Nr 2(79) 2020

ISSN 2544-7068

BEZPIECZNY BANK

Bankowy Fundusz Gwarancyjny

Nr 2(79) 2020

ISSN 2544-7068

BEZPIECZNY BANK

SAFE BANK

Bankowy Fundusz Gwarancyjny

SAFE BANK is a journal published by the Bank Guarantee Fund since 1997. It is devoted to issues of financial stability, with a particular emphasis on the banking system.

All articles published in "SAFE BANK" are reviewed.
All articles present the opinions of the authors
and should not be construed to be an official position of BFG.

PUBLISHER

Bankowy Fundusz Gwarancyjny
ul. Ks. Ignacego Jana Skorupki 4
00-546 Warszawa

SECRETARY

Ewa Teleżyńska
Telephone: 22 583 08 78
e-mail: redakcja@bfg.pl

Desktop publishing:
Dom Wydawniczy ELIPSA
ul. Inflancka 15/198, 00-189 Warszawa
tel. 22 635 03 01, e-mail: elipsa@elipsa.pl,
www.elipsa.pl

Contents

A word from the Editor

I am writing this text as the number of Coronavirus infections approaches 10 million, death toll reaches 500,000[1], and the economic impact of COVID-19 is recognized as the worst economic downturn since the Great Depression of 1929–1935. Nonetheless, compared to the overall death toll from the 1346–1353 *magna mortalitas* pandemic, also known as the Black Death[2], and considered the most fatal pandemic in human history, the number of COVID-19 deaths can be considered as relatively low. Historical sources indicate that the Black Death not only caused some Italian and German cities to lose more than half of their population but also resulted in significant changes in the landscape. It should be noted, however, that in comparing COVID-19 deaths to the *magna mortalitas*, we compare the period of 7 months with that of 7 years, and at considerably different levels of civilization development. In this context, the current death rate is very pessimistic. When analyzing secular trends, it can be seen that pandemics erupt at least once every 100 years, with varying intensity, killing millions of lives and having catastrophic economic consequences (e.g. the Spanish Flu from the second decade of the 20th century). Unfortunately, despite the enormous progress in science and technology as well as historical experience, humanity is still underprepared for epidemics, and not only in the poor, but also in the richest nations. This poor preparation pertains both to the sphere of health protection and the entire socio-economic system, ranging from individual violations of elementary principles of personal protection to effective procedures for managing the pandemic crisis on a global, international or national scale.

As we have learned from history, crises not only bring unpleasant and costly consequences but also create premises for change or reform. It happens that people make the most unwanted but necessary choices or decisions only when the situation becomes really bad. The global and local consequences of the COVID-19 pandemic, in various spheres of socio-economic systems, along with the need to overcome the negative impacts, create opportunities for change. The crucial question, therefore, is whether the globalized world and its regional or national sub-systems can

[1] https://www.worldometers.info/coronavirus/ (access 26.06.2020).

[2] It is estimated that in Eurasia between 75 and 200 million people were killed then. See: K. Philipkoski, *Black Death's Gene Code Craced*, https://www.wired.com/2001/10/black-deaths-gene-code-cracked/

properly assess the drama of the current situation and the risk of not making the necessary decisions, before the situation takes on a truly catastrophic dimension. In other words, we urgently need wide win-win strategies – in the widest institutional and structural arrangements. The adequate place and role in the implementation of those strategies belongs to financial market entities.

The 79th issue of *Safe Bank* journal contains a few studies in connection with the COVID-19 pandemic.

Two studies deal directly with the issue of monetary policy in the face of disruption caused by the pandemic. The first addresses the issues of monetary policy in an international perspective, while the second synthetically covers the challenges faced by the Monetary Policy Council in Poland in the event of economic disruption caused by COVID-19 during the period of historically low interest rates. The next two articles deal with the impact of the pandemic on the functioning of the economy or banks in Poland and Italy.

The two last studies in the "Problems and views" section go beyond the COVID-19 related issues. One deals with the Polish deposit guarantee system, which can be associated with the panic of depositors in the period preceding the lockdown and the rapid withdrawal of money from accounts as a form of protection against any restrictions to account access. The last study in this chapter is devoted to considerations on the commission for granting a loan as an instrument for transferring the cost to a consumer by financial institutions in Poland.

Special emphasis ought to be placed on the texts in the Miscellanea section. This time we shall present three studies produced within the framework of the European Financial Congress[3]. The first concerns Macroeconomic challenges and forecasts for Poland. This is the fifth edition of the report prepared in cooperation with EFC experts while at the same time being the only currently available national study next to similar ones prepared by World Bank and IMF. They can be treated as complementary to previously discussed articles regarding the situation in Poland during the pandemic, including the projection for 2021 and 2022. The next two are the representation of the EFC positions with regard to the European Commission's consultation document on Digital Operational Resilience Framework for financial services and the European Securities and Markets Authority's consultation paper on Draft Regulatory Technical Standards under the Benchmarks Regulation.

Wishing you an interesting reading!

Jan Szambelańczyk
Editor-in-Chief

[3] The European Financial Congress (EFC), established in 2011, is a platform for debating the issues of security, financial stability and economic growth in Europe, and for discussing measures to ensure a successful future for Poland and the European Union (https://www.efcongress.com/en/).

Problems and Opinions

DOI: 10.26354/bb.1.2.79.2020

Witold Grostal*
ORCID: 0000-0002-0021-0038
witold.grostal@nbp.pl

Monetary policy across the world in response to the COVID-19 pandemic[1]

Abstract

This paper presents monetary policy measures undertaken by selected central banks across the World following the outbreak of the COVID-19 pandemic, with a special focus on the Federal Reserve System and the Eurosystem. Against a background of falling global economic activity and rising risk aversion in global financial markets due to the pandemic, which was accompanied by announced or implemented large anti-crisis fiscal measures in many countries, a very large number of central banks eased their monetary policy. Not only did they lower short-term interest rates, they also employed a number of other tools, such as asset purchases, additional liquidity provision operations, foreign exchange interventions and swap lines. The universality, pace, range, and scale of monetary policy easing was unprecedented. At the current juncture, given the ongoing pandemic and the uncertainty about its economic impact, it is difficult to forecast the total scale and scope of the global monetary expansion.

Key words: monetary policy, central bank, US Federal Reserve System, European Central Bank, economic policy, COVID-19, pandemic

JEL: E52, E58

* Witold Grostal – National Bank of Poland.

[1] This paper solely presents the opinions of the author and should not be interpreted otherwise.

Polityka pieniężna na świecie w reakcji na pandemię COVID-19

Streszczenie

W niniejszym artykule przedstawiono działania z zakresu polityki pieniężnej podjęte przez wybrane banki centralne w okresie luty–maj 2020 r., w reakcji na wybuch pandemii COVID-19, ze szczególnych uwzględnieniem Rezerwy Federalnej oraz Eurosystemu. W warunkach spadku aktywności gospodarczej na świecie i wyraźnego wzrostu awersji do ryzyka na rynkach finansowych wobec rozprzestrzeniania się pandemii, a także przy ogłoszonej lub podjętej jednocześnie antykryzysowej stymulacji fiskalnej w wielu krajach, bardzo duża liczba banków centralnych poluzowała politykę pieniężną. Władze monetarne stosowały zarówno obniżenie krótkoterminowych stóp procentowych, jak i szereg innych instrumentów takich jak skup aktywów finansowych, dodatkowe operacje zasilające w płynność, interwencje walutowe, linie swapowe. Powszechność, tempo, zakres i skala luzowania polityki pieniężnej miały charakter bezprecedensowy. Na obecnym etapie – ze względu na trwająca pandemię oraz niepewność dotyczącą jej gospodarczych skutków – trudno ocenić jakie będą łącznie skala i zakres ekspansji monetarnej na świecie.

Słowa kluczowe: polityka pieniężna, bank centralny, Rezerwa Federalna Stanów Zjednoczonych, Europejski Bank Centralny, Eurosystem, polityka gospodarcza, COVID-19, pandemia

Introduction

In early 2020, in the wake of the SARS-CoV-2 coronavirus epidemic and the efforts by the authorities in many countries to counteract the further spread of the disease, a sharp drop in global economic activity coincided with a marked increase in risk aversion in financial markets. Under these conditions, nearly all central banks worldwide markedly eased their monetary policy to limit the economic impact of the epidemic. With a view to easing financial conditions, central banks applied both short-term interest rate cuts (unless the rates were already negative) and a number of other easing measures, including the purchase of financial assets on an unprecedented scale.

The goal of the paper is to summarise the actions pursued by central banks between February and May 2020 in response to the SARS-CoV-2 coronavirus epidemic. Section 1 outlines the global macroeconomic and financial conditions in the context of the SARS-CoV-2 pandemic. Section 2 summarises the measures undertaken by a wide group of central banks worldwide between February and May 2020 *vis-a-vis* the pandemic. Sections 3 and 4 detail the relevant measures pursued by the US Federal Reserve System and the Eurosystem respectively.

1. Background

At the turn of 2019 and 2020 a number of cases of pneumonia were reported in China, due to infection by the previously unknown coronavirus (initially named 2019-nCov; later SARS-CoV2 and COVID-19 for the disease). In February 2020, many cases of the disease were registered across Asia and Europe. The World Health Organisation (WHO) officially declared a pandemic on 11 March 2020. In the following weeks the SARS-CoV-2 virus reached almost all countries worldwide and the number of new cases registered per day rose from less than 2,000 in late February to over 70,000 in April 2020. With preventive measures in place, including a policy of *social distancing*, the daily number of confirmed new cases stabilised in April and early May 2020, and some countries saw a material decline.

Due to the rapid spread of SARS-CoV-2, many governments around the world implemented *social distancing* policies. Since early March, restrictions on community and business life were implemented in many countries, including most EU Member States and the United States[2]. Whereas these measures may have limited the spread of coronavirus, they had a dampening impact on economic activity.

The COVID-19 pandemic and the ensuing prevention measures impacted the economy in the short term via a number of channels, both supply and demand. As an immediate effect of the restrictions, production and added value in the sectors concerned declined. The pandemic also temporarily dampened the supply side of the economy by disrupting supply chains and decreasing labour productivity[3]. At the same time, the epidemic and the related restrictions and uncertainties adversely affected aggregate demand through several channels, including direct restrictions on consumption, deterioration of labour market conditions (and household income) and consumer sentiment.

Restrictions on business activity tamped down aggregate demand, through their dampening effect on the current and expected situation of employees in the labour market. Companies stopped or reduced their business, decreased orders and often decided to cut employment and wages. Furthermore, the consumption of complementary goods directly affected by the restrictions slumped[4]. In this way the initial supply shock very quickly triggered a parallel strong demand shock.

The adverse impact of the pandemic on aggregate demand was further aggravated by the situation in the financial markets, which was contributing to tighter financing conditions. Although no significant response in the financial markets was observed during the initial period of the epidemic, the outbreak in Italy in the second half of February 2020 was followed by a marked fall in share prices, an increase in risk premiums and capital outflow from emerging markets. Demand for liquidity in US dollars surged, and most currencies depreciated against the dollar. Yields on peripheral bonds of the Euro area countries increased, albeit to a lesser extent

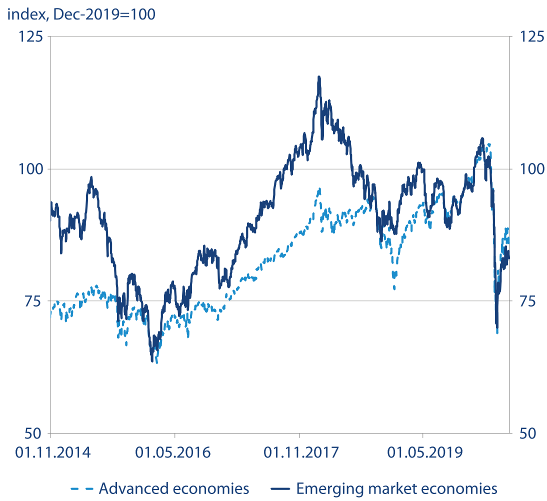
[2] T. Hale, A. Noam, B. Kira, A. Petherick, T. Philips, *Variation in government responses to COVID-19*, BGS Working Paper Series BSG-WP-2020/032, 2020.

[3] L. Fornaro, M. Wolf, *COVID-19 Coronavirus and Macroeconomic Policy*, Technical Report, Centre for Economic Policy Research, 2020.

[4] V. Guerrieri, G. Lorenzoni, L. Straub, I. Werning, *Macroeconomic implications of COVID-19: can negative supply shocks cause demand shortages?*, NBER Working Paper No. 26918, 2020.

than during the debt crisis of 2010–2012. There were also disturbances in the US Treasury bond market, with securities becoming less liquid and prices more volatile[5]. These trends were halted by measures pursued by central banks.

Figure 1. Share prices



Source: Bloomberg data.

Figure 2. Nominal US dollar exchange rate, trade weighted (US dollar index)

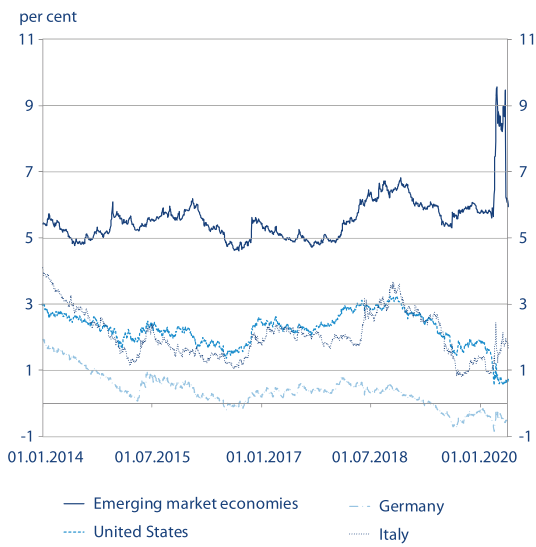
Source: St. Louis Fed. data (https://fred.stlouisfed.org/series/DTWEXBGS).

[5] M. Fleming, F. Ruela, *Treasury market liquidity during the COVID-19 crisis*, https://libertystreeteconomics.newyorkfed.org/2020/04/treasury-market-liquidity-during-the-covid-19-crisis.html, 17 April 2020.

Figure 3. Financing conditions in the Euro area and in the US

The *Goldman Sachs Financial Conditions Index* is established as a weighted average of risk-free interest rates, corporate bond yield spreads, stock prices and exchange rates (according to the estimated impact of individual variables on GDP).
Source: Bloomberg data.

Figure 4. Yields on 10-year government bonds

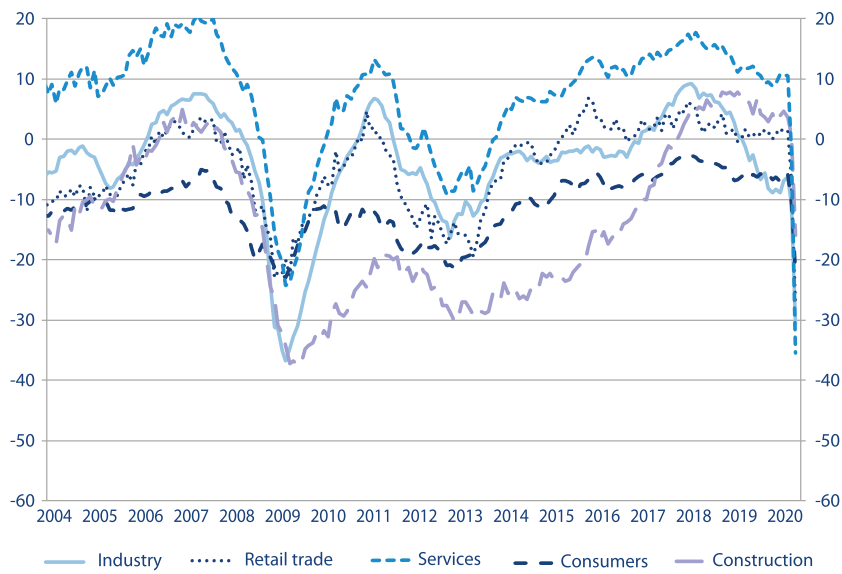


Emerging economies – Bloomberg Barclays Emerging Markets Sovereign Values.
Source: Bloomberg data.

Uncertainty proved an important factor dampening economic activity. Growing fears of unemployment supported the propensity to save, adversely influencing consumption. The risk of the epidemic relapse and uncertainty about the evolution of financing conditions may have discouraged economic agents from investing and increasing employment over the longer time frame, especially in sectors most exposed to prevention measures. According to the conclusions of different studies, uncertainty has a material role in fluctuations in economic activity. Uncertainty magnified the depth of the recession in the aftermath of the 2007–2009 financial crisis, for example[6].

A pandemic, featuring the massive spread of disease, means that the above processes take a global scope, and therefore subdues world trade.

Figure 5. Business climate indicators in the European Union

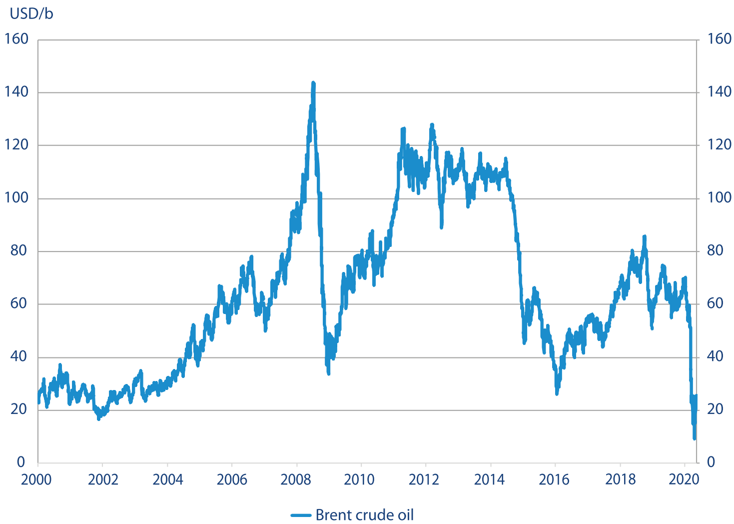


Source: European Commission (https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/business-and-consumer-surveys/download-business-and-consumer-survey-data/time-series_en). Cut-off date: April 2020.

The impact of the epidemic on price formation is an important aspect, especially for central banks pursuing an inflation targeting strategy. Commodity prices took a tumble, following the sharp contraction in economic activity, exerting a strong curbing effect on inflation.

[6] N. Bloom, *Fluctuations in Uncertainty,* Journal of Economic Perspectives 2014, Vol. 28, pp. 153–176.

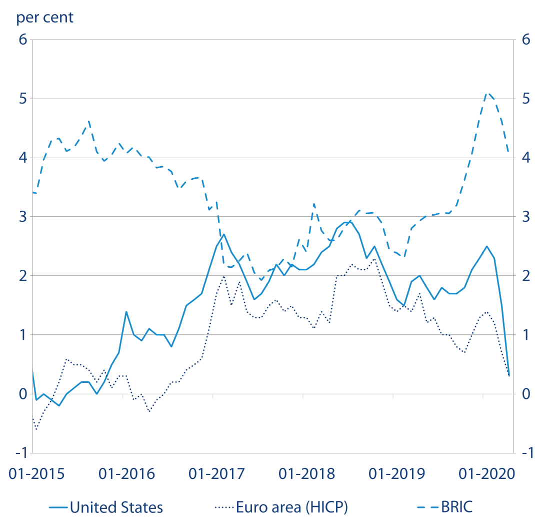
Figure 6. Brent crude oil price



Source: St. Louis Fed data (https://fred.stlouisfed.org/series/DCOILBRENTEU).

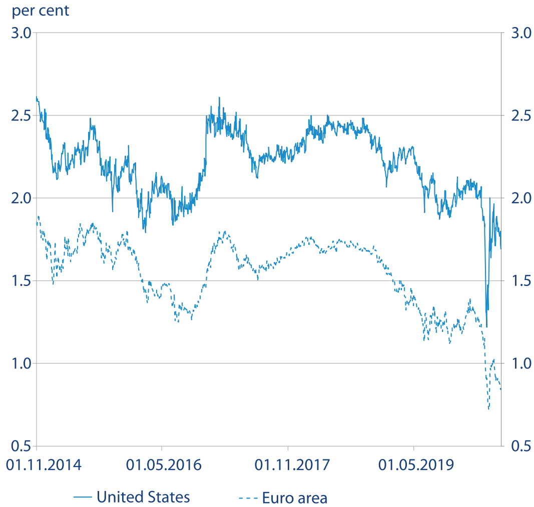
Initial experience and data available until May 2020 point to the predominance of the disinflationary effects of the COVID-19 pandemic. The major global economies posted falls in realised and expected inflation.

Figure 7. CPI in the US, Euro area and BRIC countries



CPI in BRIC countries – average inflation in Russia, Brazil, China and India weighted by GDP (for 2019).
Source: Source: Bloomberg data, IMF (World Economic Outlook April 2020).

Figure 8. Long-term market inflation expectations in the Euro area and the United States



Expected average inflation in 5 years for the next 5 derived from *forward inflation-linked swap rate.*
Source: Bloomberg data.

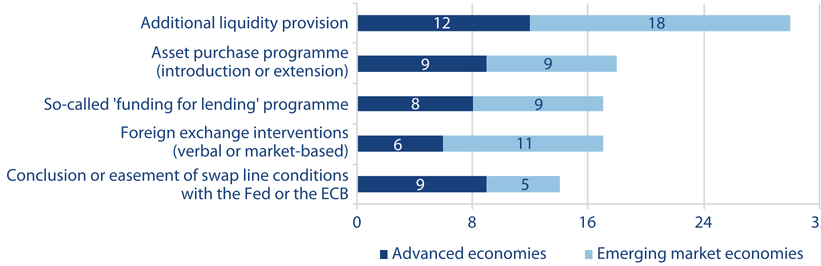
Against the backdrop of a massive deterioration in economic activity, many governments reached out for extensive fiscal stimulus measures, thus fuelling rapid upsurge in issuance of sovereign debt securities.

2. Monetary policy response by central banks to the COVID-19 pandemic

The spread of the COVID-19 pandemic prompted central banks around the world to undertake a number of monetary policy easing measures in the February-May 2020 period in order to mitigate the economic impact of the pandemic. To ease the monetary conditions, the central banks implemented short-term interest rate cuts and a number of other instruments. In particular, monetary authorities applied (Figure 9):

- additional operations providing liquidity to the banking sector, in some cases making the interest rate on these operations contingent on lending by the bank;
- asset purchase programmes;
- foreign exchange interventions;
- swap lines with the main central banks.

Figure 9. Selected measures between 1 February and 25 May 2020 of central banks from 12 developed and 19 emerging economies



Advanced economies: Australia, Denmark, Iceland, Japan, Canada, Norway, New Zealand, United States, Euro area, Switzerland, Sweden, United Kingdom.
Emerging market economies: Brazil, Chile, China, Croatia, Czech Republic, Philippines, India, Indonesia, Israel, South Korea, Malaysia, Mexico, Russia, South Africa, Romania, Thailand, Turkey, Ukraine, Hungary.
Source: Own study based on information from central banks' websites.

Nearly all the central banks worldwide reduced interest rates during this period (24 out of the 31 central banks examined; Figure 10, Figure 11). All those central banks in developed economies whose interest rates were positive in the early 2020 reduced their interest rates. As a result, nearly all developed economies posted zero or negative interest rates in May 2020[7,8]. In emerging economies, with materially higher pre-pandemic rates, the scale of rate cuts was even greater than in advanced economies, and stood at approx. 50–300 bps. Respectively, in most emerging market economies the interest rates also reached an all-time low, and in some of them the interest rates in May 2020 were already below 1.00%.

Already before the COVID-19 pandemic, nominal interest rates across the world were at very low levels, including zero or negative in many advanced economies. For some years, economists and central bankers were indicating that in a subsequent recession, a reduction in short-term interest rates may not suffice to support the economy[9]. For this reason, the monetary authorities in many countries around the world – although they did not foresee an epidemic – were well-positioned to employ monetary policy instruments that were previously considered unconventional[10].

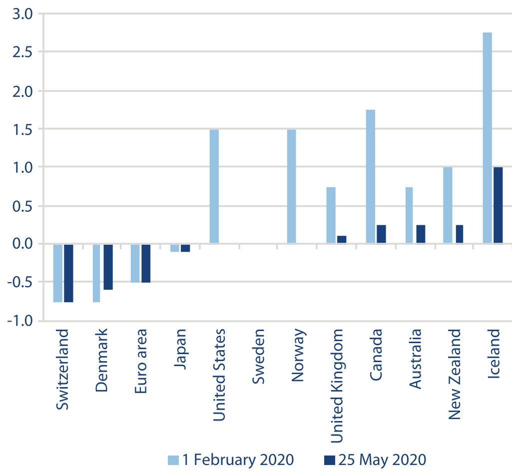
7 With the exception of Iceland, where the nominal interest rates remained higher than in most other emerging economies since the 2008 banking crisis.

