Mateusz Śliwa
Aleksandra Kłosowska
University of Rzeszów

CHANGE IN THE LEVEL OF CORPORATE LENDING IN POLAND DURING THE COVID-19 PANDEMIC

The main theme undertaken in this paper is the assessment of the impact of the COVID-19 pandemic on corporate lending. The main objective of the article is to analyze the qualitative and quantitative changes in the level of corporate lending in Poland. The author focuses, on the one hand, on the ability of firms to incur liabilities and, on the other hand, on the changes in bank lending rules over the course of a changing economic reality burdened by the crisis caused by the pandemic. The individual analyses also show a broader comparative context by referring to statistical data before the onset of the virus crisis. In the case under review, uncertainty about the health of the MSP sector during the crisis weighed on the tightening of credit policy. An increase in demand for bank financing in the pandemic period was reported by both large companies and micro enterprises. However, only in the case of the former did the availability of loans increase. As a result, the gap between the availability of bank loans to large firms and the MSP sector widened.

Keywords: enterprise, lending, COVID-19, state interventionism, corporate finances, crisis

JEL codes: G20, G38

Introduction

The COVID-19 pandemic has left its mark on almost every national economy in the world. The implementation of government decisions in response to the spread of SARS-CoV-2 has had many negative economic consequences in individual countries1 and its effects have become one of the main challenges for enterprises operating in the 2020’s, both in Poland and globally.

The spread of COVID-19 reduced economic activity worldwide, leading to new threats to financial stability. The crisis caused by the pandemic has demonstrated, both to financial market participants and the general public, that natural disasters can have a direct global disruptive economic impact on an unprecedented scale2. In April 2020, a preliminary analysis was made of the impact of the pandemic on selected parts of the global economy, including the financial industry. This assessment shows that the non-integrated response of governments and the blockade of many countries has led to

disruptions such as interruptions in supply chains and reductions in factory production, which has affected, among other things, the GDP. Based on research released in the Economic Alert, Poland's economy has characteristics that should allow it to cope with a pandemic much better than most other countries. These features include: strong sectoral diversification; a low share of tourism in GDP; a floating exchange rate, the weakness of which limits the decline in exporters' revenues; a current account balance, which in turn prevents excessive weakening of the zloty threatening the solvency of entities with liabilities in foreign currencies; an excess of imports over exports of energy resources, whose prices have collapsed.

The adjustment of monetary policy has softened financial markets, contributed to a reduction in the cost of credit and promoted the extension of credit. Nevertheless, in the face of pandemic-induced economic disruption, historically low global interest rates may hide solvency problems that will arise in future years. In Poland, on the side of fiscal policy, stimulation packages were applied – the so-called anti-crisis shields. On the monetary policy side, the National Bank of Poland (NBP) Monetary Policy Council (MPC) decided to cut interest rates close to zero. Thus, the NBP joined the group of other central banks applying a very mild monetary policy.

Despite the many tools and systems used for risk identification, the introduced legal regulations and historical experience, it was not possible to avoid the consequences of the global crisis caused by the pandemic. In conditions of high uncertainty, effective forecasting of the economic situation becomes particularly problematic, and thus making the right business decisions becomes more difficult. Enterprises, in order to survive the global crisis, had to implement several measures to adapt to the conditions in which they found themselves. The scale of the impact of enterprise activity on the economic condition of the state is shown in the report on the condition of the small and medium-sized enterprise (SME) sector in Poland according to which, in 2021, all enterprises generated 72.7% of GDP, of which 49.1% was as a result of the activity of the SME sector.

In Poland, investments of enterprises (most often technological) are carried out mainly by large companies. The reason for this is the greater economic potential compared

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5 M. Flotyński, Polityka pieniężna w Polsce w trakcie kryzysu spowodowanego pandemią wirusa SARS-CoV-2, Czasopismo Polskiego Towarzystwa Ekonomicznego, Poznań 2020, s. 16
7 A. Skowrońska, A. Tarnawa (red.): Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa 2021.
to the SME sector. However, the SME sector, in which many entities do not conduct diversified activities, and moreover, usually have small financial resources, had to show the greatest scale of adjustment of activities due to the rapidly changing sanitary restrictions. Generally, in the event of unforeseen situations, it may become necessary to take out a working capital loan that will help maintain a company’s financial liquidity and allow it to rebuild its development potential in times of better economic conditions. Investment loans taken by enterprises to expand their operations on a larger scale, improve production processes, provide services, or provide the enterprise with protection systems that prevent or minimise the negative effects of the crisis are also important.

