necessity to normalise the research terminology. Not only is there no uniform definition of a credit crunch, but also the risk of its occurrence in the banking sector refers to various bank loans. Figure 4 indicating a collapse in lending in Poland in 2008 refers to the share of credit receivables from the non-financial sector in total assets. In 2009, however, this share stabilised on the level around 55% in the entire analysed period, which makes it possible to recognise that a credit crunch in the Polish banking sector was of an incidental nature and risk of its recurrence is low considering the fact that the value of credit receivables from the non-financial sector has been slowly but steadily growing over the years. On the other hand, the problem of a credit crunch in the Polish banking sector is unfavourable in the study of the structure of credit receivables (cf. Figure 3), since starting from 2004, the volume of credit receivables from households prevails in the structure of bank loans and grows faster than credit receivables from enterprises. The persistence of this trend generates a high level of risk of a credit crunch in the Polish banking system. Business loans are, and will long remain, the main driver of the economic growth in Poland. While lending to households cannot be deprived of its pro-growth power, its positive motivation of production processes is of short-term nature and is seriously threatened by the force of instability in the world economy.

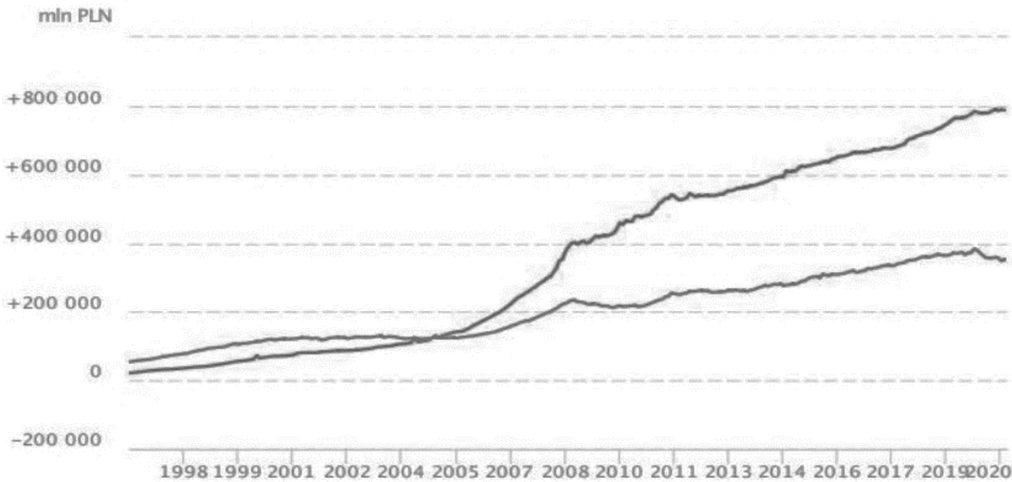

Figure 3. Loans and other receivables from households and enterprises (stocks) in PLN million.