8 In the Euro area, Switzerland, Japan, Norway, Denmark and Hungary, selected central bank interest rates were negative in late May 2020.

9 Cf. for instance P. Szpunar, *Nowe wyzwania dla banków centralnych – czego nauczył nas globalny kryzys finansowy? [New challenges for central banks – what the global financial crisis taught us?]*, [in:] *Gospodarka narodowa wobec współczesnych procesów gospodarczo-finansowych w Europie [The national economy vis-à-vis contemporary economic and financial processes in Europe]*, L. Podkaminer (ed.), Wydawnictwo Wyższa Szkoła Finansów i Prawa w Bielsku-Białej [Editing House of Bielsko-Biała School of Finances and Law], Bielsko-Biała 2017, pp. 9–48 and BIS Committee on the Global Financial System, *Unconventional monetary policy tools: a cross-country analysis.* 2019.

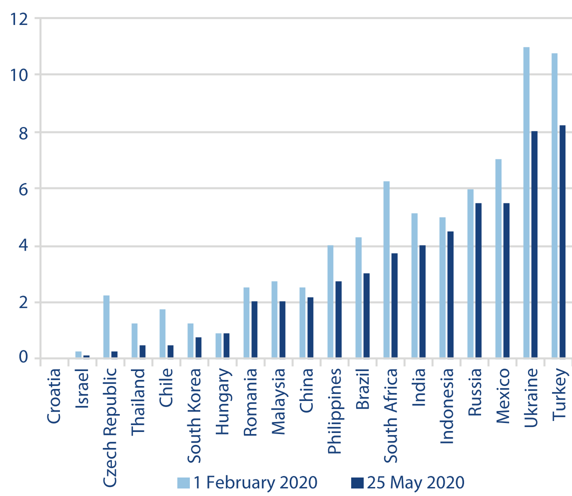
10 Cf. for instance excerpts of minutes from FOMC meetings between July 2019 and January 2020 available on the Federal Reserve System website: https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm

Figure 10. Central bank interest rates in selected advanced economies



Source: Bloomberg data.

Figure 11. Central bank interest rates in selected emerging market economies



Source: Bloomberg data.

The clear need for such actions is evidenced, for example, by the fact that despite lower nominal interest rates than in previous decades, even before the pandemic, amidst the marked slowdown in price growth due to recession in many advanced economies, real interest rates did not fall, even though central banks reduced nominal rates close to zero or below. On trepidation of the projected recession of unprecedented magnitude and the associated disinflationary or even deflationary tendencies, central banks consequently decided to employ additional monetary policy instruments, apart from the reduction in short-term interest rates. Without this, there was a risk of pro-cyclical tightening of financing conditions, which may have aggravated the recession and spelled the emergence of deflationary tendencies.

Aside from interest rate cuts, the principal measures implemented by central banks in response to the pandemic included the large-scale purchase of financial assets. The crisis triggered by the COVID-19 pandemic was the first time in the history of modern central banking where many (18) in the pool of central banks around the world – both in advanced and emerging market economies – applied this instrument in response. Although similar actions were taken in previous years by monetary authorities in advanced economies, this time the scale and scope of purchases surpassed prior experience. In turn, for many emerging market economies, this was the first time that this monetary policy instrument was used in the history of the modern monetary system. In formulating justification for employing this instrument, monetary authorities generally invoked the need to support market liquidity and the transmission of interest rate cuts to the economy. Public sector bonds dominated in the assets purchased. On the top of that, central banks purchased other instruments such as corporate bonds, municipal bonds, mortgage bonds and asset-backed securities (MBS, ABS) – depending on the characteristics of the economy and the financial market as well as the market conditions. A number of central banks initially signalled *ex ante* the target scale of the asset purchases. Nonetheless, in the following weeks of the development of the crisis, many of them gradually increased the signalled scale, and some, including the Federal Reserve System, abandoned communicating it while asserting that the volume of purchases would be as high as necessary. At the same time, some central banks applied *yield curve targeting*, where they declared the target level of government bond yields with relevant terms to maturity, while also ceasing to communicate the target scale of purchase.

Another action in response to the spread of the COVID-19 epidemic undertaken by nearly all (30) of the central banks examined was the increase in the scale of liquidity-providing open market operations, despite the fact that in many of these economies the banking system operated under structural liquidity surplus. This was designed to moderate the risk of liquidity problems arising due to such factors as the risk of a drop in confidence between counterparties, which could lead to disturbances on the financial markets. In particular, the monetary authorities increased the offered and actual scale of liquidity-providing operations (in some cases without specifying a maximum scale or even signalling an unlimited potential scale), increased their frequency and extended their maturity. At the same time, some central banks expanded the spectrum of eligible collateral for credit operations (such as credit claims or mortgage bonds).

Apart from that, more than a half of the central banks examined (17) applied operations to provide the banking sector with liquidity, the interest rate of which depended on the credit activity of the relevant bank (referred to as funding for lending programmes). As declared, their objective was to stimulate bank lending.

In the initial phase of the COVID-19 crisis, the global financial markets experienced tensions due to a surge in demand for liquidity in the US dollar. In response, the Federal Reserve System established swap lines with some of the central banks worldwide – or enhanced the conditions of existing swap lines – providing US dollar liquidity at low cost. At the same time, some of the central banks (17) were engaged in verbal or actual market foreign exchange interventions. The direction of intervention was diverse, country-by-country, and the attitude of central banks to interventions in some of them changed over time.

3. US Federal Reserve System monetary policy in response to the COVID-19 pandemic

The United States Federal Reserve System (the Fed) identified relatively early the economic risks associated with the spread of SARS-CoV-2 coronavirus. Members of the Federal Open Market Committee (FOMC) at its meeting on 28–29 January 2020 noted that the outbreak of the epidemic in China boosted risk aversion, manifesting itself in a fall in equity prices and yields of U.S. Treasury securities. At the same time they pointed out that the spread of the virus was a new risk factor for the economic outlook. In a statement on 28 February 2020, J. Powell, president of the Federal Reserve System, mentioned that the coronavirus poses evolving risks to economic activity and that the Fed would use the available tools to support the economy.

On 3 March 2020, during an extraordinary FOMC meeting in response to the development of the epidemic, it was decided to lower the target range for the federal funds rate by 50 bps to 1.00–1.25%. The following days saw a number of decisions taken to extend the scope of the Fed's liquidity-providing operations. On 9–13 March 2020 it was decided to increase the scale of overnight (O/N) and two-week repo operations, and to launch liquidity-providing operations with a three-month maturity. It was also decided to extend the Treasury securities purchase programme with securities with a maturity of over one year. At the subsequent FOMC meeting on 15 March 2020, the target range for federal funds rate was lowered to 0.00–0.25%. The FOMC also announced that the Fed would purchase at least $500 billion of Treasury securities and $200 billion of MBS (mortgage-backed securities). Following its subsequent meeting on 23 March 2020, the FOMC declared that Fed would purchase government debt securities and MBS in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions and the economy, without communicating the scale of the purchases.

At the same time, measures to support the liquidity of the banking sector were undertaken on 15 March 2020. Namely, it was decided to reduce the reserve requirement ratio to zero and to align the interest rate on loans granted through a *discount window* with the upper bound of the range for the federal fund rate (previously it had stood at 50 bps above the upper bound of the range). The Federal

Reserve System encouraged banks to draw from the credit facilities it provided, namely the intraday loan and the discount window. On 24 April 2020 access to intraday credit was facilitated by abolishing the limits for unsecured loans and simplifying the procedure for providing collateralised loans.

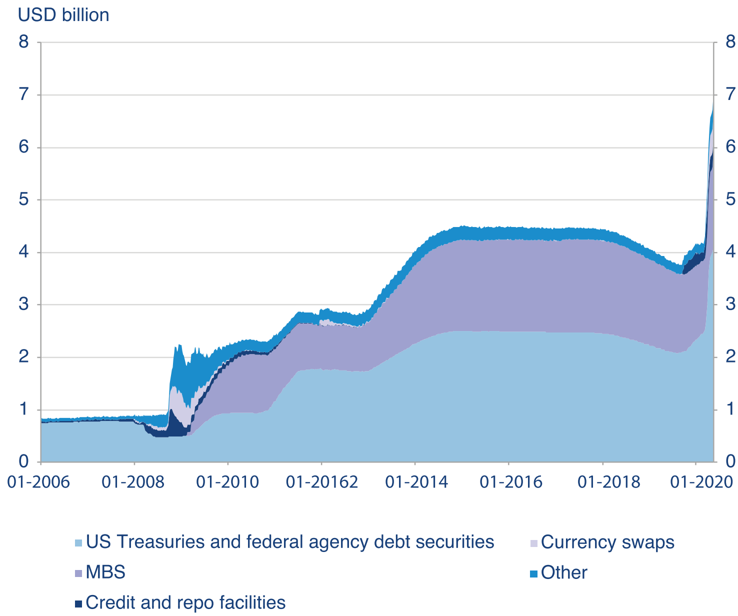
The Fed also took a number of measures to ensure the smooth operation of the corporate debt securities market and to maintain access for companies to financing. On 17 March 2020, it was decided to launch a Commercial Paper Funding Facility for short-term corporate debt securities and on 23 March 2020 the Fed announced that it would also purchase corporate bonds on the primary market (Primary Market Corporate Credit Facility) and secondary market (Secondary Market Corporate Credit Facility). April 2020 saw the launch of the Main Street Lending Programme. This allowed banks to grant 4-year loans to companies (with a one-year grace period in repayment) and then sell up to 95% of the loan value to the Main Street Lending Facility. The launch of the Paycheck Protection Programme Liquidity Facility was announced on 9 April 2020 to provide liquidity to financial institutions participating in the Paycheck Protection Programme. Paycheck Protection was to provide a two-year, low-interest, redeemable loan to small businesses, on condition that it was used to pay salaries or finance other fixed costs.

As regards other Fed measures aimed at maintaining the smooth functioning of the financial system and availability of financing, one should mention the Money Market Mutual Fund Liquidity Facility, announced on 17 March 2020, whereby money market funds acceded loans under a pledge of assets with a high investment grade and Term Asset Backed Loan Facility, introduced on 23 March 2020, to provide lending collateralised on loan-backed ABS (including car, card, student, equipment and accommodation). In order to ensure smooth operation of the Treasury debt securities market, on 17 March 2020, the implementation of 90-day liquidity-providing operations for treasury bond dealers (Primary Dealer Credit Facility) was announced.

On 23 March 2020 the range of assets that could serve as collateral for loans granted under the Money Market Mutual Fund Liquidity Facility was extended to include local government debt securities. These assets were also included in the Commercial Paper Funding Facility. On 9 April 2020 the launch of the Municipal Lending Facility was announced, whereby debt securities issued by cities, counties and states would be purchased.

Asset purchases and liquidity-providing operations resulted in a rapid increase in the Federal Reserve System total assets – in mid-May 2020 the assets of the Federal Reserve System were nearly 67% higher as against late February 2020 (see Figure 12) and exceeded by more than $1.5 trillion the figure at the end of previous quantitative easing programme in October 2014. The increase in the total assets primarily reflected both asset purchases (especially government debt securities), and the launch of new credit facilities. Between late February and mid-May 2020, a pronounced growth occurred in the use of the discount window (from USD 2 million to nearly USD 25 billion) and foreign exchange swaps offered to other central banks (from USD 45 million to nearly USD 443 billion).

Figure 12. Federal Reserve System assets



Source: St. Louis Fed (https://fred.stlouisfed.org).

4. Eurosystem monetary policy in response to the COVID-19 pandemic

With the European Central Bank's (ECB) deposit rate negative for nearly six years, the ECB had limited space to reduce short-term interest rates in the early stages of the pandemic. The first decision of the Governing Council of the ECB in response to the COVID-19 crisis was taken and announced at its standard scheduled meeting on 12 March 2020. The ECB's policy rates remained unchanged, with the ECB deposit facility rate persisting at 0.50%. The ECB increased the scale of its asset purchase programme by announcing additional purchases of €120 billion in 2020, but, contrary to previous asset purchase programmes, the ECB did not provide a monthly purchase schedule. Furthermore, the ECB continued with its asset purchases of €20 billion a month, which had resumed in November 2019.

On 12 March 2020 the ECB also launched longer-term liquidity-providing operations (LTROs) to the banking sector, with an interest rate that was equal to the average rate on the deposit facility (-0.50% at that time) over the life of the operation. The operations were to be provided temporarily, each week, on a potentially unlimited scale. These operations matured on 24 June 2020, the day of the subsequent tranche of the so-called targeted *longer-term refinancing operations* (TLTROs), planned much earlier[11]. At the same time, the ECB lowered the potential TLTRO interest rate, eased the conditions of these operations and increased their available volume. According to the new conditions announced on 12 March 2020, during the special period from June 2020 to June 2021, assuming the no change in the interest rate by the ECB, the TLTRO rate could be -0.75% (that is deposit rate minus 25 bps), assuming the value of a bank's eligible loans did not fall during the reference period, or -0.25% (that is refinancing rate minus 25 bps) – if the loan value fell. At the same time, the ECB increased the maximum scale of operations from 30% to 50% of the eligible loans of a bank. The shortest possible period after which a commercial bank may resolve on earlier repayment of TLTRO was also shortened (from two years to one year, albeit not earlier than in September 2021).

Following the ECB communications of 12 March 2020, and the statements by some Governing Council members, the apparent divergence of yields on long-term government bonds between Germany and the Euro area countries considered vulnerable and more exposed to the crisis, occurred. In response, following an extraordinary meeting on 18 March 2020, the ECB's Governing Council, announced the launch of an additional asset purchase programme (Pandemic Emergency Purchase Programme – PEPP) on a cumulative scale of EUR 750 billion. The announced horizon of the programme was made contingent on the development of the pandemic; nonetheless it was to cover the period to at least the end of 2020. The PEPP structure was considerably more flexible than that of the previous ECB asset purchase programmes. First, the composition of purchases in terms of asset classes remained unspecified, it was only mentioned that the ECB could purchase all asset classes that it had been purchasing under previous programmes and additionally short-term debt securities of non-financial institutions. Second, Greek government bonds, which had not been previously eligible, were included in the programme for the first time. Third, the ECB waived the issue share and the issuer limits that it had imposed in previous purchase programmes; the ECB also signalled flexibility in its approach to the capital key, which, however, was intended to remain the benchmark for the distribution of cumulated purchases between the euro area countries. Fourth, the ECB signalled its willingness to alter the parameters of the programme, including an increase in its scale, and emphasised that it would not tolerate any risks to the smooth transmission of its monetary policy in all jurisdictions of the euro area.

At the same time, the Eurosystem increased the scale and maturity of its US dollar liquidity providing operations to the banking sector. This was supported by the agreement announced on 15 March 2020 between the world's leading central banks on swap operations with the Fed to reduce costs and extend the maturity of US dollar liquidity.

With a view to counteracting the tightening of financing conditions, including bank lending, at an extraordinary meeting on 7 April 2020 the Governing Council decided

[11] TLTRO-III are 3-year liquidity-providing collateralised operations whose interest rate depended on the lending of the bank concerned and was based on the ECB's floating rates of deposit facility and main refinancing operations.

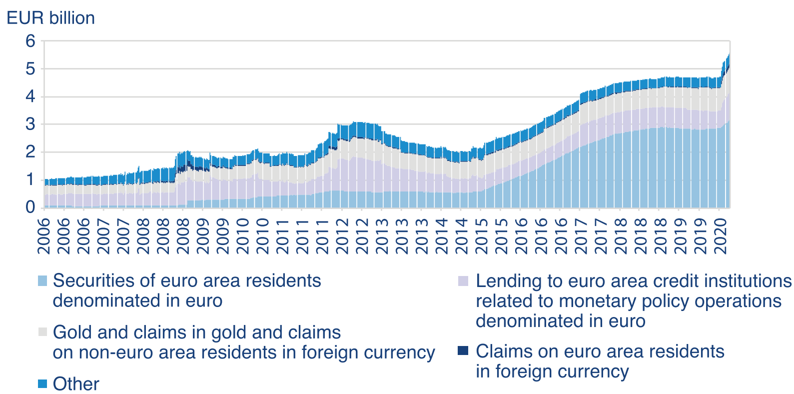
to temporarily ease the collateral standards for liquidity-providing operations in the banking sector. In particular, Greek government bonds and credit claims also below EUR 25,000 (previously only credit claims above this amount had been accepted) were included in the list of eligible collateral, and the general reduction of collateral valuation haircuts was adopted.

Subsequently, in a context of a renewed increase in the spread of long-term government bond yields between the euro area countries considered vulnerable (and more exposed to the consequences of the pandemic) vs Germany, as well as reports of possible credit rating downgrades for Italy, in particular, the ECB's Governing Council on 22 April 2020, after an unplanned meeting, announced another decision to ease the collateral standards for operations with the Eurosystem. A temporary rule was introduced whereby assets whose rating had been downgraded after 7 April 2020 (but no more than two notches below the previously agreed threshold), might be eligible as collateral for operations with the Eurosystem in accordance with the rating on that date.

In turn, on 30 April 2020 the ECB again reduced the interest rate on TLTRO operations. As a result, assuming unchanged ECB main interest rates, the minimum interest rate on these operations from June 2020 to June 2021 could be as low as -1.00% (that is the ECB deposit rate minus 50 bps), provided that the bank concerned did not reduce its eligible loan portfolio. At the same time, the ECB announced the launch of additional long-term liquidity-providing operations (pandemic emergency longer-term refinancing operations, PELTROs) offered in *fixed-rate, full-allotment* auctions, maturing in the summer of 2021 at a rate 25 bp lower than the ECB's main refinancing operations rate, thus above the interest rates on TLTROs.

The Eurosystem's response to the COVID-19 pandemic directly translated into an increase in the Eurosystem total assets. Between 28 February and 22 May 2020 the increase amounted to around 18% (Figure).

Figure 13. Eurosystem assets



Source: ECB data.

Summary

In early 2020, in the wake of the SARS-CoV-2 coronavirus epidemic and government action in many countries to counteract the further spread of the disease, global economic activity posted a sharp deterioration, and a marked upsurge in risk aversion was observed in financial markets. The immediate effect of the restrictions included a decline in output in the sectors concerned and other supply disruption, including disruption of supply chains. At the same time, the epidemic and the related restrictions and uncertainties adversely affected aggregate demand both due to direct restrictions on consumption and via the deterioration of labour market conditions and consumer sentiments. Data and projections available until May 2020 have suggested a stronger and potentially longer-lasting impact on the global economy of the demand-side shock associated with the COVID-19 pandemic, rather than supply-side one, which was reflected in a drop in current and expected inflation rates. Against this background, many governments undertook extensive anti-crisis fiscal stimulus measures.

At the same time, a very large number of central banks around the world embarked on considerable monetary expansion with a view to moderating the economic impact of the pandemic. To ease financial conditions, central banks employed short-term interest rate cuts and a number of other instruments, including the purchase of financial assets, additional liquidity-providing operations, foreign exchange intervention and swap lines with major central banks. The prevalence, speed, scope and scale of monetary policy easing was unprecedented. At the current juncture, given the ongoing pandemic and the uncertainty about its economic impact, it is difficult to assess the combined scale and scope of monetary expansion worldwide.

References

Bank of England, *Monetary Policy Report*, May 2020.

BIS Committee on the Global Financial System, *Unconventional monetary policy tools: a cross-country analysis*, 2019.

Bloom N., Fluctuations in Uncertainty, Journal of Economic Perspectives 2014, Vol. 28, pp. 153–176.

Central Bank of Ireland, *Quarterly Bulletin Q2 2020*, April 2020.

Czech National Bank, *Global economic outlook*, April 2020.

Fleming M., Ruela F., *Treasury market liquidity during the COVID-19 crisis*, https://libertystreeteconomics.newyorkfed.org/2020/04/treasury-market-liquidity-during-the-covid-19-crisis.html, 17 April 2020.

Fornaro L., Wolf M., *COVID-19 Coronavirus and Macroeconomic Policy*, Technical.

Główny Urząd Statystyczny (Statistics Poland), *Notka metodologiczna. Wytyczne dotyczące opracowania HICP w kontekście kryzysu związanego z COVID-19*, 2020.

Guerrieri V., Lorenzoni G., Straub L., Werning I., *Macroeconomic implications of COVID-19: can negative supply shocks cause demand shortages ?*, NBER Working Paper No. 26918, 2020.

Hale T., Noam A., Kira B., Petherick A., Philips T., *Variation in government responses to COVID-19*, BGS Working Paper Series BSG-WP-2020/032, 2020.

https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm

https://www.federalreserve.gov/newsevents/pressreleases.htm

Ihrig J., Senyuz Z., Gretchen C.W., *The Fed's "Ample-reserves" approach to implementing monetary policy*, Finance and Economics Discussion Series 2020-022, Board of Governors of the Federal Reserve System.

International Monetary Fund 2020, *World Economic Outlook. Chapter 1 The Great Lockdown*, April 2020.

Riksbank, *Monetary Policy Report*, May 2020.

Szpunar P., *Nowe wyzwania dla banków centralnych – czego nauczył nas globalny kryzys finansowy?*, [in:] *Gospodarka narodowa wobec współczesnych procesów gospodarczo-finansowych w Europie*, L. Podkaminer (ed.), Wydawnictwo Wyższej Szkoły Finansów i Prawa w Bielsku-Białej, Bielsko-Biała 2017.

World Health Organization, *COVID-19 situation reports*, https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/

DOI: 10.26354/bb.2.2.79.2020

Łukasz Hardt*
ORCID: 0000-0001-6542-5833
lhardt@wne.uw.edu.pl

Should Polish monetary policy go long?

Abstract

This essay discusses the optimal shape of monetary policy in Poland as the Polish economy faces the COVID-19 pandemic. It starts by discussing possible scenarios for GDP and inflation dynamics in 2020, and next it focuses on monetary policy. It reviews recent moves as taken by the Monetary Policy Council in March and April 2020, and then analyses the possibility of monetary policy in Poland going long by allowing interest rates on long-term repo operations to be lower than the reference rate. In doing so it uses, among others, the idea of reversal interest rate. Although this paper generally supports the idea of Polish monetary policy going long, it also underlines some potential risks of implementing non-standard instruments of monetary policy.

Key words: COVID-19 pandemic, monetary policy, repo operations, reversal interest rate, yield curve control strategy

JEL: E42, E52, E58

Czy polska polityka pieniężna powinna kontrolować długoterminowe stopy procentowe?

Streszczenie

Esej traktuje o optymalizacji polityki pieniężnej w Polsce w warunkach kryzysu gospodarczego wywołanego pandemią COVID-19. Początkowo rozważane są możliwe warianty wzrostu PKB i inflacji w 2020 r., a następnie skoncentrowano się na polityce pieniężnej. W szczególności omówiono decyzje Rady Polityki Pieniężnej z marca i kwietnia 2020 r., a następnie przeanalizowano możliwości wydłużenia horyzontu tej polityki, w szczególności dzięki utrzymywaniu stóp procentowych długoterminowych operacji repo na niższym poziomie niż stopa referencyjna. W tekście wykorzystano koncepcję reversal interest rate. Mimo, że generalnie Autor popiera wydłużanie horyzontu polskiej polityki pieniężnej, to akcentuje ryzyka związane z wdrażaniem niestandardowych instrumentów tej polityki.

Słowa kluczowe: pandemia COVID-19, polityka pieniężna, operacje repo, reversal interest rate, strategia kontroli krzywej dochodowości

* Łukasz Hardt – Faculty of Economic Sciences, University of Warsaw, MPC member.

1. Setting the stage

The Polish economy is facing unprecedented challenges resulting from the COVID-19 pandemic, and hence there is a need for an appropriate economic policy reaction. What is clear and relatively uncontroversial is that we need both fiscal and monetary expansion. Such an approach is now dominant in nearly all countries where central banks are breaking successive taboos in monetary policy, e.g., by opening up the possibility of nearly unrestricted debt purchases, and where fiscal policies often suspend spending rules. This begs the question, how should economic policy be crafted in Poland? In general, this essay focuses solely on monetary policy and asks how monetary expansion should be carried out in Poland.

In 2020, a recession in Poland is inevitable, although the GDP decline should be lower than in many other European countries. Nevertheless, unemployment is expected to rise, and a huge jump in uncertainty is certain to hit investments and private consumption. The future inflation path is less clear. On the one hand, inflation will be constrained by a strong decline in economic activity together with rising unemployment, not to mention low fuel prices. However, on the other hand, all sorts of rumors about the definitive death of inflation should not be taken for granted, since consumers' inflation expectations are still high, food prices are rising as well as prices of basic necessities, global supply chains are interrupted, and thus access to the global product market is limited. Last but not least interest rates are historically low, and fiscal policy is to be more expansionary. As far as inflation is concerned, it should be taken into account that what matters for its level is not only price dynamics but also the structure of the so-called inflation basket. If consumers are now buying more food and less services, and if food prices are on the rise, then real inflation may already be much higher than the one reported by the Central Statistical Office, which reviews the structure of inflation basket only annually. This, of course, has a redistributive dimension because inflation is always more painful for the less well-off, which in the case of Poland is reinforced by a largely degressive income tax. Thus, the economic situation of a huge share of Polish households is likely to worsen in 2020. Therefore, three decades of continuous economic growth have, it seems, come to an end and Polish economic policy has to change its course.