In order to prevent unfavourable incidents and mitigate the economic crisis that occurred as a result of economic lockdowns, the Polish government took the initiative to help entrepreneurs by creating a package of actions and instruments dubbed the Anti-Crisis Shield, which aimed to cushion the effects of the problems arising from the struggle with Covid-19. The proposed aid measures under the Anti-Crisis Shield were primarily intended to support Polish enterprises in terms of maintaining their operations, protecting jobs, and ensuring the safety of employees, health protection, strengthening the financial system and public investments. In March 2020, work began on ways to save the Polish economy. To maintain the financial continuity of enterprises, the government introduced an additional package under the aid of the Polish Development Fund in the form of the so-called Polish Development Fund Financial Shield, complementing the Anti-Crisis Shield. As part of financing enterprises, the government introduced, for example, a convenience related to the costs of running a business itself, including the possibility of a favourable deduction of losses in tax returns.

Loans (granted both in domestic and foreign currencies) are popular sources by which companies obtain assets depending on their needs. It is worth noting that, on the one hand, decisions to incur liabilities are implied by information from the financial sector, economic reports, the monetary policy strategy of the National Bank of Poland and exchange rates (in the case of loans in foreign currencies). On the other hand, there are lenders who may be reluctant to lend when there are uncertainties in the market. In this case, banks delimit enterprises in terms of their activities, size, and market shares, because depending on the sector of activity, individual companies differ from each other in the level of capital intensity, and thus, depending on the industry, banks can expect larger, smaller, or negligible difficulties in the payment of obligations incurred. From the banks’ point of view, entities with good economic and financial standing are more reliable because their financial liquidity, assessed on the basis of indicators, brings greater potential for using external capital to invest in the development of the enterprise. Entities characterised by a stable position on the market are privileged in terms of the availability of financing with

13 K. Puchalska, I.D. Tymoczko: Szerokie ujęcie ekspozycji polskich przedsiębiorstw niefinansowych na ryzyko walutowe, Źródła i skala ekspozycji oraz metody zarządzania ryzykiem walutowym, Materiały i Studia, Źeszyt nr 293, Warszawa, 2013.
external capital, thanks to which they are able to implement the adopted goals and development strategies\(^{16}\).

The main aim of the article was to identify quantitative changes in the level of corporate lending in Poland. In this study, the author focused on depicting the economic reality in the context of the possibility of the banking sector to grant loans and of enterprises to incur liabilities during the COVID-19 pandemic. The individual analyses also show a broader comparative context by referring to statistical data before the onset of the virus crisis.

**Research methodology**

The subject of the research is the possibility of taking loans by Polish enterprises (large and SMEs) during the COVID-19 pandemic. The sources of the data are statistical data from the Central Statistical Office and quarterly reports published by the National Bank of Poland. The main research method is a comparative analysis of qualitative and quantitative changes in granting loans by banks and incurring liabilities by enterprises in selected time series. A linear regression function was also used to conduct the study, based on which the interdependence of the selected variables was examined. The study used the formula:

\[
y_i = a + b x_i^17
\]

The results of the analysis made it possible to assess the scale of changes in the level of lending to Polish enterprises in the period under examination. In order to illustrate a broader horizon, the analysed period was the time frame with complete data from 2010 to 2020 and the latest data obtained from 2021. For the purposes of the analysis, two research hypotheses were formulated:

H1: During the COVID-19 pandemic, the growth of corporate credit obligations towards banks slowed down.

H2: In the case of microenterprises, there was a decrease in the number and volume of loans taken during the COVID-19 pandemic.

**Results**

The level of corporate lending is influenced by many factors that are both the cause of these changes and their effect. For analysis of this issue, it is necessary to juxtapose some of them and properly analyse them in terms of their possible impact on the change in the credit level on a macro scale.

GDP in the years 2010-2020 adopted an increasing trend. The exception is the year 2020, when the coronavirus pandemic officially began, and with it a number of sanitary restrictions that were introduced and which directly affected the condition of the Polish economy (e.g. introducing limits on people staying in one place/room, closing dining and entertainment outlets). The condition of Polish GDP in the years before the lockdowns began showed a good market situation and favoured the functioning of enterprises on the market.