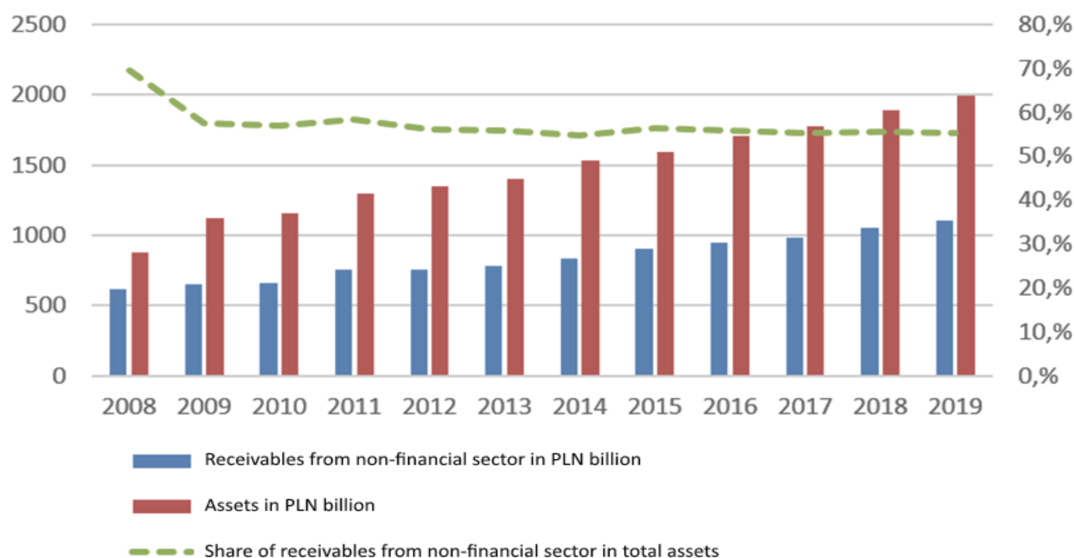

Figure 4. Credit receivables from the non-financial sector in the Polish banking sector in the years 2008-2019. Source: The National Bank of Poland.

The experience gained during the COVID-19 pandemic and global financial crisis in the years 2008-2010 demonstrates that changes in the lending policy of banks against financial instability of the economy are caused by the worsening conditions of granting loans to non-financial entities, including mainly enterprises. Under such circumstances the credit rating of the largest borrowers decreases which entails rapid deterioration of banks' loan portfolios and an increase in bank risk. Lending to households does not solve the problem of decreasing production dynamics and does not reduce the scale of the expected economic recession. The collapse of lending to business entities not only confirms the occurrence of a credit crunch in the Polish banking sector, but also favours the formation of favourable conditions for its emergence in the longer term. Emergency actions undertaken by central banks are usually the antidote to the effects of a collapse in lending to businesses. They were widely appropriate in the context of the global financial crisis. A quick response to the financial instability caused by the COVID-19 pandemic was taken by the National Bank of Poland which changed its approach towards monetary policy in a short time. However, the COVID-19 pandemic in Poland occurred under conditions of free space for action by the National Central Bank. Throughout the global financial crisis, the National Bank of Poland did not pursue a policy of negative interest rates and quantitative easing programmes. This situation made it possible to implement during the COVID-19 period a package of the NBP measures aimed at reducing the cost of financing business entities and increasing the liquidity of the banking sector. In May 2020, the reference interest rate in Poland was reduced which in the following steps implied that it was stabilised at the level of 0.10% (until the Monetary Policy Council decision-making meeting held on 7 April 2021). The reduction in the reference rate was accompanied by other measures strengthening banks' incentives to keep lending rates low (Raport o stabilności systemu finansowego, 2020, pp. 30-31). At the same time, the National Bank of Poland undertook

a range of measures to increase liquidity in the Polish banking sector. The primary reason for their inclusion in the package of measures was the increased demand among households and businesses for liquid funds during the first period of the COVID-19 pandemic. Throughout this period there was an increase in cash in circulation by PLN 54 billion, that is by 23%. The phenomenon, unprecedented even during the global financial crisis, resulted in a rapid decline in liquidity in the Polish banking sector requiring non-standard measures to be taken by the National Bank of Poland (Sytuacja na rynku kredytowym, 2021, p. 32).