2. Monetary policy reaction

The above has major implications for monetary policy and this essay puts emphasis on that very issue. Here the question is not whether monetary policy should be more expansionary, because certainly it should, but how it should be changed. In other words, monetary expansion can be realised in many different ways. Nevertheless, its goal should be always the one defined by a strategy of medium-term inflation targeting as it is described in the Monetary Policy Guidelines for 2020. The Monetary Policy Council should also take care of macroeconomic and financial stability, in addition to the proper functioning of monetary transmission channels. Thus, now that we are facing such unprecedented economic shock as the one provoked by the COVID-19 pandemic, the National Bank of Poland should use all necessary tools to help the Polish economy. Its tools consist of interest rates, open market operations, required reserve system, standing facilities, foreign exchange swaps, foreign exchange interventions, and bill discount credit. What composition of these instruments should be used by the NBP in the current circumstances? This is the question which should be debated now.

Firstly, the reference interest rate needed to be lowered but not to the extent as it was decided in March and April. We should not forget that what matters for quantity of credit in the economy is not only demand for credit but also its supply, and such a massive interest rate cut strongly reduced the ability of banks to offer new credits. For sure, however, an interest rate cut of 100 basis points helps consumers and businesses to repay loans they already have. However, if a given consumer is to lose their job, or if a given enterprise is to go into bankruptcy, then such "help" does make any difference. What is needed is to strongly support businesses by offering them the so-called "credit vacations" and giving them access to cheap, long-term financing.

Secondly, the NBP has to lower tensions in the financial markets, for instance, by providing liquidity to the banking sector, and hence the decision to lower the required reserve ratio from 3.5% to 0.5%. It could have been lowered even more sharply. A necessary step was also to give the NBP the green light to purchase government bonds on the secondary market as part of the structural operations that change the long-term liquidity structure in the banking sector and contribute to maintaining liquidity in the government bond secondary market. Furthermore, the NBP decided to offer bill discount credit aimed at refinancing new loans granted to economic entities by banks. Lastly, during its April meeting, the MCP made the much needed decision to purchase government securities and government-guaranteed debt securities on the secondary market as part of the structural operations. Apart from these measures, the NBP uses repo transactions to provide liquidity to the banking sector. An important rationale for such operations is to ensure proper functioning of the monetary transmission channels.

3. Going long and not (only) short?

Now, why such a scepticism towards cutting the short-term interest rate by 100 basis points? Here two points need to be raised. Firstly, a nominal reference rate of 0.5%, with the specificities of the Polish banking sector in min, is dangerously close to the so-called reversal interest rate, namely "the rate at which accommodative monetary policy reverses its intended effect and becomes contractionary for lending. [...] the reversal interest rate is not necessarily zero"[1]. Again, in the Polish

[1] M. Brunnermeier, Y. Koby, *The Reversal Interest Rate*, NBER Working Paper Series, 2018, no 25406, p. 1.

context it is above zero. To simplify a bit, the phenomenon of reversal interest rate is partially due to the negative impact interest rate cuts have on banking sector's profitability. Secondly, the goal of any given central bank is to impact the structure of interest rates in such a way so as to maximise the probability of achieving the bank's objectives. In normal times this was done by impacting a short end of yield curve, e.g., by cutting interest rates. However, once a nominal rate is close to zero, or even below, as is the case now in many countries, then controlling the yield curve by impacting its short end only ceased to be easily achieved. Now, effective zero lower bound may in fact be above zero and, for instance, close to the reversal interest rate. Therefore, many central banks have started to be more sympathetic to the so-called yield curve control strategies, and in particular they introduced non-standard instruments in order to directly impact longer interest rates. As J. Yellen once put it:

"The increased relevance of the zero lower bound reflects the fact that the neutral real rate of interest looks to have declined considerably in recent decades [...]. I will instead focus on an approach I consider promising – one that is evolutionary, practical, and has the potential to significantly mitigate the adverse effects of the zero lower bound. I believe the FOMC should seriously consider pursuing a lower-for-longer or makeup strategy for setting short rates when the zero lower bound binds and should articulate its intention to do so before the next zero lower bound episode"[2].

Here J. Yellen just claims that monetary policy authority should keep short rates lower for longer than the rule, e.g., the Taylor rule, would recommend. But what if a given central bank does not have time to wait till such a strategy impacts the whole yield curve in a desired way? In such a situation, it should influence it more directly by introducing instruments which impact the longer cost of money and financial instruments. Here, quantitative easing, including TLTRO by the ECB and bond purchases by FED, serve as good examples. Again as J. Yellen put it: "[...] the Committee turned to asset purchases to help make up for the shortfall by putting additional downward pressure on longer-term interest rates"[3]. Asset purchases by the NBP are going in a same direction. Even if the current recession period in Poland ends, uncertainty will stay with us for years and thus business entities will need cheap financing for the long term. Thus, should the NBP offer banks the same once they use it to provide financial assistance (credit lines) to businesses affected by the COVID-19 pandemic? For instance, why not consider long repo operations, say with maturity of two years and longer, but with a price lower than the one defined by the reference rate? As in the case of TLTRO by ECB, a given bank's access to such operations should be limited by its activity on the credit market. The proposed scheme should be just the credit market for companies and not households. Such long repo operations would be less non-standard than TLTRO operations, since repo measures need collaterals and TLTRO operations do not. Overall, in the current situation, monetary policy by

[2] J. Yellen, *Comments on Monetary Policy at the Effective Lower Bound*, Brookings Papers on Economic Activity 2018, Sept. 13–14.

[3] J. Yellen, *The Economic Outlook and the Conduct of Monetary Policy*, Speech at the Stanford Institute for Economic Policy Research, Stanford University, Stanford, California, on January 19, 2017.

the NBP should be more non-standard, but at the same time with the reference rate higher than the one we have after the March and April cuts. What should be debated also, including in the Polish academic community, is whether we have the following dilemma: due to the fact that the Polish economy is still relatively small and open, its monetary policy cannot be at the same time hugely non-standard and characterised by a reference rate close to effective zero lower bound.

Considering Polish monetary policy going long raises the question of potential dangers of such a move. One risk is that "setting more than one interest rate independently would potentially create arbitrage opportunities across the yield curve"[4]. Here two solutions emerge. First, moving a set of interest rates in tandem would definitely reduce arbitrage opportunities. Second, some additional regulatory measures may be introduced to lower the risk of arbitrage. Nevertheless, lowering long rates by flattening the yield curve may stimulate investments, which, in the presence of the post-COVID19 trauma of uncertainty, will be very much needed. However, via the Philips curve, such a change in the shape of the yield curve may stimulate inflation, but since the Philips curve is relatively flat in the Polish economy we should not be afraid of such a possibility[5]. But still, the NBP should not forget about its main goal, namely keeping inflation under control. All in all, once strong inflation pressure reappears, we should not hesitate to act appropriately.

4. Some concluding remarks

There is, however, one point which should be raised while considering the NBP going long, namely, as the MPC, we should be clear that we would like to go back to normal as soon as possible. In other words, our most normal world is the one in which we do not buy bonds, and we do not use other non-standard instruments. In other words, any signs of the NBP accepting its non-standard instruments as permanent without communicating the conditions of withdrawal from these initiatives may provoke a debate about the independence of the NBP, which in turn may negatively impact the yield curve the NBP is trying to influence. The above is even more urgent keeping in mind the failed attempt to raise rates in January when inflation was well above 4% and other conditions for monetary policy tightening seemed to be met. We do hope that we will be able to go back to normal at the NBP, since a return to everyday, stable monetary policy is a signal that the Polish economy is going back to its pre-COVID-19 growth path. One way of going back to normal may be first to raise the reference rate, and only later to withdraw from asset purchases. Also, a raise in the reference rate can be accompanied by a temporal and conditional introduction of a lower rate for the long-term repo operations described above. On the whole, a debate on whether monetary policy should go long in Poland is much needed.

4 R. Reis, *Central Banks Going Long*, CESifo Working Papers, 2018, no 6998, p. 28.

5 Cf. K. Szafranek, '*Flattening of the New Keynesian Phillips Curve: Evidence for an Emerging, Small Open Economy*, Economic Modelling 2017, vol. 63, pp. 334–348.

References

Brunnermeier M., Koby Y., *The Reversal Interest Rate*, NBER Working Paper Series, 2018, no 25406.

Reis R., *Central Banks Going Long*, CESifo Working Papers, 2018, no 6998.

Szafranek K., *Flattening of the New Keynesian Phillips Curve: Evidence for an Emerging, Small Open Economy*, Economic Modelling 2017, vol. 63, pp. 334–348.

Yellen J., *The Economic Outlook and the Conduct of Monetary Policy*, Speech at the Stanford Institute for Economic Policy Research, Stanford University, Stanford, California, on January 19, 2017.

Yellen J., *Comments on Monetary Policy at the Effective Lower Bound*, Brookings Papers on Economic Activity 2018, Sept. 13–14.

Safe Bank 2 (79) 2020

DOI: 10.26354/bb.3.2.79.2020

Ewa Kulińska-Sadłocha*
ORCID: 0000-0002-8183-6111
Ewa.Kulińska68@gmail.com

Monika Marcinkowska**
ORCID: 0000-0002-3494-9834
monika.marcinkowska@uni.lodz.pl

Jan Szambelańczyk***
ORCID: 0000-0002-4340-5193
Jan.Szambelanczyk@ue.poznan.pl

The impact of pandemic risk on the activity of banks based on the Polish banking sector in the face of COVID-19

Abstract

The aim of the study is to analyze the direct and indirect consequences of the COVID-19 pandemic for the Polish banking sector. We analyzed activities aimed at maintaining the banking sector's ability to finance the economy undertaken by the government, central bank, banking supervision, and banks in Poland, as well as assessed the financial situation of the banking sector in the period preceding COVID-19 and shortly thereafter. We found that anti-crisis measures and interventions were reflected in the financial situation of banks in the first month of their introduction, among others, by a rise in write-offs for provisions for receivables, an increase in other operating costs, or a significant decrease in receivables from debt instruments. The latter being due to the central bank providing additional liquidity to banks. Unfortunately, contrary to the expectations for increased credit availability, banks tightened their lending policy and focused mainly on financing their existing clients who had only temporary financial problems caused by COVID-19. One possible explanation for this is a lack of financial incentives for banks that neutralize an increase in risk and operating costs amid the pandemic (e.g. fiscal), despite the existence of such preferences for Treasury securities.

Key words: bank, banking sector, COVID-19, financial markets, health crisis, pandemic

JEL: G21, G28, I15, O16

* Ewa Kulińska-Sadłocha – Polish Economic Society in Warsaw.
** Monika Marcinkowska – University of Lodz.
*** Jan Szambelańczyk – Poznań University of Economics and Business.

Wpływ ryzyka pandemii na działalność banków na przykładzie polskiego sektora bankowego w trakcie COVID-19

Streszczenie

Celem opracowania jest analiza bezpośrednich i pośrednich konsekwencji pandemii COVID-19 dla polskiego sektora bankowego. Analizie poddano działania mające na celu zachowanie zdolności sektora bankowego do finansowania gospodarki podejmowane przez rząd, bank centralny, nadzór bankowy oraz banki, a także dokonano analizy sytuacji finansowej sektora bankowego w okresie poprzedzającym COVID-19 i po pierwszych antycovidowych działaniach.

Działania i interwencje antykryzysowe znalazły odzwierciedlenie w sytuacji finansowej banków już w pierwszym miesiącu ich wprowadzenia, m.in.: poprzez zwiększenie odpisów na rezerwy na należności, wzrost pozostałych kosztów operacyjnych czy znaczny spadek należności z tytułu instrumentów dłużnych. Ten ostatni na skutek dostarczenia przez bank centralny dodatkowej płynności bankom. Niestety wbrew oczekiwaniom zwiększenia dostępności kredytów – banki zaostrzyły politykę kredytową i skupiły się głównie na finansowaniu swoich dotychczasowych klientów mających jedynie przejściowe problemy finansowe wywołane COVID-19. Wyjaśnieniem tego jest m.in. brak bodźców finansowych dla banków neutralizujących wzrost ryzyka i kosztów działalności w warunkach pandemii (np. fiskalnych), a jednocześnie istnienie takich preferencji dla skarbowych papierów wartościowych.

Słowa kluczowe: bank, sektor bankowy, COVID-19, rynek finansowy, kryzys zdrowotny, pandemia

Introduction

On 30 January 2020, the World Health Organisation (WHO) declared the 2019-nCoV coronavirus, which had first appeared in November 2019 in the Chinese city of Wuhan, an international public health emergency. COVID-19[1] has become a serious threat to human health worldwide and the steps taken by different countries to limit the spread of the virus and manage the pandemic have resulted, among other things, in a sudden drop in economic activity and the deactivation of workers. Restrictions and bans introduced to protect the health and life of the population have contributed to a reduction or loss in income as well as in the ability of businesses and the population to pay their financial obligations. Many governments have created emergency assistance programmes to mitigate the short-term economic impact of the pandemic, and to counteract the economic downturn.

The 2020 pandemic is a health crisis, in some locations even a humanitarian one, and a huge shock to socio-economic systems, including, sooner or later, the banking sector. Although the activity of banks in the first stage of the epidemic was not significantly affected, this situation may change in the subsequent stages, and even after the pandemic has been contained. This concerns in particular the deterioration

[1] In February 2020, the WHO announced, that the official name of the 2019-nCoV (Also known as the Novel Coronavirus or informally known as the Wuhan Coronavirus) will be "Covid-2019".

of the financial situation of customers and contractors, as well as disturbances on the financial markets. With the support of regulators and supervisors, banks can mitigate the negative effects by, for example, taking actions aimed at maintaining or repairing the economy of enterprises, preventing the loss of jobs or income of employees and customers, and, finally, adapting the organisation and activities of banks to the new situation, while maintaining the principles of responsible banking.

The aim of the study is to analyze the direct and indirect consequences of the COVID-19 pandemic for the Polish banking sector. Empirical analyzes were preceded by the characterization of the pandemic and by the periodization and systematization of actions aimed at restoring the stability of the socio-economic system. Then, the interventions of the government, central bank – the National Bank of Poland (Narodowy Bank Polski, NBP), and the Polish Financial Supervision Authority (Komisja Nadzoru Finansowego, KNF) aimed at maintaining the ability of credit institutions to finance the economy at the expense of increased systemic risk as well as bank proposals prepared by the Polish Bank Association (Związek Banków Polskich, ZBP), were inventoried. The time horizon of empirical analyzes ends with data from May 20, 2020, with the monthly financial data of the banking sector published by the NBP and the KNF covering the period back up to March 31, 2020.

1. The impact of the COVID-19 pandemic on socio-economic systems

Historical experience shows that every epidemic, and especially a pandemic[2], similarly to other random events with have a huge impact on the internal, external or even global environment (so called "black swans"), is characterised by both their unpredictability and difficulty in surmounting. Every pandemic is accompanied by growing social unrest, sometimes generating panic among the public and policy-makers[3]. They expose the powerlessness of medicine in the face of a new disease at the same time rapidly and significantly changing the social or economic situation, affecting even the political situation of infected nation/s[4].

2 C. Duncan, S. Scott, *Czarna śmierć epidemie w Europie od starożytności do czasów współczesnych*, Bellona, Warsaw 2020.

3 W.J. Mckibbin, R. Fernando, *The Global Macroeconomic Impacts of COVID-19: Seven Scenarios*, CAMA Working Paper 19/2020, February 2020, https://www.researchgate.net/publication/339658337_The_Global_Macroeconomic_Impacts_of_COVID-19_Seven_Scenarios (access 16.04.2020).

4 A. Havics, *A Look at COVID 19 in terms of 10. Economics*, A Post Paper Summary, 11.04.2020, https://www.researchgate.net/publication/340540337_Havics_A_Look_at_COVID_19_in_terms_of_10_Economics_2020_R3b_040920_Sec (access 26.04.2020); W.J. Mckibbin, A. Sidorenko, *Global Macroeconomic Consequences of Pandemic Influenza*, CAMA Miscellaneous Publications, February 2006, https://cama.crawford.anu.edu.au/sites/default/files/publication/cama_crawford_anu_edu_au/2017-02/26_mckibbin_sidorenko_2006.pdf (access 16.04.2020); G.W. Shannon, J. Willoughby, *Severe Acute Respiratory Syndrome (SARS) in Asia: A Medical Geographic Perspective*, Eurasian Geography and Economics 2004, No 45(5), pp. 371–372.

Scientific studies and specialist reports (e.g. by WHO) indicate links connecting the health of the population with social welfare, economic growth, and social and economic development[5]. The economic impacts of pandemics have been and are being analysed or studied on the global, regional, and even local scale. The focus is mainly on the analysis of economic results, including in particular changes in the volume and dynamics of GDP, various social consequences, as well as the effectiveness of projects undertaken to stop the spread of the disease and to mitigate its negative effects and aversive behaviours[6].

The experience of countries affected by COVID-19 shows that it affects the social and economic systems through[7]:

– a reduction in or slowing down of economic activity (production, distribution, commerce and services) on a macro scale, mainly related to the freezing of the economy and lockdown in certain industries or regions,
– a reduction in the consumption of goods and services as a result of preventive measures and morbidity (deaths, isolation, quarantine, social distancing, lack of access to distribution points, etc.),
– a disruption in the supply chain and the functioning of markets (e.g. due to restrictions or slowdowns in national and international transport, border closures) and a real or expected reduction in the population's income,
– the financial situation of enterprises – as a result of a decrease, postponement or change in the structure of demand, decrease in profitability of operations, liquidity problems related to freezing or delays in economic settlements, debt or increased investment risk,
– perturbations in financial markets (e.g. fall in prices of securities, mainly corporate shares and bonds, changes in interest rates, currency fluctuations, increased risk aversion, speculative actions and insolvency of debtors),
– a smaller stream of taxes and an increase in central and local government spending, leading to a budget deficit and public debt.

[5] D.E. Bloom, D. Canning, J. Sevilla, *The Effect of Health on Economic Growth: Theory and Evidence*, NBER Working Paper No. 8587, Issued in November 2001, https://www.nber.org/papers/w8587.pdf (access 14.04.2020); D.E. Bloom, D. Canning, *Population Health and Economic Growth. Commission on Growth and Development*, Working Paper, No. 24, Washington, DC: World Bank 2008, https://openknowledge.worldbank.org/handle/10986/28036 (access 24.04.2020); *Health and Economic Growth, Findings and Policy Implications*, G. López-Casasnovas, B. Rivera, L. Currais (ed.), The MIT Press 2007; *Macroeconomics and Health: Investing in Health for Economic Development*. Report of the Commission on Macroeconomics and Health, World Health Organization 2001, https://apps.who.int/iris/bitstream/handle/10665/42435/924154550X.pdf;sequence=1 (access 10.04.2020).

[6] *World Bank Group. 2014. The Economic Impact of the 2014 Ebola Epidemic: Short- and Medium-Term Estimates for West Africa.* Washington, DC: World Bank 2014, https://openknowledge.worldbank.org/handle/10986/20592 (access 12.04.2020).

[7] D. Bachman, *The economic impact of COVID-19 (novel coronavirus)*, https://www2.deloitte.com/us/en/insights/economy/COVID-19/economic-impact-COVID-19.html (access 21.03.2020); D. Evans, M. Over, *The Economic Impact of COVID-19 in Low- and Middle-Income Countries*, https://www.cgdev.org/blog/economic-impact-COVID-19-low-and-middle-income-countries (access 20.03.2020); A. Haughton, *Combat The Economic Impact Of COVID-19*, http://jamaica-gleaner.com/article/news/20200325/combat-economic-impact-COVID-19 (access 31.03.2020).

These general trends and patterns coexist with others in some market niches, especially those related to preventing or combating the effects of the pandemic.

The management and containment of the pandemic involves the introduction of a number of restrictions, including international ones, which result in a drop in economic activity and employment as a result of the freezing of the economy (see Table 1). When the economy is frozen, steps are taken to ensure the financial stability of businesses and households, and to improve the chances of a rapid rebound through economic recovery. It is a difficult and complex task to maintain the financial liquidity of companies, without which some of them will not be able to continue their activities. The latter task, with appropriate regulations, concerns the banking sector in particular. Stopping and then gradually reducing peak morbidity and mortality enables selective relaxation of social distancing restrictions and defrosting of the economy. After a pandemic has eased, or management of the spread of the disease has been ensured in a given country, a recovery phase begins.

Making up for lost income is not possible to achieve to the same extent in all sectors, and in many cases proves simply impossible, including tourism, catering, recreation, transport, culture and art. However, retail or manufacturing industries that are able to make up for most of the lost benefits once they resume activity ought to be in quite a different position, provided that consumers will not adopt a saving attitude in case of a relapse. Actions supporting weakened demand by households and entrepreneurs, as well as alleviating the social and economic effects of unemployment caused primarily by the financial situation of employers, are particularly important during unfreezing and after lockdown. All the more so because some entrepreneurs reduce or delay investments, or the use of business support services, not only as a result of shrinking demand, but also due to uncertainty, payment congestion or difficulties in obtaining external financing.

The return of the economy to its pre-pandemic state is conditioned in many ways, and in the pessimistic scenario it may take several years. During this period, many changes are to be expected in the economic, fiscal and budgetary policies as well as in business activities, including business models and strategies. Changes in the structure of consumption needs and social behaviour are similarly highly likely.

One of the basic conditions for *ex ante* crisis management of an epidemic/pandemic is the adoption of different transmission scenarios based on simulation results, both in terms of the number of infected persons and their characteristics, including territorial distribution with disease intensity, and in terms of duration. Analytical methods and instruments based on epidemiological models are available for this purpose, one of the most popular of which is the Susceptible Infected Resistant (SIR) model[8].

[8] COVID-19 transmission is most commonly predicted using one of the simplest epidemiological models – the Kermack-McKendrick SIR model. A. Bartłomiejczyk, M. Wata, *Analizy epidemiologiczne w środowisku matlab/octave*, Zeszyty Naukowe Wydziału Elektrotechniki i Automatyki PG nr 65, Gdańsk 2019, pp. 12–13.