\(^{16}\) A. Paździor: Dostępność instrumentów finansowych wspierających przedsiębiorczość i innowacje, Ekspertryza naukowa, Politechnika Lubelska, Lublin 2013.

\(^{17}\) M. Pigłowski, Analiza regresji dla liczby systemów i placówek franczyzowych w Polsce, Zeszyty Naukowe Uniwersytetu Szczecińskiego nr 776, Szczecin 2013, s. 101.
As shown by the data in Chart 1, it can be noticed, however, that the trend of growing GDP does not go hand in hand with the number of enterprises operating on the market (Chart 2). With the onset of the pandemic and the increase in the risk associated with running a business, potential entrepreneurs did not undertake the risk of starting a business, which significantly decreased the number of newly established companies – it was the lowest in the entire analysed period.

The number of liquidated enterprises is equally important. Between 2010 and 2020, the trend of quantitative changes in their context showed greater fluctuations than in the case of the number of newly established enterprises, while in 2020 it reached the lowest rate in the last 10 years. The downward trend was noticeable already in 2019. Such a decrease may be the result of state intervention in the form of financial shields, which were not sufficient to cover all losses and liabilities of companies caused by the lockdown,
but which certainly contributed significantly to reducing the number of liquidated enterprises due to the requirements for maintaining company operations and employment of personnel.

Most importantly, from the point of view of lending to enterprises, observing that the number of liquidated enterprises did not increase during the first year of the pandemic (when they were burdened with the greatest limitations in how they could function), one should reject correlation of a decrease in lending with a decline in the number of enterprises and look for the reasons for this decline in other factors.

The last analysed year, 2021, was characterized by much smaller restrictions affecting enterprises and a better market situation, which resulted in the creation of over 30,000 more companies than in 2020. It may be alarming that after the relatively good years of 2019-2020, there was a sudden crash as far as liquidated enterprises were concerned – an increase of liquidated enterprises by approx. 20 thousand entities compared to the previous year. The observed phenomenon may be influenced by the fact that aid shields for entrepreneurs were no longer provided. Particularly sharp drops in the number of registered enterprises were observed in January (-23,803) and December (-21184) of 2021. There were on average 75% more liquidated entities than in August 2021, when this number was the lowest (-12,856).

Domestic enterprises have bank accounts with which to carry out financial transactions in the scope of business activity, and bank accounts through which to make settlements resulting from the concluded transactions and public law clearings. An average large enterprise operating on the Polish market uses bank loans for approx. 14 years. In the case of the SME sector, the period is approx. 4 years shorter18 (Chart 3).

![Chart 3. Period of using bank loans by enterprises in Poland (in years)](source)

Source: Author’s own elaboration based on K. Puchalska, I.D. Tymoczko, 2013, op. cit.

An important issue in the context of the level of financing for enterprises is the level of inflation, which has seen a significant upward trend since 2018 and continues until now, accelerating dangerously. As the NBP analyses indicate, inflation at the end of December 2021 reached the level of 8.6% and significantly differed from the assumed safe level (Chart 4).

This has translated into a level of interest rates that necessitated NBP intervention. During the pandemic, interest rates were significantly reduced, stimulating companies to

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take out favourable loans. In the present situation, raising these rates in order to slow down inflation is causing an unfavourable situation on the credit market, both among enterprises and individual clients. Despite lowering the reference rate, the phenomenon of entrepreneurs being cautious about taking out loans was stronger.

By comparing the average corporate loan obligation with the average reference rate, we can observe similar downward trends over the analysed period.


The initial period of the COVID-19 pandemic in Poland is considered to be March 2020. Then, a sudden drop in the value of bank loans for individual entrepreneurs, which lasts until August 2020, can be observed (Chart 6). The average value of loans granted in 2019 amounted to PLN 41444.6 million, while for 2020 it decreased by PLN 1690.5 million. It is only from December that an upward trend can be observed, which continues until the end of the analysed period. Returning to the beginning of 2020, it should be mentioned that at that time the policy of a slight tightening of the standards of granting loans to enterprises was continued and the current trend of falling demand for loans was observed\(^\text{20}\) (Table 1).