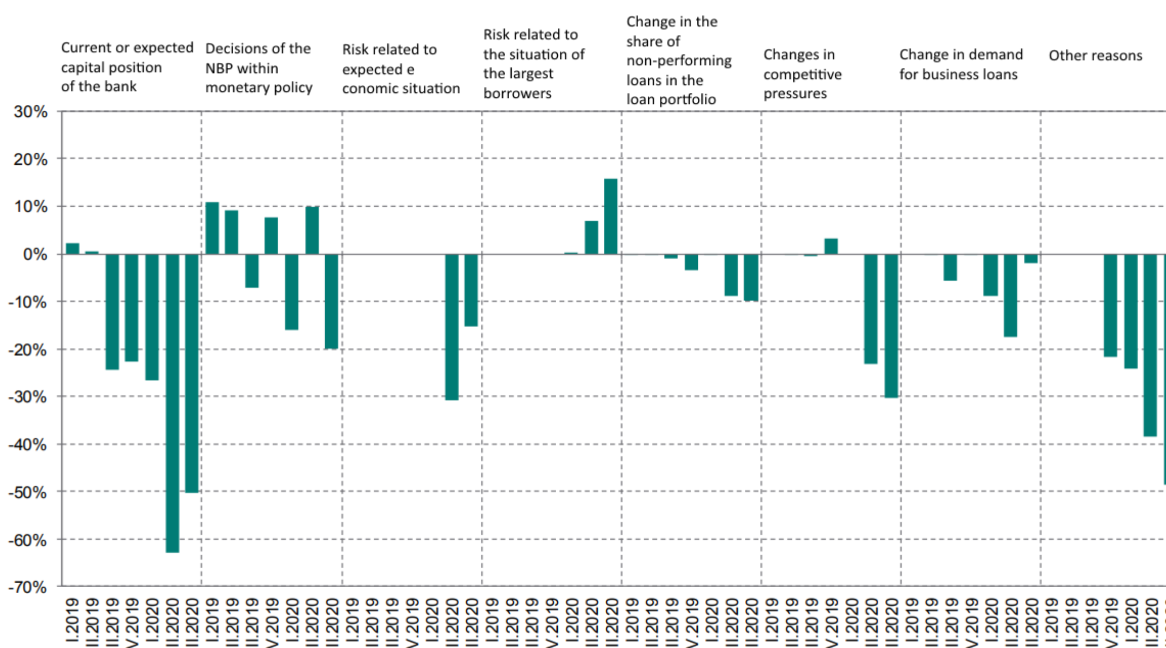

Figure 5. Reasons for changes in the credit policy. Source: Situation on the credit market results of the survey to chairpersons of credit committees Q4 2020, p. 5.

They concentrated on repo-type operations to inject liquidity into the banking sector and the purchase of treasury bonds and debt securities guaranteed by the State Treasury on the secondary market, becoming a significant factor in stimulating lending in the Polish banking sector. Despite such wide-ranging actions by the National Bank of Poland, all commercial banks in Poland already tightened their credit policy in the first quarter of 2020. There were various reasons for the increase in its restrictiveness (cf. Figure 5). Predominating among these were the expected risks related to an unstable growth perspective, but also industry risk.

The 'COVID-19' experience teaches that any industry may turn out to be a difficult bank partner in the short term. This changes the foregoing understanding of industry risk. This is because banks primarily depended on macro and microeconomic factors connected with the environment in which enterprises in the identified industry operate as well as internal conditions shaping their economic and financial status. The group of macroeconomic factors usually included those that resulted from the systemic specificity of the state, cyclical changes in the economy or the directions of development of the world economy. Microeconomic factors were usually associated with market risk as they were perceived as changes in competitive

conditions, price fluctuations or higher operating costs in the industry and, as a result, changes in the internal operating conditions of enterprises in a particular sector. Banks noticing the different degree of risk exposure of different industries were mainly concerned about changes in the assessment of their operational or financial risk, eventually changing the level of risk incurred. The COVID-19 pandemic put businesses assigned to these industries directly or indirectly affected by government restriction in a difficult position. Banks began to exclude such businesses from lending procedures placing them among high-risk industries. Therefore, the public authority umbrella did not change the banks' approach towards assessing industry risk. On the contrary, banks began to explicitly specify industries they did not want to finance. It may be expected that such industries as the hotel and tourism industries will rapidly reduce their level of credit risk as lockdown conditions ease. However, this will not change the banks' highly individualized approach to industry risk during the pandemic. Not only industries, but also specific industry companies will be stigmatised. In the longer term, industry risk will affect bank lending activity given an increasing challenge of sustainable economic development.

3. Discussion

The concept of sustainable development is not new and it has been making its path in the world economy for many years (Rada Eropejska, 2015; Szpak, 2020). However, it received a new spirit not so long ago in the form of green finance in the banking environment of the European Union. The European Green Deal (EGD) document was published in autumn 2019 (Europejski Zielony Ład. Komisja Europejska…).

It constitutes a roadmap for using resources more efficiently than ever before through the transition to clean, closed-loop economy, as well as for counteracting the loss of biodiversity and reducing pollution levels. The EU wants to become a climate neutral continent by 2050. Reaching this goal is not an easy task and it will require a range of actions in all industries of the economy. Climate change is an extremely complex process which requires especially:

- investments in environmentally friendly technologies,
- industrial innovations,
- increasing the energy efficiency of buildings,
- radical decarbonisation of the energy sector.