Table 1. Periodisation and systematisation of prevention, anti-pandemic and post-pandemic actions or interventions in the process of stabilizing the socio-economic system

SPECIFICATION	OUTBREAK COUNTRY		CROSS BORDER EXPAN-SION	EPIDEMIC/PANDEMIC			POST-PANDEMIC RECOVERY
PERIOD OF TIME	n_0	n_0+e_0	n_0+e_{0+K}	$n_0 + e_{0+K+L}$			$n_0 + e_{0+K+L+P}$
STAGES	Symptoms	Development	Transfer	Symp-toms	Development & spread	Fighting & blanking	Disappearance & control
FUNCTION OF THE STATE	Guardian of order	Market regulator	Cross--border co-operation	Guardian of order	Market regulator and ultimate insurance / payer of last resort		Guardian of order, facilitator of changes, market regulator
INTERESTS AT STAKE	Life & Health / Continuity of economic activity and effective functioning of the state in various fields						
	-------------	Viability of businesses / Income of shareholders and bondholders / Interest of creditors					
	---				Individual subsistence		-----------------------------------
EPIDEMIC/ PANDEMIC	Monitoring and refraining	Freezing and lockdown	Monitoring and refraining		Freezing and lockdown	Refreezing and release	Back to normality reorganisation
TYPE OF INTE-RVENTION/ ACTIONS	Medical and social preven-tion; resource security & mobilization of anti-epi-demiological potential	Normative limits and restrictions of economic acti-vity and mobili-ty; suspension of institutions and social distancing, curfews	Medical and social prevention; resource security & mobiliza-tion of anti-epide-miological potential; isolation of outbreaks, closing internal and state borders		Normative limits or alleviation of duties under insolvency law, moratoria on contractual obliga-tions, limitation on termination of leases, other restrictions of economic activity and mobility; suspension of institutions, social distancing; state of emergency	Selective adjust-ment of pandemic rigours according to health of the population in regions and states, the effectiveness of medical care and health service infrastructure other refreezing and unlockdown	Removing or mitigating the ef-fects of a pandemic, including coming out of the economic crisis, introducing system reforms conditioned among others by implementing and spread of medical technology that protects against infections as well as gathering financial, human and material resources under political consensus

Table 1 – continued

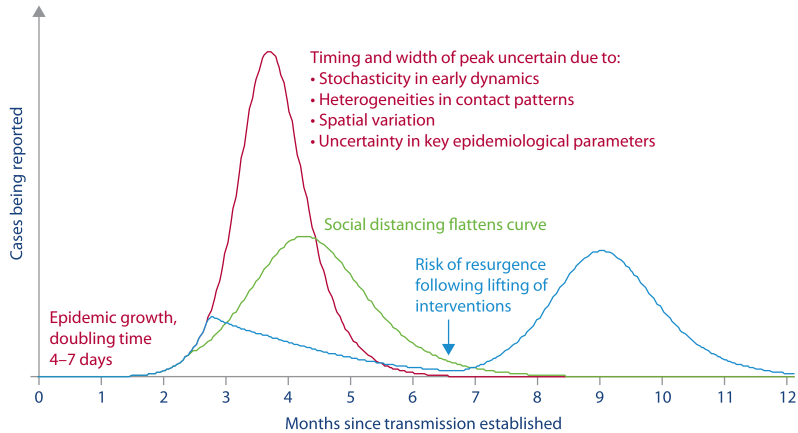
SPECIFICATION	OUTBREAK COUNTRY		CROSS BORDER EXPANSION	EPIDEMIC/PANDEMIC			POST-PANDEMIC RECOVERY
OUTCOMES	Social unrest and pre-crisis behaviour of consumers, employees and employers according to specific circumstances	Segregation of businesses operating in epidemic mood, including remote operating mode and temporarily suspended in operation or closed.	Crossborder and international exchange of epidemic information, coordination and cooperation in actions	Social unrest and pre-crisis behaviour of consumers, employees and employers according to specific conditions	Deliberate segmentation of businesses and institutions operating in epidemic mood, including remote work and suspended (closed); Substituting the market through: bailouts, subsidies, loans, guarantees, direct cash handouts; Economic segregation by profit and loss, including bankruptcies caused by shrinking demand or payment gridlocks; implementing new financial products	Caching the normative effects of restrictions, occupational and economic activity by financial and fiscal help packages as well as public and private stimulatory financing aimed at neutralizing market shocks, both for internal and external (foreign) demand.	Structural and ownership changes due to financial strengths of owners and investors; increasing role of digitization, computerization, Internet, and modified status of indirect production workers, with special attention to remote communication, state budget remediation and increasing role of the public and state entities in social security services; modification of consumption patterns, including housing

Explanations:
n_0 – country outbreak period (for COVID-19 November 2019);
e_0 – epidemic period in the outbreak country (in weeks, months, quarters or years due to specific character (f.e. COVID-19: 1–3 months);
K – spread period to other countries, regions or continents, counted as for e_0, where $K > 0$ (f.e. COVID-19: > 2 months);
L – pandemic period in countries, regions or continents after K period, where $L > 0$ (f.e. COVID-19: 3–6 months);
P – period after K + L (f.e. COVID-19: forecast > 12 months).

Source: own study.

The SIR model has been used in several countries to simulate the development of COVID-19[9]. Three development options for the COVID-19 pandemic, depending on the means of intervention used, are illustrated in Figure 1.

Figure 1. Simulated transmission model of COVID-19



Source: R.M. Anderson, H. Heesterbeek, D. Klinkenberg, T. Deirdre Hollingsworth, *How will country-based mitigation measures influence the course of the COVID-19 epidemic?*, The Lancet, March 2020, vol. 395, pp. 931–935, https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2930567-5 [access 20.04.2020].

The red line in Figure 1 illustrates the course of the pandemic with quarantine as the only measure of control. In this scenario, the number of patients increases rapidly in a short period of time, which leads to a slimmer disease curve and a shorter duration pandemic. The green line reflects the number of infections with various prevention and mild distancing measures in place throughout the epidemic (quarantine, restriction of personal mobility and use of public transport, closure of educational institutions and certain enterprises, ban on mass events). In this prevention scenario, the course of the epidemic is different: the growth in the number of patients is slower, there are fewer patients at the peak of the disease, but the duration of the epidemic is noticeably longer. The blue line assumes very strict

9 A. Atkeson, *What Will Be the Economic Impact of COVID-19 in the US? Rough Estimates of Disease Scenarios*, NBER Working Paper No. 26867, March 2020, https://www.nber.org/papers/w26867 (access 16.04.2020); C.A. De Castro, *SIR Model for COVID-19 calibrated with existing data and projected for Colombia*, 24.03.2020 https://arxiv.org/pdf/2003.11230.pdf (access 16.04.2020); M. Batista, *Estimation of the final size of the coronavirus epidemic by the SIR model*, University of Ljubljana, Slovenia, February 2020, https://www.researchgate.net/publication/339311383_Estimation_of_the_final_size_of_the_coronavirus_epidemic_by_the_SIR_model (access 05.05.2020); Yi-Cheng Chen, Ping-En Lu, Cheng-Shang Chang, Tzu-Hsuan Liu, *A Time-dependent SIR model for COVID-19 with Undetectable Infected Persons*, http://gibbs1.ee.nthu.edu.tw/A_TIME_DEPENDENT_SIR_MODEL_FOR_COVID_19.PDF (access 13.05.2020).

prophylaxis and social distancing for a certain period of time, followed by a rapid alleviation of the restrictions leading to a revival of the epidemic and a significant extension of its duration.

The synthetically characterised scenarios present a range of options for national strategies aimed at combating epidemics. When selecting the right strategy, it is however essential to optimise human and public health losses, as well as the socio-economic costs. In addition, the selection of a corrective measures package will inevitably be influenced by the infrastructure and the health care potential, the condition of state finances and acceptable level of public debt, and, last but not least, the political situation in the country. The latter particularly concerns the authority or political power of the policy-makers. Any change of the epidemic management approach made during the epidemic, especially for non-medical reasons, gives rise to additional complications.

The chosen pandemic development scenario helps appropriately select and implement solutions to prevent or mitigate the health and socio-economic impacts. Historical experience shows that the socio-economic impact of a pandemic varies, depending on the course of the pandemic, including the speed of threat identification, the ways and extent of prevention, the type of mitigation actions taken, considering the available resources, including in particular the competence of staff and the financial resources that can be mobilised.

Despite the controversy about the communicability and effects of 2019-nCoV in terms of health and life[10], the prevailing view is that the scale of national destabilisation caused by COVID-19 exceeds the potential for self-rebalancing without serious consequences for the economy, people's lives and the well-being of society. These consequences can be seen in different sectors, industries or businesses as well as specific population groups or households. This is why the state and its agencies should intervene in a structured manner to cushion or limit the negative consequences of the pandemic[11].

As Table 1 shows, the state's actions in the legislative sphere and the efficiency of the government and its agencies in implementing programmes to reduce the effects of the epidemic play a key role here.

---

10 See initial declarations of disregard for COVID-19 by key policy-makers (Belarus, Brazil, USA, Great Britain). In a broader sense, this relates to supporters of the concept of natural selection of weaker individuals, which can be eliminated from the population by 2019-nCoV. Some form of support for this approach was observed in the natural experiment on the impact of the 2019-nCoV virus on the passengers on board the Diamond Princess cruise ship, where about 20% of the 3,711 passengers and crew members were infected, 10% became ill and 0.16% of the population died.

11 M. Lehmann, *Mothballing the economy and the effects on banks*, [in:] *Pandemic Crisis and Financial Stability*, C.V. Gortsos & W.-G. Ringe (eds.), European Banking Institute 2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3607930 (access 22.05.2020).

2. Channels of influence of COVID-19 on the banking sector

In the secular trend, social and economic development is accompanied by financial deepening or the financialisation of the economy[12]. This is why the financial sector, especially the banking sector, plays an increasingly important systemic role (mobilisation of savings, transformation of term and risk in lending processes, financial settlements, capital investments, financial investment risk hedging). Hence, the stabilisation and efficiency of the financial system, especially of banks, becomes of cardinal importance in crisis situations.

However, the first experiences from the COVID-19 crisis were unprecedented, mainly due to the extent and speed of the spread of the virus in a globalised world and the size and intensity of human mobility before its outbreak (compared to other 'great' pandemics). Although the circumstances surrounding the COVID-19 pandemic do not, in the short term, directly affect banking activities as negatively as other industries (e.g. manufacturing, commerce, transport, tourism and recreation or culture), or as positively (e.g. IT, internet commerce, telecommunications), the risk of its adverse consequences remains relatively high in the long term.

The direct impact of COVID-19 on the activities of banks is related, in particular, to the availability of staff[13], additional expenditure on operations and savings on these activities (see Table 2).

The direct impact of COVID-19 on the activities of banks is short-term in nature and is weakens as the pandemic eases. The consequences may be medium and long term, both for individual banks and for the stability of the banking sector. It is worth noting the changed risk of repayment of loans granted before the pandemic, the specific portfolio risk generated during the pandemic, and the restrictions on business activities. The special laws and regulations adopted under pressure of a potential crisis or catastrophic projections are particularly important here. Moreover, it is important to stress the political pressure or proprietary capacity of the state to financially support economic activity. In general, parliaments, governments, central banks or supervisors with traditional or innovative instruments for stimulating funding and cushioning the risk of banking sector destabilisation have both a direct and indirect impact on banking activity during a pandemic.

[12] R. Boyer, *Do Globalization, Deregulation and Financialization Imply a Convergence of Contemporary Capitalisms?* INCAS DP Series, Discussion Paper Series 2018 #09; G.F. Davis, S. Kim, *Financialization of Economy*, Annual Review of Sociology 2018, Vol. 41; M. Ratajczak, *Państwo a finansjalizacja*. Bezpieczny Bank 2020, no 1(78), pp. 9–20.

[13] Juggling childcare and professional duties is quite a challenge. Because of the coronavirus, half of the mothers are forced to cope with the dual role, according to a study conducted for the BIG InfoMonitor Debtor Register. One in two mothers admit that it causes them serious difficulties, and that taking care of children and a professional career at the same time leads to stress and anxiety about their position in the company. Still, working mothers classify cleaning and shopping, and not professional duties, as the most tiring chores. *Pracę i opiekę nad dzieckiem łączy połowa mam.* https://media.bik.pl/informacje-prasowe/516055/prace-i-opieke-nad-dziecmi-laczy-w-pandemii-polowa-mam-nie-jest-latwo (access 25.05.2020).

Table 2. The short-term impact of the COVID-19 pandemic on banking activities

Limited employee availability					Additional expenditure on banking activity				Cost savings in banking activity							
Absence			Risk aversion													
Lockdown[a]	Quarantine	Childcare exemptions	Emigration of foreign nationals	Other[b]	Epidemiological prevention and protection of operators	Remote working equipment for employees	Higher IT costs[c]	Other	Better use of e-banking potential	Lower media and infrastructure operating costs	Lower mission expenses	Lower material costs	Forced leave	Lower HR costs	Other	

[a] – restricting or freezing local, regional, national and foreign labour mobility
[b] – increasing the number of sick leave days for coexisting diseases etc.
[c] – including securing communication with employees working remotely using public computer networks and the Internet, mitigating the increased risk of hacker or fraudster attacks
Source: own study.

Many banks are quite well prepared to deal with the current situation due to the experience of previous crises and reforms introduced on that basis, including restrictive prudential regulations and a supervisory infrastructure. Cooperation between regulators and supervisors and banks and financial institutions allows for quick reactions, including the provision of liquidity by the central banks. On the other hand, the financial standing of individual banks at the pandemic outbreak stage, the structure and quality of assets, and, above all, the economic situation of customers, will have a considerable impact on the diversification of the post-pandemic situations. This primarily concerns key borrowers, as well as the scale of losses incurred by other debtors. Thus, processes on both domestic and foreign financial markets[14] will be crucial. Confusion in the functioning of businesses and households will be particularly important, specifically in the following aspects:

[14] Financial markets were the first to react to media reports on COVID-19. An increase in the risk associated with the uncertainty about the infectivity and mortality of the new virus, as well as the expected economic slowdown and fall in profits, have resulted in a sharp fall in the prices of securities

- deterioration in the financial situation of companies leading to bankruptcy, caused by reduced use of production or service capacity, as well as price changes in commodity markets – as a result of a disruption to the supply chain, administrative closures or restrictions on activity, restrictions and delays in deliveries and domestic or foreign payments, social distancing forcing workers to stay at home[15], dramatic fall in consumption of certain goods and especially services (e.g. tourism and recreation, gastronomy, transport), fall in prices of raw materials (e.g. oil, copper, iron)[16],
- deterioration of the financial situation of households – as a result of a reduction or loss of income from work (e.g. resulting from reduced activity, temporary closure or bankruptcy of the employer, reduced wages),
- change in consumer and business moods and expectations leading to delay or cessation of investments and changes in the structure of consumer demand caused directly or indirectly by the pandemic or change in consumer preferences,
- deterioration in the sentiment of financial investors in global and domestic financial markets, a decrease in risk aversion or even panic, outflow of capital to less risky regions, sudden fall in security prices, changes in exchange rates, reduction in lending and/or increase in lending costs (debt market).

In the absence of spectacular bank failures, with the efficiency of deposit guarantee systems or resolution authorities, the bank run risk is relatively low. Nonetheless, banks that are relatively weakly capitalised, especially those based on short-term deposits in financing long-term loans, will face challenges in maintaining their deposit bases.

3. The general situation of the Polish banking sector and instruments for cushioning the effects of the pandemic

In the period immediately preceding the COVID-19 pandemic, the Polish banking sector was in a relatively good condition, although market processes and the nature of fiscal and regulatory burdens resulted in a relatively high diversification of the banks' situations, especially in terms of the profitability of operations and legal risk related to the so-called franchise loans[17].

(between 19 February and 23 March the S&P 500 index lost more than a third of its value and the Dow Jones Industrial Average went down by 36%). Capital has been moved towards safer assets as well as relatively safe places/countries/regions.

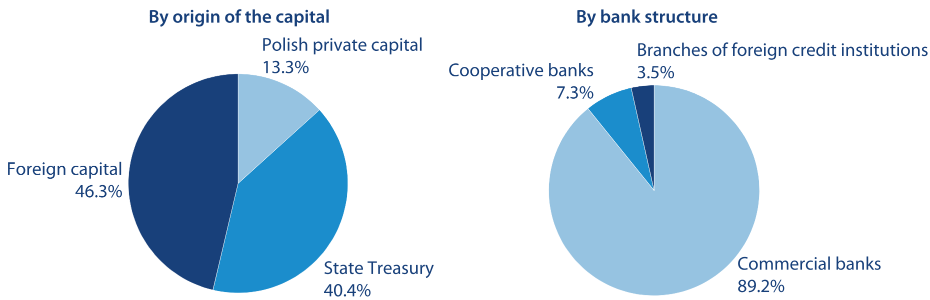
15 The travel ban has caused problems in the tourism and transport industry, restaurants and shops were closed, and many companies decided to lower wages or dismiss employees. Lending to the most vulnerable industries has become very risky.

16 The IMF's raw material price index has decreased by more than 21% over the last two months (from 119 points in January 2020 to 93 points in March 2020).

17 In November 2019, the Court of Justice of the European Union (CJUE) delivered a judgement in connection with questions referred for a preliminary ruling by the District Court of Warsaw concerning EU Directive 93/13 on unfair terms in consumer contracts. Having considered those questions, CJUE provided two solutions. First of all, a court may annul a credit agreement if it is convinced that the

At the end of February 2020, just before the pandemic, there were 598 banks operating in the Polish banking sector, including: 30 commercial banks, 535 cooperative banks (of highly diversified size and organisational structure)[18] and 33 branches of credit institutions (foreign banks). The banks had almost 156,000 employees and a network of more than 12,200 offices (branches, subsidiaries, agencies, representative offices). Over 40% of the banking sector's assets are held by 8 state-controlled commercial banks (see Figure 2).

Figure 2. Structure of the banking sector in Poland by asset value [as at 29 February 2020]



Source: Monthly data for the banking sector as at 29 February 2020, PFSA, https://www.knf.gov.pl/?articleId=56224&p_id=18 (access 13.05.2020).

The Polish banking sector is characterised by a great diversity of banks with regard to the scope of activities, organisation, as well as assets and capital – for example the balance sheet total of the smallest bank in the sector at the end of 2019 was PLN 27.9 million (a cooperative bank), while for the largest bank it was PLN 348,044 million (a commercial bank controlled by the State Treasury). At the end of December 2019, the banking sector generated a profit of PLN 14,230 million. 19 banks reported a loss of PLN 715 million (4 commercial banks and 15 cooperative banks). The net financial result at the end of February 2020 was 58.8% higher than the result achieved at the end of February 2019. Eleven banks, including 7 commercial banks and 4 cooperative banks, reported losses (PLN 184 million in total).

agreement cannot remain valid when the abusive clauses are eliminated. Secondly, a national court may uphold the agreement if performance thereof can continue after unacceptable indexation provisions are removed. In the event of unfavourable national court judgements, the consequences of the CJUE judgement for banks, according to the estimates of the Polish Bank Association, may reach even PLN 60 billion.

[18] In the entire period following the political transformation in Poland, cooperative banks have had a small but stable share in the banking market: assets approx. 7%, net result approx. 10%, loans 6%, and deposits from the non-financial sector approx. 10%. They operate the most extensive network of outlets (about 29% of all banking outlets in the country, employing about 21% of all banking sector employees). Moreover, they have a 32% share in deposits and 40% share in loans to local government units, and about a 58% share in lending to farmers.

The volume of loans for both enterprises and households in the first two months of 2020 increased by PLN 16.9 billion, and the volume of deposits by PLN 7.9 billion. However, the share of non-performing receivables in receivables from the enterprise and household sectors improved slightly compared to the end of 2019, mainly as a result of a decrease in non-performing receivables in the enterprise sector.

Taking into account the financial ratios, at the end of February 2020 the Polish banking sector enjoyed a relatively good financial situation: banks were solvent, and on average they had a high liquidity ratio, a low level of financial leverage, with an average profitability above the EU average. Despite the overall positive situation, several banks require the attention of their owners and supervisors and the readiness of the safety net link to use deposit guarantee or resolution instruments. This is particularly the case with distressed cooperative banks, which have very low or no emergency shareholder capital raising potential. The situation may prove equally dangerous in commercial banks with a relatively high share of the so-called franchise loans burdened with legal risk.

In Poland, the first COVID-19 case was recorded on 4 March 2020, and then the Polish government took drastic measures to combat the spread of the pandemic by freezing most business activity, closing down all educational facilities, schools and universities, cultural establishments, restaurants, and most shops, reintroducing border controls, restricting or banning entry into the country, and suspending international rail and air transport. The population was ordered to stay at home and avoid going out unless necessary under the penalty of high fines. Similarly to stock exchanges in the USA and other European countries, the Warsaw Stock Exchange recorded the most prominent one-day decline in its history – the WIG 20 index fell by 13.3%, and WIG by 12.6%[19]. Initially, the demand for cash increased.

Following the announcement of the pandemic by the WHO, the banking sector experienced significant cash withdrawals by customers fearing sanitary restrictions being put in place and lack of access to the money accumulated in their accounts. The value of currency in circulation has been increasing steadily and grew by 23% from the beginning of the year to mid-May this year (see Figure 3). Due to previously accumulated buffers, no threat to banks' liquidity occurred. In some branches of banks and ATMs, temporary operational problems have arisen, related to delays in the delivery of cash from the logistic centres of banks and cash handling companies. The situation has stabilised after a few days and withdrawal amounts have decreased, although they remained at higher levels[20].

[19] WIG Index – Warsaw Stock Exchange Index has been calculated since 1991 and includes shares of companies listed on the main market. WIG20 is the index of the 20 largest joint stock companies listed on the Warsaw Stock Exchange.

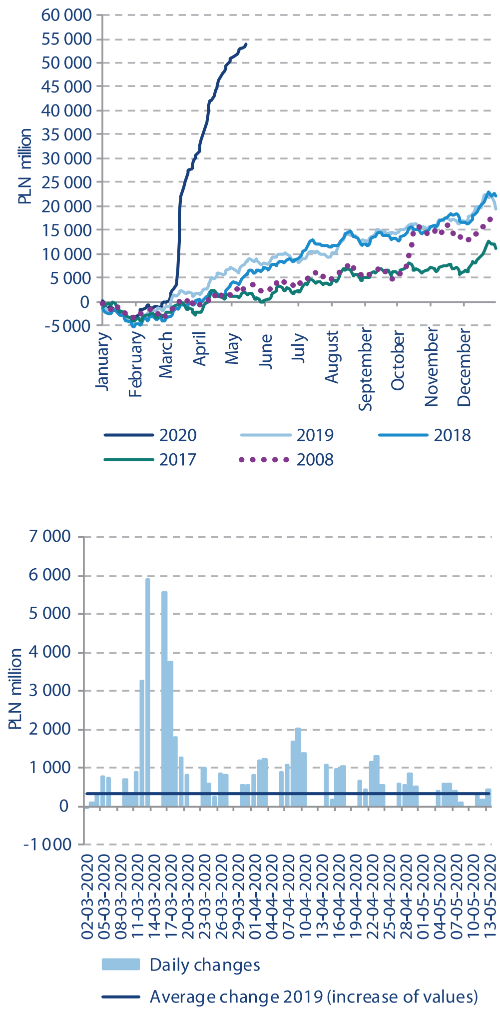
[20] Poles were recovering long-term deposits, and this was mainly due to the panic caused by the rumours that the government would freeze bank accounts similar to Cyprus' practice during the global financial crisis. *Polacy wystraszyli się plotek o niewypłacalności banków*, https://www.money.pl/pieniadze/polacy-wystraszyli-sie-plotek-o-niewyplacalnosci-bankow-nbp-na-rynku-przybylo-51-mld-zl-w-gotowce-6515725102798977a.html (access 31.05.2020).

Table 3. Quantitative characteristics of the banking sector in Poland

Specification	Data as at				
	31/12/2019	29/02/ 2020	Growth rate	31/03/2020	Growth rate
	1	2	3=2:1	4	5=4:2
Balance sheet total (PLN million)	1,992,124	2,047,036	+ 2.76%	2,110,675	+ 3.11%
Loans to enterprises (PLN million)	383,200	389,268	+ 1.58%	401,599	+ 3.17%
Share of non-performing loans in loans to enterprises	8.50%	8.23%	- 0.27 p.p.	8.34%	+ 0.11 p.p.
Loans to households (PLN million)	740,007	750,492	+ 1.42%	759,036	+ 1.14%
Share of non-performing loans in loans to households	5.70%	5.75%	+ 0.05 p.p.	5.81%	+ 0.06%
Share of non-performing receivables in receivables from non-financial sector	6.66%	6.60%	- 0.04 p.p.	6.69%	+ 0.09 p.p.
Debt instruments (PLN million)	457,788	507,671	+ 10.9%	490,634	- 3.36%
Household deposits (PLN million)	832,668	849,039	+ 1.97%	863,392	+ 1.69%
Enterprise deposits (PLN million)	429,626	421,307	- 1.94%	435,274	+ 3.32%
ROE – calculated for 12 consecutive months	6.85%	7.12%	+ 0.27 p.p.	6.13%	- 0.99 p.p.
ROA – calculated for 12 consecutive months	0.72%	0.75%	+ 0.03 p.p.	0.64%	- 0.11 p.p.
TCR – Total Capital Ratio	19.1%	19.1%	NC	19.1%	NC
LCR – Liquidity Coverage Ratio	156.7%	162.7%	+ 6 p.p.	163.8%	+ 1.1 p.p.
Net interest margin	2.63%	2.63%	NC	2.63%	NC

Source: based on: *Financial data of the banking sector*, https://www.nbp.pl/home.aspx?f=/statystyka/ pieniezna_i_bankowa/naleznosci.html (access 20.05.2020); Monthly data of the banking sector, https://www.knf.gov.pl/?articleId=56224&p_id=18 (access 20.05.2020).

Figure 3. Currency in circulation: daily cumulative changes (upper panel) and daily changes since the beginning of March 2020 (lower panel)



Source: Financial Stability Report. Special Issue: impacts of the COVID-19 pandemic. NBP June 2020, p. 47, https://www.nbp.pl/en/systemfinansowy/fsr202006.pdf (access 15.06.2020).

The first pandemic development scenarios for Poland assumed that the pandemic would last slightly longer than in China (i.e. just over 3 months)[21].