Based on the data of the average value of bank loans for individual entrepreneurs and the average interest rate in 2020-2021, the linear regression function took the following form \(y_i = 0.094381922 - 0.0000016423x_i\). This means that if the average interest rate decreases by 1%, then the average value of bank loans for individual entrepreneurs will increase by PLN 625 billion. In order to relate the results to the scale of Poland's economy as a whole, the conclusions are given in billions of PLN.

Table 1. Average value of bank loans for individual entrepreneurs (million PLN) “x” and average interest rate “y” in Poland in 2010 - 2021

<table>
<thead>
<tr>
<th>Years</th>
<th>Average value of bank loans for individual entrepreneurs (mln PLN) x</th>
<th>Average interest rate y</th>
<th>(x_2y_2)</th>
<th>(x^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>17 608.9</td>
<td>6.00%</td>
<td>1056.532</td>
<td>310 072 302.7</td>
</tr>
<tr>
<td>2011</td>
<td>20 633.4</td>
<td>6.60%</td>
<td>1362.49</td>
<td>425 736 143.3</td>
</tr>
<tr>
<td>2012</td>
<td>24 282.6</td>
<td>6.67%</td>
<td>1619.647</td>
<td>589 643 035.8</td>
</tr>
<tr>
<td>2013</td>
<td>27 038.2</td>
<td>4.94%</td>
<td>1334.336</td>
<td>731 064 741.4</td>
</tr>
<tr>
<td>2014</td>
<td>29 396.6</td>
<td>4.21%</td>
<td>1236.616</td>
<td>864 159 062.7</td>
</tr>
<tr>
<td>2015</td>
<td>31 232.0</td>
<td>3.53%</td>
<td>1102.749</td>
<td>975 435 455.6</td>
</tr>
<tr>
<td>2016</td>
<td>32 482.8</td>
<td>3.51%</td>
<td>1138.793</td>
<td>1 055 133 497.7</td>
</tr>
<tr>
<td>2017</td>
<td>35 338.2</td>
<td>3.70%</td>
<td>1307.514</td>
<td>1 248 788 803.3</td>
</tr>
<tr>
<td>2018</td>
<td>38 668.3</td>
<td>3.55%</td>
<td>1371.437</td>
<td>1 495 239 422.8</td>
</tr>
<tr>
<td>2019</td>
<td>41 444.6</td>
<td>3.62%</td>
<td>1500.642</td>
<td>1 717 658 999.8</td>
</tr>
<tr>
<td>2020</td>
<td>39 754.1</td>
<td>2.67%</td>
<td>1062.098</td>
<td>1 580 392 038.1</td>
</tr>
<tr>
<td>2021</td>
<td>38 960.3</td>
<td>2.38%</td>
<td>926.6066</td>
<td>1 517 907 625.4</td>
</tr>
<tr>
<td>Total</td>
<td>376 840.0</td>
<td>51.37%</td>
<td>15019.46</td>
<td>12511231128</td>
</tr>
</tbody>
</table>


In the fourth quarter of 2020, although no noticeable changes in lending policy towards large enterprises were observed, there was a noticeable decrease in the value of bank loans for individual enterprises, which in particular increased at the turn of November and December 2020. In the last quarter of the discussed year, no noticeable changes were observed in lending policy towards large enterprises, while the criteria for small and medium-sized enterprises were slightly eased, which was mainly motivated by the deteriorating economic situation (especially in industries sensitive to the impact of the pandemic)\(^{21}\). From January to September 2021, the value of bank loans for individual entrepreneurs shows a growing tendency. The increase from the beginning of 2021 (PLN 37,688.1 million) to September (PLN 39,613.7 million) amounted to PLN 1,925.6 million. Only around March and April, is a slight decrease noticeable, which could have been caused by the projected third wave of COVID-19 infections (Chart 7).

Based on the analysis, it can be concluded that during the pandemic, the upward trend in corporate liabilities towards banks was reversed. Therefore, the first hypothesis should be rejected and it should be pointed out that it was not so much a slowdown as a reversal of the upward trend in this respect. Hypothesis II can only be accepted if only the year 2020 is assumed as the pandemic period. If we want to consider 2021 also as a pandemic year, Hypothesis II should be rejected, because the volume of loans taken by micro-enterprises increased to a level similar to that before the pandemic.