Within the framework of these broadly outlined areas of action, specific tasks are emerging that will require many new investments and financial instruments implemented in the vein of a fair transition favouring sustainable development. It is estimated that the impact of the transition to green economy will be uneven across different EU countries, therefore it is necessary for them to obtain financial support and technical assistance within the framework of

the fair transition mechanism. However, the fair transition mechanism will not be sufficient in order to overcome climate barriers. In March 2018, the European Commission announced the EC Action Plan of financing sustainable growth aimed at three main financing objectives (Zrównoważone finansowanie…):

- redirecting capital flows towards sustainable investments in order to achieve sustainable and inclusive growth,
- managing financial risk resulting from climate changes, environmental degradation and social issues,
- promoting transparency and long-term nature in the financial and economic activity.

On 15 April 2020, the Council of the European Union introduced a common system of classification for sustainable finance that should encourage private investors to invest in sustainable development and contribute to a climate economy[2]. It should also facilitate assessment and help investors redirect towards technologies, sectors and companies of a more sustainable nature. The declaration of the implementation of the European Green Deal was also confirmed under the pandemic conditions. It was indeed recognised that the post-pandemic recovery programmes will continue to encompass actions aimed at reaching zero GHG emissions in Europe by 2050 (Gajewski, Paprocki, 2020, p. 5).The energy transition of Poland meeting the challenges arising from the adoption of the European Green Deal and simultaneously guaranteeing energy security of the country will require expenditures of about PLN 1,600 billion in the 2021-2024 perspective. Only in the fuel and energy sector the financial needs are estimated at PLN 867-890 billion, whereas in non-energy sectors (industry, transportation, agriculture, households, services) the expenditures of PLN 745 billion are expected. It is worth emphasising that EU and national resources dedicated for energy and climate transition will have amounted to PLN 260 billion by 2030 (Polityka energetyczna Polski do 2040 r., 2021, pp. 90-91). The scale of capital expenditures constituting Polish contribution to the implementation of ambitious objectives included in the EU plan of leading in the world pursuit of achieving climate neutrality will imply the need to use diverse sources and innovative methods of financing. The financial framework specifies the involvement of the budget of state and local governments, EU and non-EU funds, private funds, debt financing and entities of the fuel and energy sector. It is noted that after 2020, the financial burden of the planned investments will be, to a lesser extent, implemented through non-national funds. These extremely ambitious investment plans will have to be implemented in the post-covid environment among economies affected by the results of the pandemic and unpredictable risk of further covid waves and lockdowns. The European Union's climate and energy policy together with its strategic vision of climate neutrality in 2050 implemented in parallel with the recovery from the deep economic crisis, increases risk of credit crunch in the entire Community.

[2] The taxonomy regarding climate change mitigation and adaptation to this change should be adopted by the end of 2020 so that it can fully come into force by the end of 2021. As far as the remaining four objectives are concerned, the taxonomy is to be established by the end of 2021 and come into force by the end of 2022.

Risk of credit crunch is particularly high in Poland where electricity generation system is based on coal. This exceptionally difficult starting position generates a large scale of indispensable adjustment activities that will influence the market condition of enterprises in the country and abroad. The difficulties of entities in the fuel and energy sectors will not encourage activity in the credit market and will even curb sectoral development investments. There is a high probability of burdening consumers with the costs of energy transition which may move over to the eagerness and ability of households and micro and macro family companies to engage in credits. The measures undertaken in this area indicate the establishment of a platform for financing sustainable development outside the banking sector. They should be replaced by investment funds, pension funds, insurance institutions and, of course, a large flow of public funds directed more and more profusely as public private partnerships. However, more and more banks are moving towards sustainable finance, recognising the necessity for having green assets which is particularly satisfying for their strategic partners. Banks are also orienting their interest in financial intermediation between EU funds to promote green investments and their recipients. Therefore, it should be expected that their role in the process of financing sustainable development will be increasing. The situation is causing banks to increasingly eliminate lending to non-European taxpayers.

Extreme situations in the economic system such as lockdown or global crisis favour the increase in risk of a credit crunch also as a consequence of various factors determining the demand for bank loans. In the Polish banking sector burdened with the results of the COVID-19 pandemic the reasons for changes in demand for corporate credit were different (cf. Figure 6).