At the end of March, compared to February 2020, total assets and loans to enterprises had increased by more than 3%, but the growth of loans to households was approx. 2 p.p. lower. On the other hand, the share of non-performing receivables in receivables from the non-financial sector increased. The decrease in receivables was caused by a decrease in the central bank's debt instruments (as a result of providing liquidity to the banking sector). ROE and ROA calculated for 12 consecutive months deteriorated, which denoted a 17.4% drop in the financial result compared to February 2020 and as much as 48.5% compared to March 2019. The analysis of the structure of the profit and loss account for the banking sector allows us to conclude that this decrease was caused primarily by an increase in provisions for receivables (57.5% compared to March 2019; 144.6% compared to February 2020). In March, as compared to February 2020, the operating profit of banks increased by 49.6%; including interest income by 50.9% and fee and commission income by 56.8%. At the same time, as compared to March 2019, net interest income increased by 6.8%, net fee and commission income by 11.5%, and operating income slightly decreased by 0.6% (due to an increase in other operating expenses). Yet another, third NBP interest rate cut in May 2020, as well as regulations concerning maximum loan costs, will be reflected in the financial results of the banks in the following months. And even though banks reduced deposit interest rates after the second interest rate cut (April 2020) to such a level as to preserve and even increase margins, the third cut in the reference rate to 0.1% has prevented such intentions.

The COVID-19 threat has been addressed by governments as well as the EU and national financial supervisors[22]. On 30 March, the Polish government presented a package of solutions aimed at protecting the economy and citizens from the effects

[21] M. Ważna, *Kiedy zakończy się pandemia koronawirusa SARS-CoV-2? Sprawdzamy, co mówią naukowcy,* https://www.medonet.pl/koronawirus/to-musisz-wiedziec,kiedy-zakonczy-sie-pandemia-koronawirusa-sars-cov-2--sprawdzamy--co-mowia-naukowcy,artykul,49208922.html (access 10.04.2020).

[22] Statements, guidelines and opinions for supervised financial market entities have been issued by: the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA). For the banking sector, the EBA issued: *EBA statement on actions to mitigate the impact of COVID-19 on the EU banking sector,* 12 March 2020, https://eba.europa.eu/eba-statement-actions-mitigate-impact-COVID-19-eu-banking-sector (access 05.04.2020); *Statement on the application of the prudential framework regarding Default, Forbearance and IFRS9 in light of COVID- 19 measures*, 25 March 2020, https://eba.europa.eu/eba-provides-clarity-banks-consumers-application-prudential-framework-light-COVID-19-measures (access 05.04.2020); *Statement on actions to mitigate financial crime risks in the COVID-19 pandemic, Statement on dividends distribution, share buybacks and variable remuneration, Statement on supervisory reporting and Pillar 3 disclosures in light of COVID-19*, 31 March 2020, https://eba.europa.eu/eba-provides-additional-clarity-on-measures-mitigate-impact-COVID-19-eu-banking-sector (access 05.04.2020); *Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis,* 02 April 2020, https://eba.europa.eu/regulation-and-policy/credit-risk/guidelines-legislative-and-non-legislative-moratoria-loan-repayments-applied-light-COVID-19-crisis (access 05.04.2020).

of the pandemic, i.e. the so-called anti-crisis shield[23], which had been extended or modified three times by the end of May 2020. Liquidity measures of the NBP were incorporated in the anti-crisis shield. As part of the solutions for ensuring the availability of financing, the NBP has:

- cut interest rates three times,
- reduced the required reserve ratio from 3.5% to 0.5%,
- introduced a programme for the purchase of financial assets (Treasury bonds, Treasury guaranteed bonds and Treasury bills) on the secondary market as part of structural open market operations (PLN 55 billion worth of Treasury bonds were purchased in March),
- introduced modifications to repurchase operations in order to adjust the amount of money to the needs of the economy,
- launched a discount credit program for refinancing loans granted to entrepreneurs by banks.

Proposals by European Union institutions were reflected in solutions proposed by the Polish Financial Supervision Authority (KNF) aimed at preserving the sector's ability to finance the economy[24]. These in some cases included delaying the implementation of prudential regulations, and in others allowed for a relaxation of prudential standards generating an increase in banking risk (Table 4).

[23] The anti-crisis shield is based on five pillars: 1) protection of workplaces and employee safety, 2) financing of entrepreneurs, 3) health protection, 4) strengthening of the financial system, 5) public investments. The estimated value of the support is PLN 212 billion (approx. 10% of GDP).

[24] SSP – Supervisory Stimulus Package for Security and Development to support the banking sector. https://www.knf.gov.pl/dla_rynku/Koronawirus_informacje_dla_podmiotow_nadzorowanych (access 06.04.2020).

Table 4. Description of supervisory solutions for the banking sector in Poland in response to COVID-19

Purposes	Means of implementation
Group 1 : Provisions and classification of credit exposures	
– maintaining the banks' ability to meet the customers' financial needs – creating a foundation for solutions protecting indebted customers – reducing the negative impact of provisions and write-offs/ write-downs on the financial situation of banks – enabling banks to take advantage of the overall pandemic situation in their relations with clients and external institutions	– no obligation to reclassify credit exposures for entities from industries particularly affected by the pandemic (micro, small and medium-sized enterprises and individuals, including those who have lost their jobs) in the event of a change in the loan repayment schedule – delayed implementation of Recommendation R *concerning the principles of credit risk management and recognition of expected credit losses* – postponed implementation date for Recommendation S *concerning good practices in the management of credit exposures backed by mortgages* until 30 June 2021 – extension of loan collateral utilisation dates for the purpose of reducing the specific reserve basis – extension of the group of 'special credit repayment guarantees' applicable to customers who have become temporarily uncreditworthy (to include guarantees from state institutions) – introduction of regulations allowing banks to extend loan maturity or otherwise modify the terms of loans to SME customers
Group 2: Capital buffers	
– enabling banks to offer their customers shielding solutions – maintaining banks' ability to finance customers	– revocation of the systemic risk buffer – supervisory acceptance of temporary bank operations below the combined buffer requirement – supervisory authorities allowing changes in the structure of the add-on Pillar 2 Requirement (P2R) and enabling fulfilling this requirement to a lesser extent by Tier 1 (CET1) equity – declaration that the KNF will considered the possibility of using or reducing another systemically relevant institution's buffer (the O-SII buffer) – recommendation to retain all the profit generated by the banks in 2019 (including non-payment of dividends)
Group 3: Liquidity standards	
– customer service and money circulation while maintaining depositors' security	– a case-by-case supervisory approach to the liquidity buffer (also when the bank's LCR falls below regulatory standards)

Table 4 – continued

Purposes	Means of implementation
Group 4: Ongoing supervision	
– banks to focus on customer service and key processes as well as current operations	– limitation or suspension of supervisory activities that burden banks in terms of personnel or organisation, including inspections – deferral of supervisory reporting obligations (e.g. review outside reporting obligations, collecting information for supervisory review and assessment) – supervisory authorities taking the pandemic into account when deciding on postponements and updates to recovery plans and other obligations by banks – deferring the deadline for banks to comply with the EBA guidelines on outsourcing

Source: own study based on information from: https://www.knf.gov.pl/en/MARKET/Coronavirus_Information_for_supervised_entities (access 20.04.2020); Regulation of the Minister of Finance of 16 April 2020 amending the Regulation on the principles of creating provisions for the risk related to the activity of banks, Journal of Laws of 17 April 2020, item 687; Act of 16 April 2020 on special support instruments in connection with the spread of SARS-CoV2, Journal of Laws of 17 April 2020, item 695; Act of 31 March 2020 amending the Act on special measures related to the prevention, neutralisation and combating of COVID-19, other infectious diseases and the consequent crisis situations, Journal of Laws of 31 March 2020, item 568; Act of 2 March 2020 on special measures related to the prevention, neutralisation and combating of COVID-19, other infectious diseases and the consequent crisis situations and certain other acts, Journal of Laws of 7 March 2020, item 374; Regulation of the Minister of Finance of 18 March 2020 repealing the Regulation on the systemic risk buffer, Journal of Laws of 18 March 2020, item 473.

In addition, legislative changes have been made in order to:

- enable remote management of companies, including: participation in management board meetings, supervisory board meetings, shareholders' meetings, and general meetings using electronic means of communication[25],
- extend the reporting deadlines, including in terms of preparation, approval and publication of annual financial statements, deadline for submission of issuers' quarterly reports, deadline for holding a general shareholders' meeting[26],
- extend the deadlines for preparing and submitting tax settlements for 2019[27],
- allow the suspension of time limits in judicial or administrative proceedings, also conducted by the KNF[28].

[25] Act of 31 March 2020 amending the Act on special measures related to the prevention, neutralisation and combating of COVID-19, other infectious diseases and the consequent crisis situations and certain other acts, Journal of Laws of 31 March 2020, item 568, Article 27.

[26] Regulation of the Minister of Finance of 7 April 2020 on setting new deadlines for the performance of certain reporting and information obligations, Journal of Laws of 7 April 2020, item 622.

[27] Regulation of the Minister of Finance of 31 March 2020 on the extension of deadlines for preparing and submitting certain tax information, Journal of Laws of 31 March 2020, item 563.

[28] The deadlines for administrative proceedings conducted by the PFSA were unfrozen on 25 May 2020. *Komunikat ws. „odmrożenia" terminów w postepowaniach administracyjnych prowadzonych przez Ko-*

A number of solutions to help borrowers with financial difficulties were also proposed by the Polish Bank Association (ZBP). Within the framework of the existing regulations and the financial instruments made available by the public sector, the banks have taken measures to support their customers, for example by offering:

- the option to defer (suspend) the repayment of interest or capital instalments (leasing instalments, factoring fees) for up to 6 months for both individual clients and enterprises due to their difficult financial situation caused by the COVID 19 pandemic,
- extension by 6 months of financing for enterprises (renewal of working capital and transaction loans), who were creditworthy at the end of 2019, were affected by COVID-19, and whose financing agreement will expire in the coming months – at their request,
- free submission and processing of applications and simplification of procedures – remote submission of applications, no need to submit additional documents and certificates,
- financing for micro and SME enterprises with the use of commission-free de minimis guarantees from the State Bank Gospodarstwa Kredytowego through 'special collaterals', which constitute 80% of the loan amount,
- accepting micro and SME applications for support, 50% of which is a financial subsidy,
- distribution of national and EU funding to support businesses, farmers and local authorities affected by COVID-19,
- increasing credit card and contactless payment limits.

In addition, in March 2020 the ZBP put forward a proposal to change or temporarily reduce the external burden due to the need to mitigate the effects of the COVID-19 pandemic. These included:

- transferring of 50% of the tax on financial institutions paid by banks to the Bank Guarantee Fund (Bankowy Fundusz Gwarancyjny, BFG),
- suspending, for a minimum of 1 year, the application of bank tax on exposures to customers whose business has been affected by the coronavirus, as well as on assets held by banks in the NBP (deposits, nostro, money bills),
- creating an asset management fund (from the fees paid to the BFG to date), the aim of which would be to help banks with financial difficulties resulting from the coronavirus pandemic, to counteract the spread to other banks in the Polish banking sector,
- adapting prudential solutions for banks to the ongoing pandemic,
- creating sub-portfolios of coronavirus-affected loans in banks and allowing banks to periodically reduce the level of provisions/write-offs/write-downs for this portfolio,
- suspending the Act on payment backlogs in terms of tax consequences.

misję Nadzoru Finansowego, https://www.knf.gov.pl/knf/pl/komponenty/img/Komunikat_ws_odmrozenia_terminow_w_postepowaniach_administracyjnych_prowadzonych_przez_KNF.pdf (access 20.05.2020).

4. The impact of COVID-19 instruments on banks in Poland

Banks are not willing to take on excessive risk or additional costs[29] and try to minimise the pandemic-related effects of a possible insolvency of borrowers[30]. This assessment results partly from information obtained by the NBP from a survey conducted among chairpersons of credit committees[31]. Banks tightened their credit policies in all customer segments as early as March 2020 (see Table 5) and focused mainly on supporting customers with a stable business model and, in the lender's opinion, have only temporary financial problems caused by COVID-19[32]. Such a strategy was also conditioned by the decision of the Monetary Policy Council to reduce interest rates, which entailed the reduction of the maximum interest rate on credit cards debt (reference rate plus 3.5%) and consumer loans with a variable interest rate [2 x (reference rate plus 3.5%)]. In addition, an algorithm for calculating the cost of consumer credit and its maximum limit (the total non-interest-bearing costs of consumer credit may not exceed 45% of the value of the credit) has been introduced[33]. Thus, the sale of new loans has become less profitable for banks.

The main reason for tightening bank lending policies was the risk of a deteriorating economic situation in Poland and an increase in NPL (non-performing loans). As far as enterprises are concerned, in the first quarter of 2020 banks reported a weakening demand for loans to large enterprises. On the other hand, the demand for loans to SMEs varied between banks. The banks' projections for the second quarter of 2020 show a significant drop in demand for loans for all enterprises (also

[29] However, this leads to new regulations, which sometimes strongly affect the banks' finances. The government's draft act on the so-called shield 4.0 provides for the possibility of suspending the repayment of capital and interest at the request of persons who lose their jobs or other main source of income for a period of 3 months without any validity date, as well as the possibility of verifying the situation of the borrower or the purpose of the loan. Banks estimate that the costs of this solution may range from PLN 1 to 1.5 billion. The concept of suspending loan agreements is unknown in Polish law and has tax implications for the beneficiary. At the same time, if operational issues are not solved, an obligation may be imposed on banks to create provisions for past due receivables.

[30] D. Szymański, *Banki robią to, przed czym ostrzegano od dawna. „Musimy się zabezpieczyć"*, publication date 16 April 2020, https://businessinsider.com.pl/firmy/zaostrzanie-akcji-kredytowej-trudniej-o-kredyt-w-banku-analiza-polityki-insight/qcvbjlx (access 13.05.2020).

[31] The survey was conducted in mid-April 2020 among 24 banks with a total share of loans to enterprises and households in the banking sector portfolio of 87%.

[32] According to the data of the Credit Information Bureau (Biuro Informacji Kredytowej, BIK), as at May 25, 2020, the amount of suspended liabilities on account of loans of individual customers and micro-enterprises constituted approx. 10% of the value of the banking sector credit portfolio. However, the suspension of credit instalments does not always involve a simultaneous extension of the loan period. In 1/3 of cases, the loan service period remains unchanged, while in the remaining cases it is extended, usually by 3 months. *BIK raportuje strukturę zawieszenia (odroczenia) spłaty rat kredytowych*, https://media.bik.pl/informacje-prasowe/518015/bik-raportuje-strukture-zawieszenia-odroczenia-splaty-rat-kredytowych (access 28.05.2020).

[33] Act of 31 March 2020 amending the Act on special measures related to the prevention, neutralisation and combating of COVID-19, other infectious diseases and the consequent crisis situations and certain other acts, Article 8d.

due to tightened lending criteria)[34]. In the case of loans to households, the demand for residential mortgages increased in the first quarter, while the demand for consumer loans decreased. The second quarter is expected to see a steep decline in demand for loans to households[35]. Moreover, none of the surveyed banks envisage relaxing the credit policy, all of them plan to tighten it even further – in the case of loans to households to a significant extent.

Table 5. Changes in bank lending policies related to the effects of the COVID-19 pandemic

Loans to enterprises	Loans to households
– reduced maximum loan amount – increased credit collateral requirements – suspension of granting new loans to companies with unsatisfactory financial results at the end of 2019 – limited lending to companies in industries most vulnerable to the pandemic (e.g. tourism, catering and accommodation, transport, sport and recreation, culture and entertainment, commerce, car and car part sale and manufacturing) – increased risk monitoring for companies from industries dependent on imports from China (e.g. chemical, automotive, furniture, pharmaceutical, electronics and home appliances).	– increased borrower's own contribution for residential mortgage – increased credit margin and collateral requirements – increased fees and commissions for consumer loans – reduced maximum loan amount and period for consumer loans, – suspended new lending to the self-employed, especially in the sectors most affected by the pandemic (services, transport, commerce, advertising, marketing) – limited financing of foreign entities.

Source: based on: *Senior loan officer opinion survey on bank lending practices and credit conditions,* 2nd quarter 2020, NBP Financial Stability Department, Warsaw, April 2020, https://www.nbp.pl/en/systemfinansowy/kredytowy2_2020_en.pdf (access 16.05.2020); M. Kunica, *O kredyt będzie trudniej. "Czas beztroskiego konsumeryzmu w Polsce się skończył" – ostrzega prezes największego banku w Polsce*, 4 April 2020, https://businessinsider.com.pl/ finanse/makroekonomia/prezes-pko-bp-zbigniew-jagiello-o-kryzysie-zwiazanym-z-koronawirusem-COVID-19/5rrfdg4 (access 20.04.2020).

Interestingly, there is a conflict of interest related to the government's desire to develop lending activities that support economic activity during the pandemic and recovery from the recession caused by the COVID-19 pandemic, but also to tightening of bank lending policy, due to the reduction of their profitability with increasing risk and, at the same time, the calculation of bank tax on asset value.

[34] With the exception of short-term loans to large companies, where the demand is expected to increase.

[35] Especially since, in the case of mortgage loans, banks increased own contribution already in March, e.g. PKO Bank Polski and Pekao Bank Hipoteczny increased own contribution from 10% to 20%, ING Bank Śląski from 20% to 30%, and Bank Ochrony Środowiska temporarily requires as much as 40% of own contribution.

Last but not least, the almost figurative level of interest rates – after the last reduction of the NBP reference rate to 0.1% – places many small cooperative banks in a very difficult position, as their income depends mostly on interest income indexed to reference rates. Moreover, the focus on serving local leisure and recreation businesses (e.g. in seaside or mountain resorts) from client portfolios during lockdown will have a significant impact, at least in the short term, on the banks' financial situation. According to experts' assessments, in a relatively short period of time this will result in crisis consolidation in the cooperative banking sector.

Final remarks

Both scientific research and practical experience show that a crisis management system comprising at least four components is of paramount importance for the course and consequences of a pandemic. The first component concerns the preparation well in advance of the necessary material and human resources, especially staff with appropriate competences (knowledge, skills, attitudes), and implementation procedures resulting from the anticipated variant scenarios. The second one involves advanced monitoring of the situation on a local, regional and national scale, and efficient exchange of information under cross-border arrangements, and on an international and global scale. The third one is the readiness and responsibility of national policy-makers and international bodies to respond promptly and appropriately to information or warnings about epidemiological risk. The fourth one concerns cooperation and collaboration on a global scale in preventing and combating the pandemic. Unfortunately, this knowledge was not properly used to prevent the pandemic, so that the 2019-nCoV coronavirus virus infected the global village at an unprecedented rate.

Despite the fact that since the global financial crisis of the first decade of the 21st century the level of capital and liquidity in Polish banks, almost unaffected at that time, has far exceeded the regulatory and prudential minima, and the results of stress tests carried out in recent years have shown that banks are basically immune to negative external shocks that may slow down economic growth, it is difficult to assess at this stage of the pandemic whether this is a sufficient to ensure survival through a recession and potential crisis without external assistance. However, unlike during the global financial crisis, the impact of COVID-19 on socio-economic systems and on the stability of the banking system only marginally depends on banks.

The factors limiting the negative consequences of social distancing restrictions on banks' operations are primarily the computerisation of operations and a relatively high level of development of electronic banking, which, unlike in many other sectors, allows for the relatively undisturbed provision of financial services. It is difficult to clearly estimate the balance of savings and additional expenditure due to pandemic regulations and special operating conditions. Similar conditions can be observed in the assessment of possible changes in work organisation and productivity[36].

The direct impact of the pandemic on banks is short-term in nature and will cease as the pandemic expires. However, the experience of the banks' activity under the pandemic regime may stimulate serious changes in their functioning in the long term (e.g. change of business model, segmentation of employment with separated remote work posts, strengthening and development of remote communication with customers, popularisation of non-cash trade, reduction of costs of operating traditional infrastructure or other overheads). The analyses carried out show that the solutions applied to induce banks in Poland to provide liquidity or financing to businesses and households do not bring the expected results. They are largely focused on the NBP's operations in providing liquidity to the banking sector through repurchase transactions or purchase operations of Treasury securities and Treasury guaranteed debt securities. Considering the very good liquidity of the banks, this is a pre-emptive measure to stabilise and limit the scale of a potential liquidity crisis. However, the actions taken by the government lack incentives for banks to increase lending. This includes mitigating the negative impact of loans with a high pandemic-related risk on the banks' wealth and financial situation, e.g. by reducing the tax burden. This encompasses a reduction of the bank tax base for exposures to customers whose activities have been affected by COVID-19 or the inclusion of specific provisions for receivables from this group of customers as deductible costs. In a certain sense relatively low social capital in Poland is one of the barriers to the effectiveness of the adopted stimulus packages. As a consequence, there are solutions that increase transaction costs (formal requirements and regulatory failures), including extended funding acquisition periods.

Different courses of the epidemic in particular regions of the country or voivodeships may be a premise not only for the appropriate withdrawal of restrictions and unfreezing of the social and economic system, but also for profiling of the banks' credit policy towards borrowers from the given areas.

The pessimistic scenario involves a recurrence of the pandemic due to inadequate responses in terms of the pace and extent of lifting restrictions and prevention procedures, including social distancing (without adequate medical resources, especially a vaccine) resulting in a decision to re-freeze the socio-economic system. Such a scenario can be considered disastrous for the national financial system, including banks in Poland. However, a question arises as to whether, in the event of a relapse of an epidemic/pandemic, policy-makers would introduce similarly restrictive solutions.

[36] For example: in Poland, new or additional employee duties resulting from the distribution of benefits under aid schemes and packages adopted by Parliament were not compensated for by a fee or compensation for such services.

References

Anderson RM., Heesterbeek H., Klinkenberg D., Deirdre Hollingsworth T., *How will country-based mitigation measures influence the course of the COVID-19 epidemic?*, The Lancet, March 2020, vol. 395, https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2930567-5 (access 20.04.2020).

Atkeson A., *What Will Be the Economic Impact of COVID-19 in the US? Rough Estimates of Disease Scenarios*, NBER Working Paper No. 26867, March 2020, https://www.nber.org/papers/w26867 (access 16.04.2020).

Bachman D., *The economic impact of COVID-19 (novel coronavirus)*, https://www2.deloitte.com/us/en/insights/economy/COVID-19/economic-impact-COVID-19.html (access 21.03.2020).

Bartłomiejczyk A., Wata M., *Analizy epidemiologiczne w środowisku matlab/octave*, Zeszyty Naukowe Wydziału Elektrotechniki i Automatyki PG no 65, Gdańsk 2019.

Batista M., *Estimation of the final size of the coronavirus epidemic by the SIR model*, University of Ljubljana, Slovenia, February 2020, https://www.researchgate.net/publication/339311383_Estimation_of_the_final_size_of_the_coronavirus_epidemic_by_the_SIR_model (access 05.05.2020).

Bloom D.E., Canning D., Sevilla J., *The Effect of Health on Economic Growth: Theory and Evidence*, NBER Working Paper No. 8587, Issued in November 2001, https://www.nber.org/papers/w8587.pdf (access 14.04.2020).

Bloom D.E., Canning D., *Population Health and Economic Growth. Commission on Growth and Development*, Working Paper, No. 24. World Bank, Washington, DC: World Bank 2008, https://openknowledge.worldbank.org/handle/10986/28036 (access 24.04.2020).

Boyer R., *Do Globalization, Deregulation and Financialization Imply a Convergence of Contemporary Capitalisms?* INCAS DP Series, Discussion Paper Series 2018, #09.

Davis G.F., Kim S., *Financialization of Economy*, Annual Review of Sociology 2015, Vol. 41, pp. 203–221.

De Castro C.A., *SIR Model for COVID-19 calibrated with existing data and projected for Colombia*, 24.03.2020 https://arxiv.org/pdf/2003.11230.pdf (access 16.04.2020).

Duncan C., Scott S., *Czarna śmierć epidemie w Europie od starożytności do czasów współczesnych*, Bellona, Warsaw 2020.

Havics A., *A Look at COVID 19 in terms of 10. Economics*, A Post Paper Summary, 11.04.2020, https://www.researchgate.net/publication/340540337_Havics_A_Look_at_COVID_19_in_terms_of_10_Economics_2020_R3b_040920_Sec (access 26.04.2020).

Health and Economic Growth, Findings and Policy Implications, G. López-Casasnovas, B. Rivera, L. Currais (ed.), The MIT Press, 2007.

Lehmann M., *Mothballing the economy and the effects on banks*, [in:] *Pandemic Crisis and Financial Stability*, C.V. Gortsos & W.-G. Ringe (eds.), European Banking Institute 2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3607930 (access 22.05.2020).

Mckibbin W.J., Fernando R., *The Global Macroeconomic Impacts of COVID-19: Seven Scenarios*, CAMA Working Paper 19, February 2020, p. 7.

https://www.researchgate.net/publication/339658337_The_Global_Macroeconomic_Impacts_of_COVID-19_Seven_Scenarios (access 16.04.2020).

Mckibbin W.J., Sidorenko A., *Global Macroeconomic Consequences of Pandemic Influenza*, CAMA Miscellaneous Publications, February 2006, https://cama.crawford.anu.edu.au/sites/default/files/publication/cama_crawford_anu_edu_au/2017-02/26_mckibbin_sidorenko_2006.pdf (access 16.04.2020).