Conclusions

The topicality of the subject of changes in lending policy is reflected in the dynamically changing situation in the credit market, dictated by the active intervention of the NBP. Under circumstances of persistent high levels of risk, it becomes complicated to effectively forecast the economic situation and for enterprises to build development strategies. Knowledge and awareness within a company about past crises may help to prepare appropriate plans of action in the case of similar situations in the future. Particularly important is the lack of correlation between low interest rates and the availability of credit in high-risk circumstances. Micro and SME enterprises in crisis-related uncertainty need to be aware that taking out a working capital loan or carrying out a planned investment with the support of an investment loan may not be feasible.

During the analysis of secondary data, difficulties were encountered in making an objective comparative analysis of the average value of bank lending to entrepreneurs with the economic situation observed in the various quarters before and during the COVID-19 pandemic. The problem in this case was the state interventions aimed at a systemic solution to the problems enterprises faced during the COVID-19 pandemic. However, they disturbed the standard functioning of the borrower-lender relationship, hence such an analysis would not be objectively justified.

Emergency situations such as the COVID-19 pandemic strongly affect the economic growth of individual countries, including Poland. It becomes important to recognize that this is an indirect impact. In the analyzed case, the uncertainty as to the condition of the SME sector during the crisis influenced the tightening of lending policy. At the same time, it clearly showed that the level of trust in large entities is much higher than in micro, small and medium-sized enterprises.

It is also worth emphasizing that, according to the analysed secondary sources, an increase in the demand for bank financing during the pandemic was reported by both large companies and micro-enterprises, but only in the case of the former did the availability of loans increase. As a result, the difference between the availability of bank loans for the
large enterprise sector and the SME sector has widened. In terms of sectors, differences in credit availability also persist. Once again, the availability of bank financing for transport and trade companies deteriorated, which was probably the result of the greater sensitivity of these industries to the impact of the pandemic.

In this context, there is room for conducting in-depth quantitative and qualitative research among representatives of the banking sector in order to work out solutions for industries that had problems with access to credit during the pandemic crisis. Research on the condition of enterprises which managed to obtain investment or working capital loans at that time may also be valuable.

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17. Puchalska K., Tymoczko I.D., Szerokie ujęcie ekspozycji polskich przedsiębiorstw niefinansowych na ryzyko walutowe. Źródła i skala ekspozycji oraz metody zarządzania ryzykiem walutowym, Materiały i Studia, Zeszyt nr 293, Warszawa, 2013.
Zmiana poziomu kredytowania przedsiębiorstw w Polsce w okresie pandemii COVID-19

Streszczenie

Tematem przewodnim niniejszego opracowania jest ocena wpływu pandemii COVID-19 na kredytowanie przedsiębiorstw. Głównym celem artykułu jest analiza zmian jakościowych i ilościowych poziomu kredytowania przedsiębiorstw w Polsce. Autorzy skupiają się z jednej strony na możliwościach zaciągnięcia zobowiązań przez firmy, z drugiej zaś na zmiany zasad udzielania pożyczek przez banki na przestrzeni zmieniającej się rzeczywistości gospodarczej, obarczonej kryzysem spowodowanym przez pandemię. W poszczególnych analizach ukazano również szerszy kontekst porównawczy odwołując się do danych statystycznych przed wystąpieniem kryzysu spowodowanego wirusem. W analizowanym przypadku niepewność co do kondycji sektora MSP w okresie kryzysu zaważyła na zastrzeżenie polityki kredytowej, wzrost zapotrzebowania na finansowanie bankowe w okresie pandemii zgłaszały zarówno duże firmy, jak i mikroprzedsiębiorstwa, jednak tylko w przypadku tych pierwszych dostępność kredytów wzrosła. W związku z tym różnica między dostępnością kredytów bankowych dla sektora dużych firm i sektora MSP powiększyła się.

Słowa kluczowe: przedsiębiorstwo, kredytowanie, interwencjonizm państwowy, COVID-19, kryzys, finanse przedsiębiorstw

Kody JEL: G20, G38

Information about authors:

Mateusz Śliwa, MSc
Mieczysławy Ćwiklińskiej 2; 35-601 Rzeszów, Polska
e-mail: mслиwa.interkreator@gmail.com
ORCID: 0000-0002-7911-9658

Aleksandra Kłosowska, MSc
Mieczysławy Ćwiklińskiej 2; 35-601 Rzeszów, Polska
e-mail: akłosowska@ur.edu.pl
ORCID: 0000-0003-2793-3444