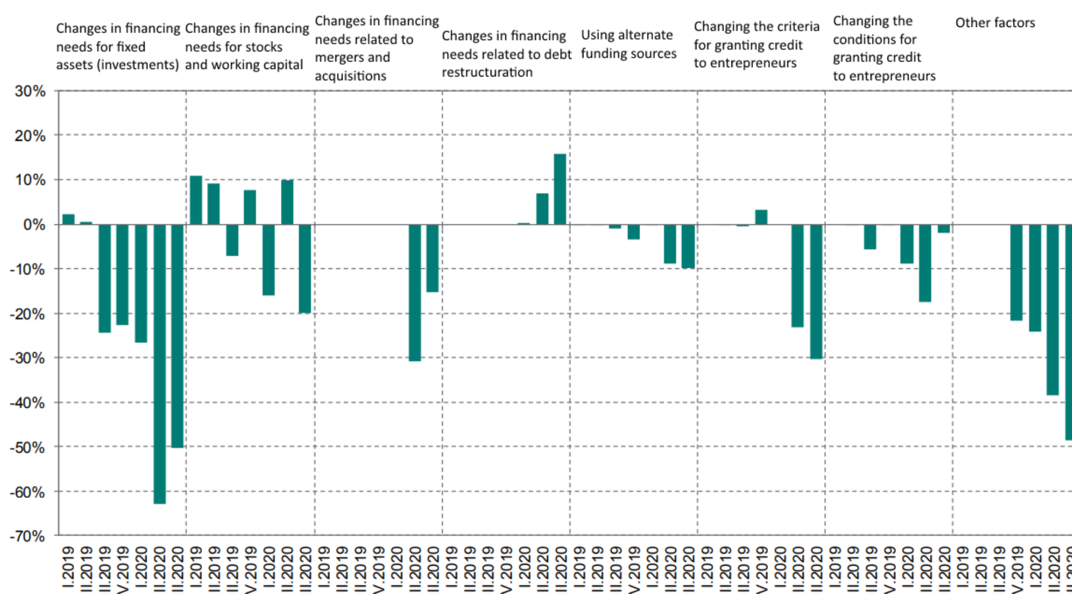

Figure 6. Reasons for changes in demand for corporate credit. Source: Situation on the credit market results of the survey to chairpersons of credit committees Q4 2020, p. 7.

Their intensity fluctuated in the following quarters of the pandemic, although the main role in the reduction in demand for bank loans was played by a significant decrease in demand inventory financing and working capital financing (-42%) and, to a lesser extent, for financing fixed assets and mergers and acquisitions (-24% and -16% respectively) (Sytuacja na rynku kredytowym, 2021, p. 7). However, the demand was not the major driver of the reduction in lending in the Polish banking system in the years 2019-2020. The support from the Polish Development Fund and forms of public anti-crisis support (-13%) also played a significant role in its stabilisation. Concerned about the increase of the risk of a credit crunch, the Polish Bank Association has also devised a package of regulatory solutions whose implementation would have a positive influence on lending. However, the systemic measures did not halt the approach of commercial banks towards the reduction the restrictiveness of corporate lending conditions. The scale of their tightening towards enterprises turned out to be even stronger that the one considered the biggest in mid-2009. Banks increased their lending margins. They differentiated them towards higher-risk borrowers and increased loan margins by up to 30% and up to 40% for higher-risk loans. They also increased the level of collateral for their lending and the cost of lending by raising non-interest credit costs. They raised credit security and limited the amount and term of the loan as well (cf. Figure 7).