Ratajczak M., *Państwo a finansjalizacja*, Bezpieczny Bank 2020, nr 1(78), pp. 9–22.

Shannon G.W., Willoughby J., *Severe Acute Respiratory Syndrome (SARS) in Asia: A Medical Geographic Perspective*, Eurasian Geography and Economics 2004, 45(5), pp. 371–372.

Senior loan officer opinion survey on bank lending practices and credit conditions, 2nd quarter 2020, NBP Financial Stability Department, Warsaw, April 2020, https://www.nbp.pl/en/systemfinansowy/kredytowy2_2020_en.pdf (access 16.05.2020).

Yi-Cheng Chen, Ping-En Lu, Cheng-Shang Chang, Tzu-Hsuan Liu, *A Time-dependent SIR model for COVID-19 with Undetectable Infected Persons*, http://gibbs1.ee.nthu.edu.tw/A_TIME_DEPENDENT_SIR_MODEL_FOR_COVID_19.PDF (access 13.05.2020).

World Bank Group. 2014. The Economic Impact of the 2014 Ebola Epidemic: Short- and Medium-Term Estimates for West Africa. Washington, DC: World Bank 2014, https://openknowledge.worldbank.org/handle/10986/20592 (access 12.04.2020).

Macroeconomics and Health: Investing in Health for Economic Development. Report of the Commission on Macroeconomics and Health. World Health Organization 2001, https://apps.who.int/iris/bitstream/handle/10665/42435/924154550X.pdf;sequence=1 (access 10.04.2020).

Press and special articles

Evans D., Over M., *The Economic Impact of COVID-19 in Low- and Middle-Income Countries*, https://www.cgdev.org/blog/economic-impact-COVID-19-low-and-middle-income-countries (access 20.03.2020).

Haughton A., *Combat The Economic Impact Of COVID-19*, http://jamaica-gleaner.com/article/news/20200325/combat-economic-impact-COVID-19 (access 31.03.2020).

Kunica M., *O kredyt będzie trudniej. „Czas beztroskiego konsumeryzmu w Polsce się skończył" – ostrzega prezes największego banku w Polsce*, 4 April 2020, https://businessinsider.com.pl/finanse/makroekonomia/prezes-pko-bp-zbigniew-jagiello-o-kryzysie-zwiazanym-z-koronawirusem-COVID-19/5rrfdg4 (access 20.04.2020).

Polacy wystraszyli się plotek o niewypłacalności banków, https://www.money.pl/pieniadze/polacy-wystraszyli-sie-plotek-o-niewyplacalnosci-bankow-nbp-na-rynku-przybylo-51-mld-zl-w-gotowce-6515725102798977a.html (access 31.05.2020).

Szymański D., *Banki robią to, przed czym ostrzegano od dawna. „Musimy się zabezpieczyć"*, publication date 16 April 2020, https://businessinsider.com.pl/firmy/zaostrzanie-akcji-kredytowej-trudniej-o-kredyt-w-banku-analiza-polityki-insight/qcvbjlx (access 13.05.2020).

Ważna M., *Kiedy zakończy się pandemia koronawirusa SARS-CoV-2? Sprawdzamy, co mówią naukowcy*, https://www.medonet.pl/koronawirus/to-musisz-wiedziec,kiedy-zakonczy-sie-pandemia-koronawirusa-sars-cov-2--sprawdzamy--co-mowia-naukowcy,artykul,49208922.html (access 10.04.2020).

Legal documents

Regulation of the Minister of Finance of 16 April 2020 amending the Regulation on the principles of creating provisions for the risk related to the activity of banks, Journal of Laws of 17 April 2020, item 687.

Regulation of the Minister of Finance of 7 April 2020 on setting new deadlines for the performance of certain reporting and information obligations, Journal of Laws of 7 April 2020, item 622.

Regulation of the Minister of Finance of 18 March 2020 repealing the Regulation on the systemic risk buffer, Journal of Laws of 18 March 2020, item 473.

Regulation of the Minister of Finance of 31 March 2020 on the extension of deadlines for preparing and submitting certain tax information, Journal of Laws of 31 March 2020, item 563.

Act of 16 April 2020 on special support instruments in connection with the spread of SARS-CoV2, Journal of Laws of 17 April 2020, item 695.

Act of 31 March 2020 amending the Act on special measures related to the prevention, neutralisation and combating of COVID-19, other infectious diseases and the consequent crisis situations and certain other acts, Journal of Laws of 31 March 2020, item 568.

Act of 2 March 2020 on special measures related to the prevention, neutralisation and combating of COVID-19, other infectious diseases and the consequent crisis situations, Journal of Laws of 7 March 2020, item 374.

Internet sources

BIK raportuje strukturę zawieszenia (odroczenia) spłaty rat kredytowych, https://media.bik.pl/informacje-prasowe/518015/bik-raportuje-strukture-zawieszenia-odroczenia-splaty-rat-kredytowych (access 28.05.2020).

Financial data of the banking sector, https://www.nbp.pl/home.aspx?f=/statystyka/pieniezna_i_bankowa/naleznosci.html [access 20.05.2020].

Monthly data for the banking sector as at 29 February 2020, PFSA, https://www.knf.gov.pl/?articleId=56224&p_id=18 (access 13.05.2020).

EBA statement on actions to mitigate the impact of COVID-19 on the EU banking sector, 12 March 2020, https://eba.europa.eu/eba-statement-actions-mitigate-impact-COVID-19-eu-banking-sector (access 05.04.2020).

Financial Stability Report. Special issue: impacts of the COVID-19 pandemic. NBP June 2020, https://www.nbp.pl/en/systemfinansowy/fsr202006.pdf (access 15.06.2020).

Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis, 02 April 2020, https://eba.europa.eu/regulation-and-policy/credit-risk/guidelines-legislative-and-non-legislative-moratoria-loan-repayments-applied-light-COVID-19-crisis (access 05.04.2020).

Komunikat ws. „odmrożenia" terminów w postępowaniach administracyjnych prowadzonych przez Komisję Nadzoru Finansowego, https://www.knf.gov.pl/knf/pl/komponenty/img/Komunikat_ws_odmrozenia_terminow_w_postepowaniach_administracyjnych_prowadzonych_przez_KNF.pdf (access 20.05.2020).

Pracę i opiekę nad dzieckiem łączy połowa mam, https://media.bik.pl/informacje-prasowe/516055/prace-i-opieke-nad-dziecmi-laczy-w-pandemii-polowa-mam-nie-jest-latwo (access 25.05.2020).

Statement on actions to mitigate financial crime risks in the COVID-19 pandemic, Statement on dividends distribution, share buybacks and variable remuneration, Statement on supervisory reporting and Pillar 3 disclosures in light of COVID-19, 31 March 2020, https://eba.europa.eu/eba-provides-additional-clarity-on-measures-mitigate-impact-COVID-19-eu-banking-sector (access 05.04.2020).

Statement on the application of the prudential framework regarding Default, Forbearance and IFRS9 in light of COVID- 19 measures, 25 March 2020, https://eba.europa.eu/eba-provides-clarity-banks-consumers-application-prudential-framework-light-COVID-19-measures (access 05.04.2020).

Supervisory Stimulus Package for Security and Development to support the banking sector, https://www.knf.gov.pl/dla_rynku/Koronawirus_informacje_dla_podmiotow_nadzorowanych (access 06.04.2020).

Safe Bank 2 (79) 2020

DOI: 10.26354/bb.4.2.79.2020

Simone Boccaletti*
ORCID: 0000-0002-6972-5005
simone.boccaletti@unimib.it

Paola Bongini*
ORCID: 0000-0003-2288-7442
paola.bongini@unimib.it

Camilla Buzzacchi*
ORCID: 0000-0003-0145-0508
camilla.buzzacchi@unimib.it

Doriana Cucinelli*
ORCID: 0000-0002-1649-5437
doriana.cucinelli@unimib.it

The Italian economic and institutional system in a pandemic situation

Abstract

This paper provides a first assessment of the effect of the COVID-19 emergency on the Italian economy. The impact of the pandemic is analyzed from three points of view: the institutional settings and the differences in power between the central and local governments; the impact on the real economy and sectoral differences; the role of the banking sector in supporting the real economy during and after the crisis. The paper highlights how the pandemic affected Italian regions and sectors differently, and presents policy consideration regarding the European banking sector.

Key words: bank, banking system, COVID-19, Italian economy, regions, sectoral differences

JEL: E01, E58, G01, G17, G21, H12, H51, H72, I15, I18

Włoski system gospodarczy i instytucjonalny w sytuacji pandemii

Streszczenie

Artykuł zawiera wstępną ocenę wpływu pandemii COVID-19 na włoską gospodarkę. Wpływ pandemii analizowany jest z trzech punktów widzenia: otoczenia instytucjonalnego i różnic między władzami centralnymi oraz lokalnymi; wpływu na realną gospodarkę i różnic sekto-

* Simone Boccaletti, Paola Bongini, Camilla Buzzacchi, Doriana Cucinelli – University of Milano-Bicocca.

rowych; roli sektora bankowego we wspieraniu realnej gospodarki podczas kryzysu i po nim. Podkreślono w jaki sposób pandemia wpłynęła na włoskie regiony i sektory gospodarki, oraz rozważono kwestie polityki europejskiego sektora bankowego.

Słowa kluczowe: bank, COVID-19, gospodarka Włoch, regiony, różnice sektorowe, system bankowy

Introduction

Italy was the first European country to be severely hit by what is nowadays acknowledged as the COVID-19 pandemic, started in. The first cases of the COVID-19 emergency were registered on January, 31, 2020, when a couple of Chinese tourists resulted positive to the test in Rome, while the first case of a positive Italian citizen was announced on February, 6, 2020, a man repatriated from Wuhan.

Since then Italy was the first western country to experience massive intensive care unit (ICU) admissions in specific regions of the country and a generalized lockdown of social and economic activities that lasted for three whole months and is nowadays seeing some forms of relaxation.

This study aims at providing the first assessments about the Italian institutional, economic and financial situation in the midst of this pandemic while analyzing how Italy is coping with the ongoing medical and economic crisis. This is one of the first academic studies specifically addressing the issue of the pandemic from the point of view of a single, most affected country, embracing a 360 degree vision, i.e. not limited to a specific economic sector[1] or to a review and comparison of other pandemics of the past[2].

1. The numbers of the emergency

After the first cases of the COVID-19 emergency in Italy were registered the number of sick people accelerated exponentially until the end of April.

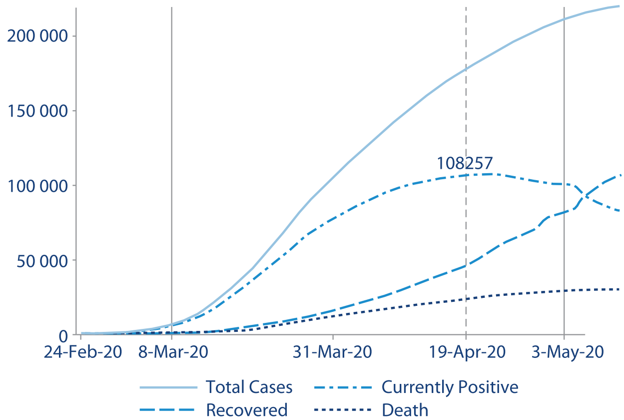
In particular, starting from the beginning of February, two important clusters were registered in Lombardy and Veneto: in order to contrast this outbreak, on February 23, when the number of cases exceeded 100, the government imposed the quarantine on eleven municipalities. By the end of the month, the total number of registered cases surpassed 1,000 (with nearly half of them being in Lombardy) and 14 regions out of 20 have registered at least 1 case of COVID-19, signalling that the diffusion of the virus represented a national problem. Therefore, on March 8, the Italian government intervened more harshly to restrain and contrast the diffusion of the virus, extending the quarantine on the whole region of Lombardy and other

[1] T. Laing, *The economic impact of the Coronavirus 2019: implications for the mining industry*, The Extractive Industries and Society, 2020.

[2] J.W. Goodell, *COVID-19 and finance: agendas for future research*, Finance Research Letters, 2020.

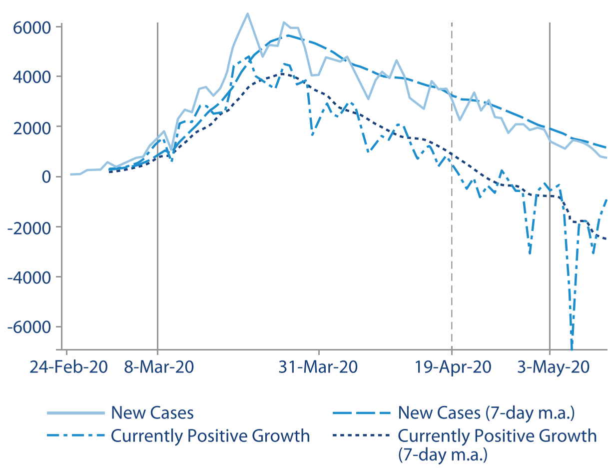
14 provinces. In the following days, the containment measures have been extended to the whole national territory, and, on March, 21, the Prime Minister announced the closure of any production activity that was not strictly necessary, crucial, indispensable for essential goods and services until April 3, 2020. Afterwards, the government extended the period of restrictions in force until May 3, 2020. On May 4, 2020, the so-called "phase 2" began, that is a gradual easing of the previous containment measures. At the beginning of phase 2, there were still 100,179 positive cases, over 210,717 total cases confirmed.

Figure 1. The numbers of the emergency



Reference lines on March, 8, 2020, and on May, 3, 2020 (the end of the so-called "phase-1").
Source: Italian Ministry of Health.

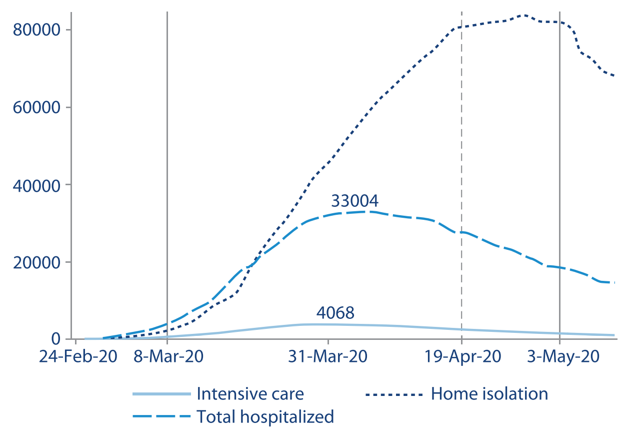
Figure 2. The number of the emergency (daily change and moving averages)



Reference lines on March, 8, 2020, and on May, 3, 2020 (the end of the so-called "phase-1").
Source: Italian Ministry of Health.

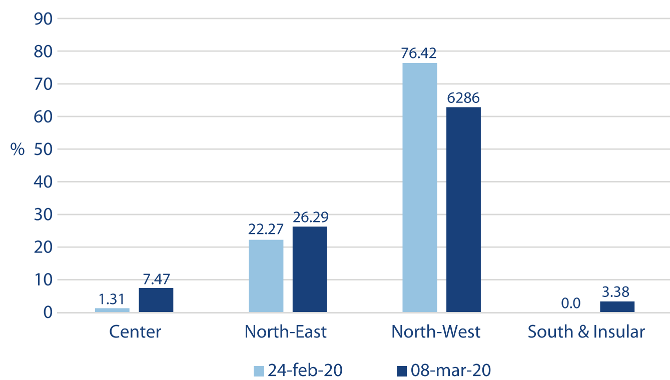
The maximum number of currently positive cases was reached in late April, two months after the outbreak of the disease, as happened in China. However, on a day-by-day distribution, the peak was reached much earlier, in late March (Figure 2). With these trends, it is by no means difficult to understand why the national health system was overwhelmed as if a tsunami was raging. In a number of regions, the directive was to stop and delay non-urgent visits, focusing only on COVID-19 restraint, containment and recovery. A huge effort was done in order to create new intensive care rooms and to create ad-hoc sites (in the hospitals or even in the close outside) in order to check potential cases and manage the positives.

Figure 3. The burden on the national health system



Reference lines on March, 8, 2020, and on May, 3, 2020 (the end of the so-called "phase-1").
Source: Italian Ministry of Health.

Figure 4. The differences in the diffusion of COVID-19 between macro-areas in Italy



Source: Italian Ministry of Health.

The diffusion of COVID-19 was not homogeneous across regions, since the very beginning of the emergency. It is quite clear that the diffusion of the virus followed different patterns in regions. What it is still missing is the answer to the question "Why did this happen?".

Overall, between March and May 2020, three peaks of the diffusion of COVID-19 in Italy can be identified. The first one is the maximum of the currently positive cases, which was registered on April, 19, 2020. The second one is the peak of new cases and of new positive cases, on a daily basis, that was reached in late March. The last one, that is connected to the burden on the national health system, was reached in early April. Moreover, at the beginning of the crisis, the diffusion of the COVID-19 was homogeneous across regions and the recovery is following a different pace as well, which makes more difficult for the Government to decide if and when to "open borders" across Italian regions.

2. The emergency from an institutional point of view

From an institutional point of view, the COVID-19 emergency was addressed under the constitutional framework, which allows decisions in exceptional situations without alteration of the ordinary division of powers while recognizing a specific role to the Italian Regions. Therefore, it is interesting to analyze the system of public responsibilities in order to focus on what powers are held by the different levels of government and how the health crisis has been dealt with. From 1970 Italian Republic is a pluralistic system, based on the presence of Municipalities and Regions, exercising relevant public functions, which should receive a central coordination. Regions have the same capacity of the State to adopt legislative acts, whereas Municipalities have only administrative functions. Therefore, administration is by and large carried out at a level of proximity to the citizen: this is a very valuable choice, yet the good functioning of services deeply depends on a high degree of coordination, as already stated. This coordination has not often worked properly in the past: we can argue that the (historical) difficult relationship between the central power and the local governments caused very serious effects in the present situation of emergency, as the adoption of not coherent decisions at all levels was the reason of an evident ineffective management of the crisis itself.

In a situation of crisis, the first step undertaken by the Italian Council of Ministers on January 31, 2020 was the declaration of "the state of emergency", following the WHO's declaration of a 'Public Health Emergency of International Concern' on January 30, 2020. After this declaration, the Italian Government adopted a series of decrees, whose initial purpose was to establish a wide range of limitation of civil rights, so as to force citizens to respect a period of quarantine. On May 13, 2020 the Government adopted a new decree containing a wide range of economic measures aimed at providing financial support to businesses, workers and families.

The extraordinary situation has raised some problems with regard to the measures concerning civil rights, as it was clear – exactly as anywhere else – that there was the necessity to limit the circulation of people – citizens and also foreigners – and their ordinary life. The decrees that put a halt to economic and leisure activities, transfers, schooling and religious services were not always accepted passively by municipalities and Regions: the local institutions repeatedly adopted decisions in opposition to the national rules, in some cases further restricting citizens' freedom, in other cases allowing behaviors prohibited by the State. The result was a great sense of unease for the citizens, who followed this confusing production of rules with discomfort having difficulties with their accomplishment. As a matter of fact, the health emergency offered the Regions an amazing occasion to affirm their role and to distance themselves from the approach of the national institutions. Loyal cooperation failed in many cases[3] whereas it should be the ordinary way to manage the relationship between local and central government. Such a situation was not totally unexpected, as the loyal cooperation between decentralized and central powers has always been practiced with difficulty: the present phase would have required a special effort to develop a dialogue among the different levels of government, but this failed to take place, and the most serious consequences appeared in the perspective of the healthcare system.

Indeed, the main challenge was faced by the health authorities, who had to adopt extraordinary solutions so as to treat a huge number of very serious cases[4]. The Italian Constitution provides that the right to health protection is guaranteed through a regional organization, although the State maintains significant functions for the correct working of the National Health Service. The Regions have the task to organize the healthcare whereas the State has the duty to determine the financial resources necessary to the 21 regional systems and to define the so called "essential levels" of the healthcare system, whose purpose is to assure the principle of equality. The aim is to guarantee a homogeneous standard of protection all over the country, even though each Region has the possibility to offer a higher level of healthcare if it has the economic resources to deliver it.

In this regard, the different models of organization of each regional health systems played a particular role. The Regions did not offer the same solutions to COVID-19 infection, which caused little damage in Southern Regions whereas it provoked a high number of deaths and infected people in the Northern part of Italy. In some Regions, the healthcare is assured through a complex system of home-care services, which requires a wide network of health facilities that offer assistance on the territory. Other Regions have developed hospitals and structures aimed at treating people far from home: in these Regions, the structures of hospitalization appeared

3 C. Buzzacchi, *Rifinanziamento della sanità pubblica e Mes: un caso di liaisons non così tanto dangereuses*, http://www.lacostituzione.info/ (access 24.04.2020).

4 C. Buzzacchi, *Coronavirus e territori: il regionalismo differenziato coincide con la zona "gialla"*, http://www.lacostituzione.info/ (access 02.03.2020).

not sufficient, and therefore there was a great effort to provide, in very short time, the buildings – sometimes military tents – and the services needed.

When the most acute phase was over, the great issues which continued to cause troubled relationships between the State and the local institutions concerned how to manage the restart of all activities. In a country where the infection had had an uneven diffusion on the one hand; and the distribution of masks, viral and antibody testing, which seemed to be lacking, on the other side, the great need was to govern the recovery with clear and reasonable rules. Many Regions appeared to rush into the restart, especially to let the sectors of industry and tourism resume: their decisions, adopted in opposition to the national decrees, were followed by litigation before the judges, and once more the evidence was of an institutional system with great difficulties to manage the emergency. In addition, everywhere the supply of masks and tests seemed not to be enough, and it was not clear who should take responsibility, if the State or Regions. Such a state of confusion and disorganization had obviously serious effects on prevention and on the orderly return to everyday life, although at the same time people had great expectations towards the Government, trusting that it would allocate a proper amount of resources in order to overcome the situation of hardship.

In order to collect the huge amount of resources necessary for this task the Italian Government had to ask the Parliament twice to deliberate the budget variation[5]: this was deemed necessary to comply with the European fiscal rules and art. 81 of the Italian Constitution, which provide the "balanced budget rule". Deficit spending can occur only in "exceptional circumstances", which refer to the "case of an unusual event outside the control" of the State concerned "which has a major impact on the financial position of the general government or to periods of severe economic downturn", according to art. 3 of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union of 2012. After the authorization granted by the Parliament, the Government planned to access to several sources of liquid assets: the Pandemic Emergency Purchase Program (PEPP) launched by the ECB, the new temporary asset purchase program of private and public sector securities to counter the serious risks to the monetary policy transmission mechanism; the delivery of European guarantee by EIB, whose goal is to support the real economy up to 200 billion €, following the Eurogroup's recommendation and the European Council's endorsement to include the EIB's proposal into the joint EU response package; and the financial assistance which became available with the European Mechanism of Stability after the removal of the conditionality criteria. All the resources are expected to limit the consequences of the severe economic crisis following the pandemic; yet the economic effects were not the only damage felt, as there are some critical issues whose solution is not merely financial.

[5] C. Buzzacchi, *Scostamento di bilancio da Coronavirus*, http://www.lacostituzione.info/ (access 13.03.2020).

Among these issues the most critical is probably that concerning schooling. The decision to keep only distance activities, with great sacrifice of learning and socialization, is expected to have serious effects on the future prospects of the country. The cultural urgency is going to be not less dangerous than the risks of unemployment and poorness: it will generate further poorness if young people cannot receive the right level of education. The challenge to face concerns a new model of education, and the hope is that institutions and private actors of the society will dedicate the correct amount of attention and efforts to this goal.

3. COVID-19 and the real sector

In the fourth quarter of 2019, the euro-area economy observed a general slowdown[6]. On average, the real EU GDP growth was almost unchanged: the contractions in the manufacturing sectors and in net-exports was counterbalanced by a positive contribution by domestic demand. On a different path stood Italy, which in the same period observed a reduction in GDP growth. Table 1 shows that, after three quarters of positive (though mild) increment, the GDP decreased by -0.3%, also implying a growth of 0.3% on a yearly basis. In particular, unlike the average euro-area performance, Italy observed a reduction in the domestic demand, partially mitigated by foreign trade. In fact, total imports observed a reduction of 1.74%, which was not enough to cover the reduction in domestic demand.

Table 1. Contribution to GDP growth in 2019

	2019Q1	2019Q2	2019Q3	2019Q4
GDP growth[a]	0.23%	0.11%	0.06%	-0.30%
National Consumption	-0.10%	0.00%	0.23%	-0.19%
Households Consumption	-0.07%	0.01%	0.32%	-0.21%
Government spending	-0.18%	0.00%	-0.07%	-0.11%
Gross fixed investments	1.99%	-0.15%	0.00%	-0.14%
Total imports	-2.68%	0.70%	1.05%	-1.74%
Total Exports	-0.48%	0.76%	-0.24%	0.33%

[a] growth rates are expressed as a percentage change with the previous period. The growth rate of GDP refers to chain-lined volumes adjusted for seasonal and calendar effects.
Source: Istat.

[6] ECB Economic Bulletin 2020, 2.

Although the fourth quarter of 2019 was not positive, forecasts for the next three years were more encouraging. In particular, in January 2020, the GDP growth projections[7] were 0.5% in 2020, 0.9% in 2021 and 1.1% in 2022. Those forecasts were mainly due to an expected support from the domestic demand and from an expected recover in the world trade. Investments were expected to rise, although with lower rates than in previous years: on one hand, low interest rates and favourable lending conditions were supposed to increase investments; on the other hand, uncertainty on trade policies were supposed to reduce firms' incentive to invest.

In sum, even though the Italian economy registered a stop in the last months of 2019, it was expected to recover and gradually strengthen in the next three years.

Impact of the emergency on the whole economy

Table 2 shows projections for the output growth and world-trade volumes growth by the International Monetary Fund (IMF) as published in the World Economic Outlook of April 2020. The projections reveal a 3% drop in world GDP, heavily unbalanced towards advanced economies that will not be recovered by 2021. According to those forecasts, Italy will observe a contraction of 9.1% of its GDP in 2020, much higher than the average loss in the euro-area, while a recover in 2021, in which it is expected a GDP growth of 4.8%, in line with the euro-area. The contraction of 2020 is due to the result of the first two quarters, while in the second part of the year a small recovery is expected, if and only if there is a relax in the containment measures (already started at the beginning of May.

The firms started to face slowdowns since late February, when the two clusters in the North of Italy were discovered and containments measures started. In particular, a survey conducted by Confindustria between February and March 2020, i.e. at the beginning of the emergency[8], on nearly 4.3 thousand firms, highlighted that two thirds of the respondents claimed that the spread of COVID-19 had an impact on their activity, with regional and sectoral differences[9].

Survey signalled two main problems: input acquisition and the slowdown on the demand side. In particular, the 21.7% of firms reported both problems, while 5.7% just the first one, and 28.7% only the second one. A second wave of the survey (Confindustria, 2020b) was run in April, after the strict containment measures adopted at the end of March: results were much more shattering. Almost the totality of respondents reported an impact on their activity (97.2%), with almost half of them delineating bad scenarios, i.e. they cannot reach yearly objectives and/or they will need to restructure/downsize the firm (in the previous wave less than 15% reported those scenarios). After the closure of non-essential activities, more

7 Bank of Italy, Forecasts are based on data available at 13 January 2020.
8 Confindustria, *Risultati relativi all'indagine sugli effetti del COVID-19 per le imprese italiane*, 2020.
9 Sectoral differences are depicted in the next sub-section.

than 70% of the firms interviewed reported that they had to close or partially close their activity. Micro and Small firms are the ones suffering the most: with respect to normal activity. Other important problems that firms faced were the difficulty to find sanitary material and, more importantly, the shortage of financial liquidity.

Table 2. IMF economic projections on real GDP growth and world trade volumes

		Projections	
Output	**2019**	**2020**	**2021**
World output	2.9%	-3.0%	5.8%
USA	2.3%	-5.9%	4.7%
Euro-Area	1.2%	-7.5%	4.7%
Germany	0.6%	-7.0%	5.2%
France	1.3%	-7.2%	4.5%
Italy	0.3%	-9.1%	4.8%
Spain	2.0%	-8.0%	4.3%
UK	1.4%	-6.5%	4.0%
Advanced Economies	1.7%	-6.1%	4.5%
Emerging markets and developing economies	3.7%	-1.0%	6.0%
World trade volumes – Imports			
Advanced Economies	1.5%	11.5%	7.5%
Emerging markets and developing economies	-0.8%	-8.2%	9.1%
World trade volumes – Exports			
Advanced Economies	1.2%	12.8%	7.4%
Emerging markets and developing economies	0.8%	-9.6%	11.0%

Source: International Monetary Fund (2020). "World Economic Outlook, April 2020: The Great Lock-down".

The emergency had a strong impact on the organization of work. First of all, the closure of non-essential activities and the associated stop in the production resulted in a large reduction in working hours (quantified by the Confindustria survey in approximately -32.5% with respect to March 2019). In parallel, income support measures were adopted in order to strengthen social safety nets. Second, the use of the so-called smart-working, i.e. work from home, has been encouraged. Instead, for those jobs that cannot be performed outside the company, new health measures to prevent the spread of the virus have been adopted. Finally, events such as exhibitions, conferences and sporting events were prohibited.

The contraction in the production activity is not only a short-term problem. The return to pre-COVID-19 levels depends on how Italy will face the reduction in the domestic demand, in production, the connected loss of job and, more importantly on the stop of the spread of the pandemic. As highlighted by Bank of Italy[10], a return to growth depends on the success of economic policies to assess company bankruptcies, on the capacity of the economy to recover and how financial markets will be able to support such a recovery. From this perspective, Italy has already defined a number of measures to contrast the economic contraction: among all, income support for workers and households, measures to support firms' liquidity (mainly through the banking sector) and credit support for firms in the form of public guarantee for loans.

Sector differences

The economic impact of the spread of COVID-19 has not been (and will not be) homogeneous across sectors. The very first slowdown of economic activity is connected to the Italian sectors like tourism and the automotive industry, which have strong connections with that part of the world. In particular, tourism suffered from slowdowns since the very beginning of the emergency, when flight bans and constraints affected the flow of people between China and Italy. Other sectors, like automotive, textile and luxury goods had difficulties in both finding inputs for the production and selling their good to the Chinese market. It is clear that in the first part of the emergency, the sectors that suffered the most were those most relying on world trade (flows of goods) and travel (flows of people).

After the two clusters in the north of Italy were discovered, the pandemic has started to affect all sectors of the economy. Containment measures started to control flows of people and goods, up to the closures of all non-essential activities from the second part of March to early May. Sectoral projections on economic performance for years 2020–2021 were laid down by Cerved[11].

Data in Table 3 include only broad macro-sectors. Digging deeper in the analysis, the report shows that the most suffering sector will be Cinema and projections of Film, with a loss of 65% of sales in the soft scenario, followed by air transportation of passengers, airports management, tourism sector and restaurants. On the contrary, the best forecasted performances are associated to on-line commerce and firms which produce materials connected to the health emergency.

[10] Bank of Italy, Economic Bulletin 2020, Issue 2 (April, 17).

[11] https://know.cerved.com/imprese-mercati/limpatto-del-covid-19-sui-settori-il-cerved-industry-forecast-reloaded/ (access 13.03.2020).

Table 3. Sales growth projections in different scenarios

	Soft scenario[a]			Hard scenario[b]		
	2020/2019	2021/2020	2021/2019	2020/2019	2021/2020	2021/2019
Best performing macro-sectors						
Chemical and pharmaceutical	0.4%	5.7%	6.1%	-0.2%	7.3%	7.0%
Farms/ agricultural companies	-1.4%	2.2%	0.8%	-2.7%	2.6%	-0.2%
Electrical engineering and IT	-10.2%	11.7%	0.3%	-15.2%	18.3%	0.3%
Least performing macro-sectors						
Means of transport	-19.5%	14.8%	-7.6%	-27.9%	27.2%	-8.2%
Logistic	-24.0%	23.2%	-6.4%	-33.3	30.9%	-12.7%
Non-financial services	-15.6%	11.4%	-6.0%	-21.1	16.1%	-8.4%
Average	-12.7%	11.2%	-2.9%	-18.0%	16.6%	-4.3%

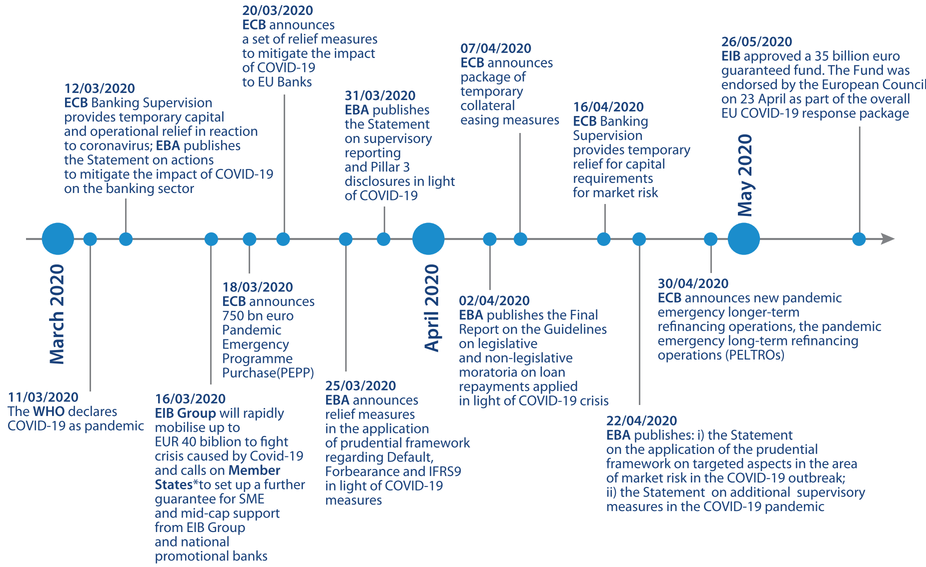
[a] the soft scenario does not consider future lockdowns;
[b] the hard scenario considers the emergency state to be persistent up to the end of 2020, with also the possibilities of future lockdowns.
Source: Cerved, "L'impatto del COVID-19 sui settori: il Cerved Industry Forecast", May 2020.

Considering the distribution of sectors within the whole Italian economy, where tourism makes an important part of GDP (5%) and of employment (6%), it is quite clear why the Italian economy will be one of the most severely hit within the Eurozone.

4. COVID-19 and the Italian banking sector

The current crisis does not see the banking system as the source of the problem; as a matter of fact, it is considered a part of the solution and it is expected to carry out the role of conductor of the support measures implemented by the European Central Bank (ECB) and the European and National Banking Authorities to deliver funding to the real economy (Figure 5). However, the ability of the Italian banking systems to deliver such task will depend on the health before the outbreak of the COVID-19 emergency.

Figure 5. Regulators and Supervisors measures to support the banking system



* European Member States set up guarantee schemes to support SME, Mid-cap and Large-cap companies

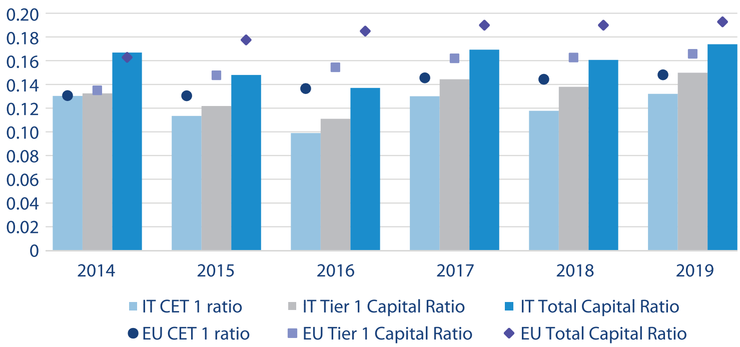
Source: Authors' elaboration.

In this view, Italian banks find themselves facing the crisis from a stronger position than the one they were in before the double-dip recession of 2008-13. The ratio of the highest loss-absorbing capital to risk-weighted assets rose from 7.1 per cent in 2007 to 13.9 in 2019[12]. The improvement is particularly important given that it was carried out without resorting to state recapitalizations: in the last ten years Italian banks have in fact built up capital buffers by raising funds from private investors. The decision not to distribute dividends in this year of emergency, in accordance with the recommendation of the supervisory authorities, will help to further improve the banking system's capital position, which is in any case still below the average value registered at EU level (Figure 6).

Similarly, the asset quality of Italian banks has improved enormously: their balance sheets were cleared of most non-performing loans, whose ratio over total loans have fallen by 10 per cent over the last five years (2015 – 16.69%; 2019 – 6,67%) while the coverage ratio has increased and it is now higher than the EU average (Figure 7). As before, no state interventions in the form of a national bad bank were put in place and banks disposed their non-performing assets through market sales and securitizations, thanks to a government-backed scheme (GACS, "*garanzia sulla cartolarizzazione delle sofferenze*") that helped by making securitization deals easier.

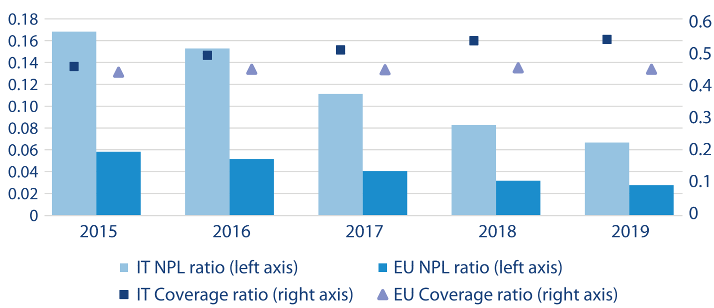
12 Bank of Italy Governor's speech, May 2020.

Figure 6. Bank capitalization



Source: Authors' elaboration on EBA Risk Dash Board data.

Figure 7. Bank asset quality in Italy and EU

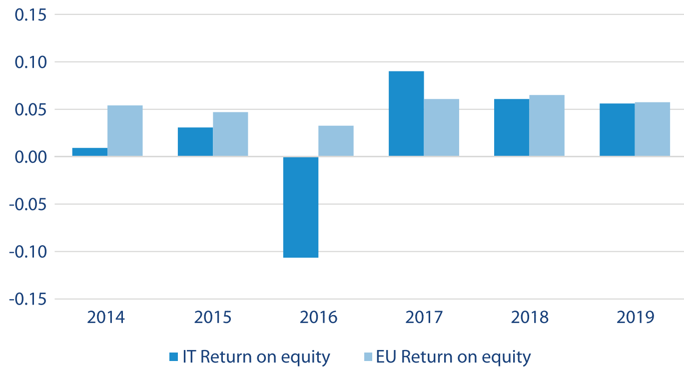


Source: Authors' elaboration on EBA Risk Dash Board data.

Thanks to this important bad asset disposal, profitability has improved from the very low levels registered in 2016 and now is in line with (low) EU averages (Figure 8). The revenue composition of Italian banks characterize the Italian banking system on average, i.e. banks with an asset mix balanced between interest bearing activities and activities that generates fees and commissions, mainly from trading activities with customers (Figure 9). Although the merits of revenue diversification are still a matter of debate in the academic literature[13], the evidence is that Italian banks benefited from being almost equally exposed to an environment of low interest rates and to market trends.

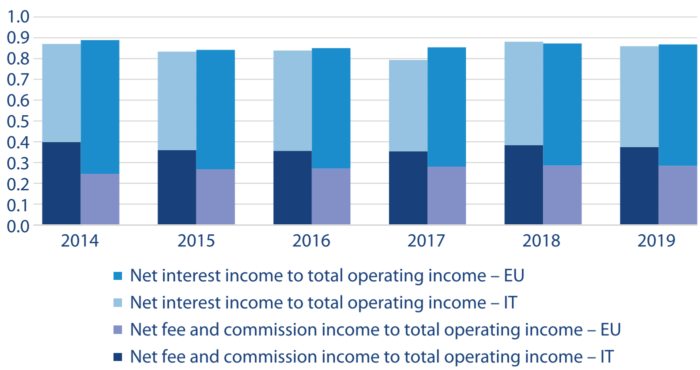
[13] C. Staikouras, G. Wood, & R. Denney, *Bank Non-Interest Income: A Source of Stability?*, Cass Business School Research Paper 2000.

Figure 8. The bank profitability in Italy and EU



Source: Authors' elaboration on EBA Risk Dash Board data.

Figure 9. The composition of bank revenues



Source: Authors' elaboration on EBA Risk Dash Board data.

So far, the impact of the pandemic recession created some difficulties in accessing the bond market, an issue widespread across banks in Europe, and in a moderate increase in loan loss provisions attributable to those banks that have incorporated the unfavorable economic outlook into the models used to compute expected losses[14]).

Notwithstanding the progress of the last few years, it is quite clear that the depth of the upcoming recession due to this unexpected sanitary emergency will inevitably affect banks' balance sheets in the medium term. The fall in productive output estimated by the Bank of Italy is expected to reach 9 per cent in 2020 in the baseline scenario, a level greater than that suffered at two different crises faced in the last 12 years (2008 and 2013). The financial crisis which started in 2007 and exploded as

[14] Bank of Italy Governor's speech, 2020.

a Sovereign debt crisis in 2012 in Europe, plus more recent defaults of Italian banks[15], are events which stressed the importance of high standards in credit risk management and in the quality of bank loan portfolios. It is nowadays widely recognized that a high level of non-performing loans (NPLs) affects bank lending capacity and lowers bank profitability, as well as its ability to raise new capital. Moreover, the high level of NPLs "*can pose risks of cross-border spill-overs in terms of the overall economy and financial system of the EU and alter market perceptions of the European banking sector as a whole*"[16]. NPLs reflect the credit quality of the loan portfolio of a bank and in aggregate terms the quality of the credit supply in a given country.

In the last years, an increasing number of researchers have studied the determinants and the evolution of NPLs and of the coverage rate (the loans reserve over non-performing loans), underlining the importance of both macroeconomic and bank specific variables in affecting the level of non-performing assets. Many authors underlined the close relationship between the economic cycle and the credit portfolio quality of banks[17]. In general, their results show that changes in macroeconomic conditions (such as a decrease in GDP) play a crucial role in the worsening of the quality of the loan portfolio, in the increase of loan loss provisions and in an upsurge of the level of NPL ratio.

In light of these evidences, the COVID-19 crisis is inevitably expected to negatively affect the credit quality of bank loan portfolio. The average effect will be different depending on the condition of each country. In fact, although during the last years throughout the Eurozone the NPL ratio decreased from 6.68% in 2015 to 2.75% in the last quarter of 2019, some differences across countries still exist (Figure 10).

The COVID-19 crisis has all the characteristics to imply a strong negative impact on bank asset quality. In fact, this crisis, that started as a health crisis and has spread as a global economic crisis, halted the economy activity of many countries. The lockdown has impacted several economic sectors and, in many countries, the unemployment rate is rapidly rising. The forecasts would be even worse should the activity restrictions extend to the third quarter of the year and should the governmental measures to support the real economy eventually fail.

---

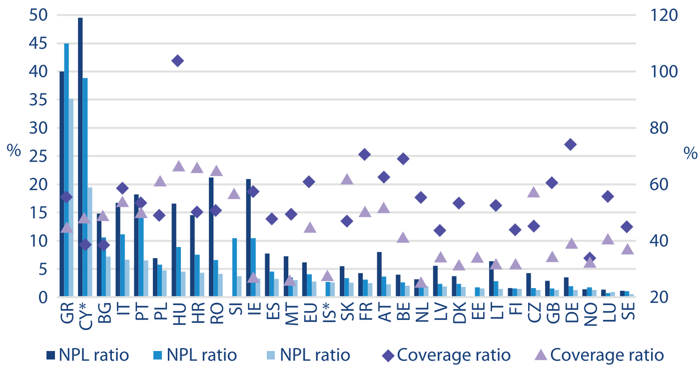
15 Banca Etruria, Carichieti, Cassa di Risparmio di Ferrara, Banca Marche, Banca popolare di Vicenza, Veneto Banca, Monte dei Paschi di Siena, Carige are the most recent cases of distressed Italian banks.

16 European Council, 2017.

17 J.A. Bikker, P.A.J. Metzemakers, *Bank provisioning behaviour and procyclicality*, Journal of International Financial Markets, Institutions and Money 2005, Vol. 15; A. Boudriga, N. Boulila, S. Jellouli*, Does bank supervision impact nonperforming loans: cross-country determinants using aggregate data?* MPRA Paper No. 18068/2009; M. Bofondi, T. Ropele, *Macroeconomic determinants of bad loans: evidence from Italian banks* Occasional Paper, Questioni di Economia e Finanza, Banca d'Italia, 2011; *Castro Macroeconomic determinants of the credit risk in the banking system: the case of the GIPSI*, Economic Modelling 2013, Vol. 31; R. Beck, P. Jakubik, A. Piloiu, *Key determinants of Non-performing loans: new evidence from a Global sample,* Open Economic Review 2015, Vol. 26; D. Cucinelli, M.L. Di Battista, M. Marchese, & L. Nieri, *Credit risk in European banks: The bright side of the internal ratings based approach*, Journal of Banking & Finance 2018, nr 93.

In this context, the idea of a European bad bank returns to the limelight. Already in 2017, Andrea Enria, at that time EBA Chairman and today the Chair of the ECB Supervisory Board, proposed the creation of a EU's bad bank to buy billions of euro of toxic loans. This proposal becomes even more reasonable in light of the possible consequences that this crisis may have on balance-sheet of European banks. In 2020 A. Enria returned to bring the proposal of a European bad bank to the attention of European Commission: a government backed centralized agency to deal with the expected upsurge of NPLs in the Eurozone.

Figure 10. The NPL ratio and Coverage ratio across European Union



Source: Authors' elaboration on EBA Risk Dash Board data. Note: NPL ratio % on the left, Coverage ratio % on the right.

5. Is the creation of a European bad bank the solution?

In the last 20 years, the number of banking crises that have affected the banking systems of both advanced and emerging economies has grown strongly. The resolution programs for these crises, adopted by individual countries, entailed one or more of the following options: regulatory forbearance, direct financial assistance, acquisition of NPLs, financial assistance to debtors, establishment of a bridge bank, bank liquidation or bank nationalization.

In the majority of the most recent crises (from Swedish crisis of early 2000 to the subprime crisis of 2007–2009), Governments addressed the problem of accumulating NPLs in the banking system through the establishment of an Asset Management Company (the so called "bad bank"), which is assigned the task of recovering the (bad) assets sold by ailing banks.

Ayadi[18] report several examples of European and non-European bad banks, specifically created to manage both the bank non-performing loans and the failed or likely to

[18] R. Ayadi, G. Ferri, & R.M. Lastra, *Systemic solutions to systemic crises. dealing with NPLs in the Eurozone*, European Economy 2017, No 1, pp. 173–198.

fail banks. Among the most important examples of centralized agency to dispose the assets of the failed institutions we can find (in the Eurozone and elsewhere):

- the Resolution Trust Corporation (RTC) in US, created in 1989 to manage the assets of the failed Savings and Loan associations;
- The *Fondo de reestructuración ordenada bancaria* (FROB), a government funded program adopted by the Spanish government in June 2009 to manage the restructuring and resolution of troubled credit institutions;
- The Troubled Asset Relief Program (TARP), a US government program to deal with the toxic assets that were burdening large US financial institutions after the burst of the subprime crisis;
- the Industrial Revitalization Corporation of Japan (IRCJ) set up in April 2003 to promote the restructuring of relatively large and troubled banks;
- the National Asset Management Agency (NAMA) set up in Ireland in December 2009 to manage bad assets of ailing Irish banks;
- FMS Wertmanagement set up in Germany in 2010 up to manage the impaired assets of the banking group Hypo Real Estate Holding AG;
- The Spanish Sareb, set up in 2012, to reduce the impact of the real estate crisis on Spanish banks' balance sheets.

However, in the case of EU bad banks, the regulatory context in which they were created was different from today and the Banking Recovery and resolution Directive (BRRD) was still in the making. Since 2016 this directive is in force and any further bad bank needs to take into account the BRRD resolution tools and requirements plus the Banking Union legislation. The bail-in is the most famous tool of BRRD which provides that no State aid can be granted before losses are charged to shareholders, subordinated bondholders up to plain vanilla bondholders and depositors. However, the positive experiences of "bad banking" cannot be ignored.

During the recent years, supervisors and regulators have published several guidelines and rules on how banks should manage their NPLs. The most important are: i) the new definition of default[19]; ii) the ECB guidelines[20] in which ECB stresses the importance of timely provisioning and write-off practices related to NPLs and the Addendum[21] in which ECB delaines the expectations when assessing a bank's levels of prudential provisions for NPLs; iii) the guidelines on management of non-performing and forborne exposures[22] with the aim of achieving a sustainable reduction of NPLs of banks to strengthen the resilience of their balance-sheets; iv) finally, the European Parliament[23] issues the calendar provisioning with the indications on the time within which a position classified as NPLs must be fully covered.

19 European Banking Authority, *Final Report on the Application of the definition of default under Article 178 of Regulation (EU) No 575/2013*. EBA/GL/2016/07, 29 September 2016.

20 European Central Bank, *Guidance to banks on non-performing loans*, 2017.

21 European Central Bank, *Addendum to the ECB guidance to banks on non-performing loans: prudential provisioning backstop for non-performing exposures*, 2018.

22 European Banking Authority, *Final Report. Guidelines on management of non-performing and forborne exposures*, EBA/GL/2018/06, 31 October 2018.