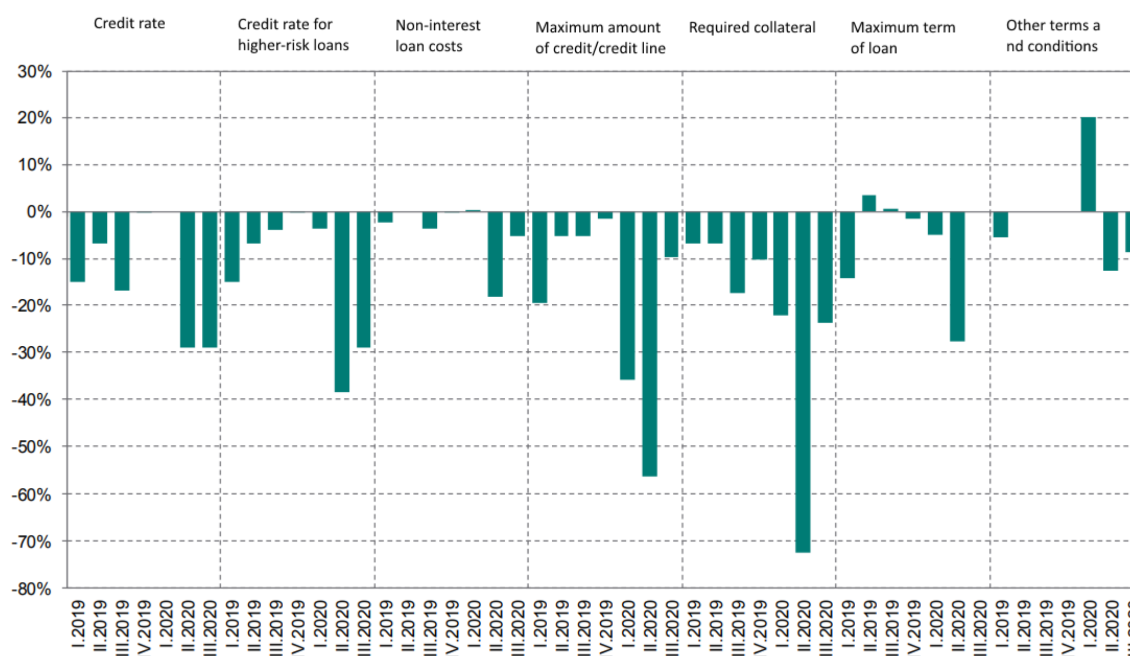

Figure 7. Terms and conditions for lending to enterprises. Source: Situation on the credit market results of the survey to chairpersons of credit committees Q4 2020, p. 5.

The actions of banks were reflected in a strong decrease in demand for corporate bank loans. It was particularly acute towards long-term loans of large enterprises. A drop of more than 50% in demand for bank loans was observed in the SME sector as well (cf. Figure 8). Considering the role of SMEs in the Polish economy, the observed phenomenon is particularly worrying.

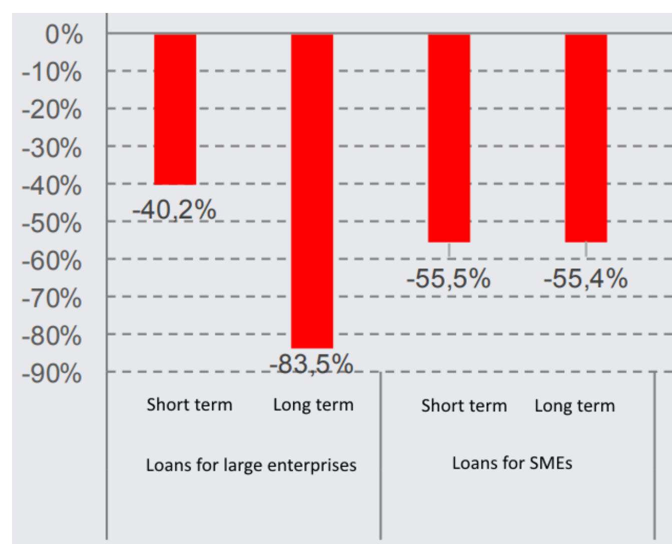

Figure 8. Demand for bank loans in Q4 2020 Source: elaborated on the basis of Situation on the credit market – results of the survey to chairpersons of credit committees Q4 2021.

4. Conclusions

The credit crunch risk analysis in the publication points out that there are more and more reasons for its intensification in the banking sector. Investment financing in the global economy is being more and more frequently provided by the non-banking sector, significantly modelling the demand for bank credit. Simultaneously, the emerging mismatch between credit supply and economically reasonable credit demand results from the intensifying periods of financial instability in the global economy. The countries in the global economy did not cope with all the effects of the global financial crisis and are already trapped in COVID-19. The need to halt the effects of the coronavirus infecting people forced countries in the global economy to announce a lockdown. It resulted in a demand shock and a high increase in the level of liquidity risk among business entities and, in the banking systems, in a significant increase in credit risk and, consequently, in the risk of excessive reduction of credit availability in the economy (credit crunch). This situation shows that in times of financial instability, risk of a credit crunch is high and the response to its effects is hindered. Indeed, the determinants causing a credit crunch in the banking sectors are unexpected and heterogeneous. For this reason, equilibrium on the credit market is extremely difficult to regulate. In the analysed cases of financial instability of the global economy, its absence from the banking system was mitigated spontaneously and in various manners.

The mismatch between credit supply and economically reasonable credit demand was also not overcome in the short term despite the extraordinary monetary policies of central banks stimulating credit growth for business entities during the global financial crisis. The situation on the credit market during the pandemic also turned out to be complicated. The sequence of

increasing economic recession in the countries affected by the COVID-19 pandemic contributed to a specific response to it. Actions aimed at limiting the impact of the pandemic were directed at the economy, particularly those areas of the economy which suffered the most. Financial support in Poland was mainly focused on companies in the industries most affected by the crisis and was of fiscal nature. It concerned mainly temporary suspension of tax payments and compulsory social contributions, introduction of tax allowances and partial takeover of employees' salaries by the state budget (Raport o stabilności systemu finansowego, 2020, p. 23).The fiscal policy of the government was supported by an expansive monetary policy of the National Bank of Poland, which, however, did not serve as the major instrument for stabilising the economy and the financial system. The undertaken fiscal and monetary measures also did not contribute to a quick restoring of the balance on the Polish credit market. It means that the impacting risk of a credit crunch in banking sectors requires multidisciplinary and diverse actions of many institutions and authorities. It also requires a strategy to be drafted for allocating financial resources to the business activity of Polish enterprises with particular emphasis on the community actions in the European Union aimed principally at helping to repair the economic damage caused by the coronavirus pandemic and, in the long term, at creating the European Green Deal. Although the recovery plan for Europe approved in 2020 by the European Commission, the European Parliament and EU heads of states and governments, constitutes the largest package of measures funded from the EU budget so far, it is still not a real financial stream flowing to the EU member countries. Furthermore, in view of its assumptions, it is already known that energy transition of Poland will require high levels of investment expenditures already in 2021, constituting Poland's contribution to the implementation of ambitious objectives of achieving climate neutrality. They will imply the use of diverse sources and innovative methods of financing. Considering the fact that ambitious investment plans will have to be implemented in a post-COVID environment, in the environment of economies significantly affected by the pandemic and the unpredictable risk of further COVID waves and lockdowns, risk of a credit crunch can be expected to grow not only in Poland but also across the entire European Union. The financing investment needs of enterprises indeed has its limitations which generally boils down to a growth of the cost of capital raised on the financial markets. In Poland, risk of a credit crunch should be regarded as particularly high since the so-called energy mix is particularly unfavourable from the GHG perspective. The need to adapt Polish industry to the conditions of the Green Deal is not limited to the entities in the fuel and energy sector. High emissivity of iron and steel industry, the chemical, mineral or paper sectors imply potential difficulties for entities in these sectors, which will increase risk of a credit crunch. The conducted analysis indicates attempts to anticipate and create financing platforms for sustainable development outside the banking sector. In response, banks applying the Green Deal adaptation strategy are activating their actions in the green investment market. An indication of this activation is a potential intermediation in the process of financing beneficiaries of green investments from the EU funds.

This leads to the conclusion that the role of banks in the process of financing sustainable development will increase. The situation is causing banks to increasingly eliminate lending to non-European taxpayers. Therefore, industry risk in the Polish banking system is becoming a significant factor in limiting lending and/or eliminating corporate loans from their portfolios. Such actions have already been observed in the Polish banking sector. The volume of credit granted to households is indeed steadily increasing, while lending to business is slowly decreasing. Post-crisis expectations of rising loan interest rates are a factor contributing to its escalation of risk of a credit crunch not just in the Polish banking sector. Business loans are also subject to greater bank risk than household loans. Banks granting credits should be guided by the banking law and prudential regulations applicable to them. They imply unconditional need for maintaining financial security, but this is accompanied by a lower profit, decreasing profitability and/or the market value of the bank. While also preparing for green economy lending banks will finance mainly green investments. Therefore, they will move towards the elimination of lending to industries which do not comply with these criteria. Therefore, a change in their approach towards credit risk evaluation should be expected. Thus, a credit crunch may turn out to be a persistent, industry-differentiated and increasing phenomenon.

Negative implications for business lending can also arise from an outflow of the deposit base from the banking sector. There are many factors favouring such a situation in the Polish banking sector, which makes the occurrence of risk of a credit crunch relatively high, and it depends, to a large extent, on the volatility of the external conditions for the functioning of domestic banks.

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