23 European Parliament, *Regulation (EU) 2019/630 of the European Parliament and of the Council of*

However, although it is widely recognized the importance of the supervisory pressure on banks to proactively manage their NPL, to improve the provisioning coverage and their management system, these measures are not sufficient to permanently manage NPLs. At least two other activities must be put in place:

- a reform of the legal systems and judiciary procedures that in some countries are too much slow and overburdened (as in Italy), to ensure faster and more efficiency recovery processes;
- a creation of a more efficient secondary market for impaired assets in order to reduce information asymmetry and inter-temporal pricing problems that can derive from the illiquidity of the market.

Historical examples demonstrated that state support is crucial to successfully deal with legacy assets carved out from banks under restructuring[24,25,26]. As suggested by Ayadi, introducing a European bad bank would provide a number of benefits, from a clearer view on the magnitude of the legacy assets problem in the Eurozone to a maximization of the recovery rate on such assets with positive spillover effects on the procyclicality in banking and the credit supply to the economy up to the promotion of transparency in a market segment – that of NPL disposal – that tends to suffer extreme opaqueness; and finally, the stimulation of accountability, since its profits (that are likely to be quite high based on past historical records of similar experiences throughout the world) would be channeled back to possibly helping sustain the Single Resolution Fund, thus avoiding relying on taxpayers' money, should a major shock occur.

Conclusions

The sanitary and economic crisis we are living has no precedents, at least in recent times. It is an asymmetric crisis: it hit EU countries, Italian regions and economic sectors differently.

The pandemic and the recession have opened up extremely uncertain scenarios that make it very difficult to outline future equilibriums. What is generally acknowledged is an overall uncertainty in the forecasts for at least the next two years.

There had been unprecedented interventions to ensure financial liquidity to families and firms and support the supply of credit, at the Italian and EU level. These interventions, in the domain of monetary policy, fiscal policy and regulatory

17 April 2019 amending Regulation (EU) No 575/2013 as regards minimum loss coverage for non-performing exposures, Official Journal of the European Union, 25 April 2019.

24 D. Cooke, & J. Foley, *The role of the asset management entity: an East Asian perspective. Rising to the Challenge in Asia*, A Study of Financial Markets 1999, Vol. 2, Special Issues.

25 P. Bongini, G. Ferri, A. Patarnello, *La crisi giapponese: scenari macroeconomici e ruolo del sistema bancario*, Credito popolare 2002, n. 4.

26 R. Ayadi, G. Ferri, & R.M. Lastra, *Systemic solutions to systemic crises. dealing with NPLs in the Eurozone*, European Economy 2017, 1, pp. 173–198.

revisions (relaxation), have been devised to help banks to play their central role in the smooth overcoming of the crisis phase. Italian banks arrived to this appointment well equipped with capital and liquidity and a credit portfolio with higher asset quality thanks to a strengthened process of valuation of credit risk and to a process of NPLs disposal made in recent years.

However, a new wave of bad loans in the next two years is highly expected. EU and among them Italian banks will most likely suffer material losses as a result of the COVID-19 outbreak and the confinement measures. Although the macroeconomic forecasts for the EU anticipate an extraordinary downturn, it is still very difficult to predict the pace of the economic recovery and too early to conclude on the mitigating impact of government support measures. As said, any quantification of losses is surrounded by significant uncertainty. The increase in non-performing loans will have to be dealt with in a timely manner, using all available instruments, including those for their restructuring and sale on the market, through a temporary EU-wide support. The debate on the creation of an EU-wide bad bank should start since now.

References

Ayadi R., Ferri G., & Lastra R.M., *Systemic solutions to systemic crises. dealing with NPLs in the Eurozone*, European Economy 2017, 1, pp. 173–198.

Bank of Italy, *Economic Bulletin* 2020, Issue 1 (January, 17, 2020).

Bank of Italy, *Economic Bulletin* 2020, Issue 2 (April, 17, 2020).

Beck R., Jakubik P., Piloiu A., *Key determinants of Non-performing loans: new evidence from a Global sample,* Open Economic Review 2015, Vol. 26, pp. 525–550.

Bikker J.A., Metzemakers P.A.J., *Bank provisioning behaviour and procyclicality*, Journal of International Financial Markets, Institutions and Money 2005, Vol. 15, pp. 141–157.

Bongini P., Ferri G., Patarnello A., *La crisi giapponese: scenari macroeconomici e ruolo del sistema bancario*, Credito popolare 2002, n. 4.

Boudriga A., Boulila N., Jellouli S.*, Does bank supervision impact nonperforming loans: cross-country determinants using aggregate data?* MPRA Paper No. 18068/2009.

Bofondi M., Ropele T., *Macroeconomic determinants of bad loans: evidence from Italian banks*, Occasional Paper, Questioni di Economia e Finanza, Banca d'Italia, 2011.

Buzzacchi C., *Rifinanziamento della sanità pubblica e Mes: un caso di liaisons non così tanto dangereuses*, http://www.lacostituzione.info/ (access 24-04-2020).

Buzzacchi C., "Coronavirus e territori: il regionalismo differenziato coincide con la zona "gialla", http://www.lacostituzione.info/ (access 02-03-2020).

Buzzacchi C., *Scostamento di bilancio da Coronavirus*, http://www.lacostituzione.info/ (access 13-03-2020).

Castro Macroeconomic determinants of the credit risk in the banking system: the case of the GIPSI, Economic Modelling 2013, Vol. 31, pp. 672–683.

Cerved, "L'impatto del COVID-19 sui settori: il Cerved Industry Forecast", https://know.cerved.com/imprese-mercati/limpatto-del-covid-19-sui-settori-il-cerved-industry-forecast-reloaded/ (access 13-03-2020).

Cooke D., & Foley J., *The role of the asset management entity: an East Asian perspective*, Rising to the Challenge in Asia: A Study of Financial Markets 1999, Vol. 2, Special Issues.

Confindustria, *Risultati relativi all'indagine sugli effetti del COVID-19 per le imprese italiane*, 2020.

Confindustria, *Seconda edizione dell'indagine sugli effetti della pandemia da COVID-19 per le imprese italiane*, 2020.

Cucinelli D., Di Battista M.L., Marchese M., & Nieri L., *Credit risk in European banks: The bright side of the internal ratings based approach*, Journal of Banking & Finance 2018, nr 93, pp. 213–229.

European Banking Authority, *Final Report on the Application of the definition of default under Article 178 of Regulation (EU) No 575/2013*, EBA/GL/2016/07, 29 September 2016.

European Banking Authority, *Final Report. Guidelines on management of non-performing and forborne exposures*. EBA/GL/2018/06, 31 October 2018.

European Central Bank, *Addendum to the ECB guidance to banks on non-performing loans: prudential provisioning backstop for non-performing exposures*, 2018.

European Central Bank, *Guidance to banks on non-performing loans*, 2017.

European Central Bank, *Economic Bulletin*. Issue 2/2020 (March, 26, 2020).

European Commission, *Commission Regulation (EU) No. 2016/2067 of 22 November 2016*, Official Journal of the European Union, 29 November 2016.

European Parliament, *Regulation (EU) 2019/630 of the European Parliament and of the Council of 17 April 2019 amending Regulation (EU) No 575/2013 as regards minimum loss coverage for non-performing exposures*, Official Journal of the European Union, 25 April 2019.

Fujii M., & Kawai M., *Lessons from Japan's banking crisis – 1991 to 2005*, [in:] Research Handbook on International Financial Regulation, Edward Elgar Publishing, 2012.

Goodell J.W., *COVID-19 and finance: agendas for future research*, Finance Research Letters, 2020.

International Monetary Fund, *World Economic Outlook, April 2020: The Great Lockdown*.

Laing T., *The economic impact of the Coronavirus 2019: implications for the mining industry*, The Extractive Industries and Society, 2020.

Stiroh K.J., *Diversification in banking: Is noninterest income the answer?*, Journal of money, Credit and Banking 2004, Vol. 36, No. 5 (October), pp. 853–882.

Staikouras C., Wood G., & Denney R., *Bank Non-Interest Income: A Source of Stability?*, Cass Business School Research Paper, 2000.

DOI: 10.26354/bb.5.2.79.2020

Magdalena Kozińska*
ORCID: 0000-0001-8767-6545
mkozin@sgh.waw.pl

The scope of the Bank Guarantee Fund's activities and its potential for extension[1]

Abstract

The Bank Guarantee Fund (BGF) is a basic element of the Polish financial safety net. In recent years, the shape of its activity has undergone significant modifications. Therefore, questioning the completeness of the new BGF business model becomes justified. The purpose of the article is to identify fields in which the BGF's activities could be developed. The Fund's tasks were identified and then compared with the results of an analysis of 109 deposit guarantee systems around the world. Based on the international experience, several areas can be identified where the BGF's operations can be improved. They include introducing the possibility of providing financial assistance to banks whose situation has worsened, increasing the level of diversification of investments made by the Fund, and strengthening the BGF's information and education activities through a presence in social media.

Key words: deposit insurance, Bank Guarantee Fund, resolution

JEL: G18, G21, G28, G33, G35

Zakres działalności Bankowego Funduszu Gwarancyjnego i potencjał jego rozszerzenia

Streszczenie

Bankowy Fundusz Gwarancyjny (BFG) stanowi podstawowy element polskiej sieci bezpieczeństwa finansowego. W ostatnich latach kształt jego działalności podlegał znacznym modyfikacjom. Zasadne staje się pytanie o kompletność nowego modelu działalności BFG. Celem artykułu jest zidentyfikowanie zadań, o które mogłaby zostać rozwinięta działalność BFG. Dokonano identyfikacji zadań Funduszu, a następnie porównano je z wynikami analizy

* dr Magdalena Kozińska – Warsaw School of Economics.

1 The article is the implementation of the research task under the grant entitled: "Models of the functioning of deposit guarantee schemes with particular focus on activities other than payment of deposits" (study no. KES/BMN18/03/18), SGH Warsaw School of Economics.

funkcjonowania 109 systemów gwarantowania depozytów na świecie. Na bazie doświadczeń międzynarodowych wskazać można kilka obszarów, na których działalność BFG może zostać udoskonalona. Obejmują one m.in. wprowadzenie możliwości udzielania pomocy finansowej dla banków, których sytuacja pogorszyła się, zwiększenie poziomu dywersyfikacji inwestycji dokonywanych przez Fundusz lub wzmocnienie działalności informacyjno-edukacyjnej BFG przez obecność w mediach społecznościowych.

Słowa kluczowe: gwarantowanie depozytów, Bankowy Fundusz Gwarancyjny, resolution

Introduction

The Bank Guarantee Fund (the BGF, the Fund) is one of the core components of the Polish financial safety net[2]. In recent years, the structure of its activities has been subject to significant revamping – under the influence of EU regulations (e.g., the BRR Directive[3], the DGS Directive[4,5]), in response to the national experience gained while fulfilling the tasks previously assigned to the BGF, as well as during the operational preparation for performance of its new functions. The main change in this respect was entrusting the BGF with responsibility for conducting resolution in banks[6] in 2015[7] – formally effective in 2016 – which was a significant expansion of the Fund's scope of operations primarily in terms of the ability of the BGF to intervene

2 M. Zaleska, *System gwarantowania depozytów [Deposit guarantee systems]*, [in:] M. Zaleska (ed.), *Świat bankowości [World of Banking]*, Difin, Warszawa 2018.

3 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 Establishing a Framework for the Recovery and Resolution of Credit Institutions and Investment Firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council (Official Journal of the European Union L 173/190).

4 Directive 2014/49/EU of the European Parliament and of the Council of 16 April 2014 on Deposit Guarantee Schemes (Official Journal of the European Union L 173/149).

5 Apart from the DGS Directive, a formal proposal was made to establish the European Deposit Insurance Scheme for the Member States participating in the Banking Union. More on that topic in *Pożądany kształt europejskiego, zintegrowanego systemu restrukturyzacji i uporządkowanej likwidacji banków oraz gwarantowania depozytów [Desired shape of the European, integrated system of bank resolution and deposit guarantee]*, [in:] M. Zaleska (ed.), *Unia bankowa*, Difin, Warszawa 2013. Moreover, national modifications were introduced in numerous countries M. Zaleska, *Zmiany zasad gwarantowania depozytów w odpowiedzi na globalny kryzys finansowy [Changes in the rules of deposit guarantees as an answer to the global financial crisis]*, [in:] J. Nowakowski (ed.), *Instrumenty i regulacje bankowe w czasie kryzysu [Instruments and regulations during crisis]*, Difin, Warszawa 2010.

6 This article is focused on the BGF's powers within the banking sector, but it should be noted that the BGF assumed responsibility for preparing and conducting the resolution of credit unions (so-called SKOK) and investment companies, neither of which are discussed in this article.

7 Formally, the BGF has acted as a resolution authority since November 2015, pursuant to the Act of 5 August 2015 on Macroprudential Supervision of the Financial System and Crisis Management in the Financial System (OJ 2015 item 1513, as amended). Comprehensive solutions associated with conducting resolution activities by the Fund were implemented by the Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee System and Forced Restructuring (OJ 2017, item 1937, as amended), effective as of 9 October 2016.

in banks on the verge of bankruptcy. The establishment of the Fund as a resolution authority was accompanied by limitations on its so-called assistance activities (the supportive function), while the BGF's principles of deposit guarantees were modified to strengthen depositor safety. These changes were introduced primarily as a consequence of European crisis experience with deposit protection. After the implementation of these reforms within the Polish statutory framework, the regulations governing the Fund's activities were modified several times introducing solutions to adapt the BGF's powers to the specifics of the domestic banking sector.

Bearing in mind the nature and scale of the implemented changes, questions about the adequacy of the BGF's new operational model become justified. The reforms of the Fund's operations concerned only a few areas of its activities and are, therefore, strongly selective. There was no debate in Poland on the optimal, comprehensive structure of the BGF's set of responsibilities, which might also require rethinking the architecture of the entire financial safety net. Moreover, the subject of the effective and successful functioning of individual safety net institutions is becoming less and less urgent as time passes and the lessons from the past crisis are forgotten. At the same time, threats to the stability of the Polish financial system and the nature of the BGF's involvement in their mitigation[8] encourage reflections on the integrity of the Fund's operating model. Therefore, it seems reasonable to compare the BGF with the way its international peers operate, which may provide suggestions as to the functional shape of the BGF. The hypothesis is that the functional scope of the BGF's tasks could, and in some areas even should, be expanded.

This article aims to review all functions of the BGF (i.e. not limited only to the deposit payout) and identify tasks by which the BGF's activities could be strengthened or expanded[9] (based on the juxtaposition with other deposit insurance institutions from other countries). For this purpose, the Fund's functions and tasks were first identified and then compared with the functions of 109 reviewed deposit guarantee schemes from around the world. Based on this juxtaposition, recommendations were formulated regarding areas in which the BGF's operations could be strengthened. It should also be emphasised that the aim of this article is to assess the completeness of the functional scope of the BGF's activity. Another issue is to evaluate the features and details of each function. It seems that in every functional area, further, detailed discussion is needed to establish the technicalities of its fulfilment. This should be treated as a direction for further analysis.

8 The main area of the BGF's activity was the payment of guaranteed deposits and support for the takeover of credit unions in case of bankruptcy.

9 "Strengthening" should be understood as complementing, expanding or enlarging the operations, which could facilitate the fulfilment of the BGF's mandate. The appropriateness of "strengthening" is assessed based on its potential to support the accomplishment of the BGF's goal.

1. Functional scope of the deposit guarantee schemes' activities – literature review, best practices and legal frameworks

Analysis of the range of tasks of the deposit insurance schemes is not a popular trend in the literature. Most of the research concerns the scope (form) of the deposit guarantees[10] or their impact on bank shareholders[11]. The functional shape of the institutions constitutes a marginal part of the subject literature[12].

The key recommendations regarding the effective construction of deposit guarantee institutions are included in the document of the IADI (2014). However, in terms of the functional shape of the DGSs, they indicate only that:

1) There should be a formal and comprehensive framework for cooperation between the DIS and other safety net institutions (principle 4).
2) The DGS should have contingency planning in place to be able to effectively manage bank failures (principle 6).
3) The public should be kept informed about the benefits and limits related to the DGS activities (principle 10).
4) The DIS should be part of a system allowing for the early identification of ailing banks (principle 13).

The above-mentioned principles are supplemented by more detailed recommendations for the selected areas of guarantor activity[13].

---

[10] The following could be enumerated: A. Demirguc-Kunt, E. Kane, L. Laeven, *Deposit Insurance Database*, IMF Working Paper 2014, WP/14/118; B. Bernet, S. Walter, *Design, Structure and Implementation of a Modern Deposit Insurance Scheme*, SUERF Studies: 2009/5; S.H. Talley, I. Mas, *Deposit Insurance in developing countries*, Policy Research Working Paper WPS 1990, 548; G. Garcia, *Deposit Insurance: A Survey of Actual and Best Practices*, IMF Working Paper 1999, WP/99/54; Ch. Kahn, J. Santos, *Allocating bank regulatory powers: lender of last resort, deposit and supervision*, BIS Working Papers 2001 No 102.

[11] For example: L. Laeven, *The Political economy of Deposit Insurance*, World Bank Policy Research Working Paper 2004, 3247; A. Demirguc-Kunt, E. Detragiache, *Does Deposit Insurance Increase Banking System Stability? An Empirical Investigation*, Policy Research Working Paper 1999, 2247; R. Gropp, J. Vesala, *Deposit Insurance, Moral Hazard and Market Monitoring*, Working Paper Series 2004, No. 302; R. Cull, L. Senbet, M. Sorge, *Deposit Insurance and Financial Development*, Policy Research Working Paper 2001, 2682; V. Ioannidou, J. de Dreu, *The Impact of explicit Deposit Insurance on Market Discipline*, DNB Working Paper, 2006, No. 89; A. Angkinand, C. Whilborg, *Deposit Insurance Coverage, Ownership, and Bank's Risk-Taking in Emerging Markets*, Journal of International Money and Finance, 2010; K. Dewenter, A. Hess, J. Brogaard, *Institutions and Deposit Insurance: Empirical Evidence*, Journal of Financial Services Research, 2017; K. Jackowicz, Ł. Kozłowski, O. Kowalewski, *Depositor Discipline Through Interest Costs During Good and Bad Times: The Role of The Guarantor of Last Resort*, Journal of Financial Services Research, 2016, 54, Issue 2.

[12] The list of the main publications includes: G. Garcia, *Deposit Insurance: A Survey of Actual and Best Practices*, IMF Working Paper 1999, WP/99/54; E. Kane, A. Demirguc-Kunt, *Deposit Insurance Around the Globe: Where Does It Work?*, NBER Working Series, Working Paper 2001, 8493; B. Bernet, S. Walter, *Design, Structure and Implementation of a Modern Deposit Insurance Scheme*, SUERF Studies 2009/5. Nevertheless, they concern mainly the deposit insurance part of the guarantors' activity.

[13] E.g. IADI (2019), *Deposit Insurers' Role in Contingency Planning and System-wide Crisis Preparedness and Management*. Retrieved from: https://www.iadi.org/en/assets/File/Papers/Approved%20

On a world scale, each country lays in practice its own concrete rules and legal framework for the functioning of the deposit insurance system, what contributes to the diversity of its models and provides a valuable basis for the comparisons and assessments.

As mentioned in the introductory part, the activity of deposit guarantee schemes in the EU is based on the common legal framework – the DGS Directive – which sets the rules for the functioning of deposit insurers. Although it was not the first European document setting the regime of guarantors' activity (the first was Directive 94/19/WE), DGSD's implementation brought important reinforcement in the protection of depositors, since it confirmed the higher and harmonised level of deposit protection (100,000 euros[14] with the possibility to settle higher protection only for temporary high balances resulting from residential property transactions or other socially important events), as well as strengthened the unification of the way the guarantors are established and run.

The most critical change was, however, the introduction of the obligation to build *ex-ante* financing mechanisms (at the target level of at least 0.8%[15] of covered deposits from 3 July 2024) for possible future activation in a crisis. The created deposit guarantee funds were set to be filled by bank contributions, which are calculated based on the risk profile of the institutions. Also, the range of depositors that can benefit from the guarantee was harmonized.

Apart from the organisational issues connected with the framework of the guarantors' activity, DGSD also provided a harmonised set of possible tasks performed by the schemes, which embraces:

1) deposit payout in case of the bank's bankruptcy,
2) support of the deposit book transfer within the insolvency procedure,
3) support of the resolution procedure,
4) implementation of preventive measures aimed at preventing the collapse of a bank.

The framework established by the DGSD was assessed by the International Association of Deposit Insurers[16] as mostly matching its Core Principles[17].

Guidance%20Papers/IADI%20Guidance%20Paper_DI%20role%20in%20contingency%20planning%20&%20crisis%20management.pdf

14 With the possibility to establish higher protection only for temporary high balances resulting from residential property transactions or other socially important events.

15 Exceptionally, the DGS fund is allowed to be established at the level of 0.5% of covered deposits if the Member State proves that the national banking sector is highly concentrated and it is unlikely that the fund will be activated, since the target way of resolving banks' problems will be resolution. An example of a country where such a lowered level of the deposit guarantee fund is applicable is France. Source: https://eba.europa.eu/regulation-and-policy/recovery-and-resolution/deposit-guarantee-schemes-data (access 05.11.2019).

16 IADI (2017), "Mind the gap!" A comparative analysis between the IADI CPs and the DGSD. Retrieved from: https://www.iadi.org/en/assets/File/Papers/Regional%20Papers/Mind_the_Gap__Final.pdf (access 05.11.2019).

17 Ibidem.

Although the DGSD harmonised the principal area of guarantors' activity[18], there are still many issues that were left to the country's design (so-called O&Ds: options and discretions). They provide for variety in the models of the functioning of deposit insurers and allow countries to structure the activity of guarantors in different ways thus contributing to the diversity of the scope of insurers' functions.

Taking into account that the EU legal framework lays only the foundation for the structure of the national deposit guarantee scheme, there is the necessity to set the concrete shape of the local (national) deposit insurer. Here, the examples of the functional organisation (i.e. the scope of the tasks) of other EU schemes, as well as non-European guarantors seem to provide a reliable basis to benchmark.

2. Evolution of functions and tasks of the Bank Guarantee Fund – a review of the literature and the statutory framework

As a key institution within the financial safety net, the primary task of the BGF is to foster the safety of the Polish financial system[19]. However, this goal was only articulated in 2013 – i.e., after the BGF had already been active for nearly 20 years – when its statutory framework was supplemented with the statement that the basic mission of the Fund is to undertake actions for the sake of the stability of the domestic financial system[20]. This broad range of responsibilities embraced multiple tasks, the scope of which was subject to multiple amendments[21]. A. Stelmach defined the scope of the BGF's activities before 2016 by grouping them into three areas[22]:

1) guarantee,
2) supportive,
3) analytical.

[18] However, according to the EBA assessment, there are innumerable aspects that should be subject to changes or further harmonisation. They were listed in the EBA's opinions on the functioning of deposit guarantee schemes in the EU. Source: EBA (2019a), *Opinion of the European Banking Authority on the eligibility of deposits, coverage level and cooperation between deposit guarantee schemes*. Retrieved from: https://eba.europa.eu/taxonomy/term/448 (access 05.11.2019); EBA (2019b), *Opinion of the European Banking Authority on deposit guarantee scheme payouts*. Retrieved from: https://eba.europa.eu/taxonomy/term/448 (access 05.11.2019).

[19] This is associated with financial system stability. More on that topic in, e.g. S. Flejterski and M. Zioło, *A safe and stable banking and financial system as the basis for the development of the economy and society*, Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie, Ekonomika i Organizacja Gospodarki Żywnościowej 2015, nr 110.

[20] It is worth mentioning that the provision delivering the broad basis of the BGF's powers was added to the act regulating the Fund's operations at the time of the amendment to the Act on Credit Unions. Therefore, it can be assumed that it was not the result of a thorough analysis of the comprehensive scope of the BGF's operations. Source: Act amending the Act on Credit Unions and Certain Other Acts (OJ 2013 item 613).

[21] A. Janc, *Financial Regulation in Poland*, [in:] R. Kattel, J. Kregel, M. Tonveronachi (ed.), *Financial Regulation in the European Union*, Routledge, London 2015.

[22] A. Stelmach, *Zakres działania Bankowego Funduszu Gwarancyjnego [Scope of the Bank Guarantee Fund's activities]*, [in:] J. Świderska (ed.), *Współczesny system bankowy. Ujęcie instytucjonalne [Contemporary banking system. Institutional approach]*, Difin, Warszawa 2013.

Referring to the scope of the BGF's tasks after 2016, P. Zawadzka, P. Zimmerman, and R. Sura[23] distinguish the following functions of the Fund:

1) guarantee,
2) restructuring,
3) analytical and control,
4) stabilisation.

In some publications[24], the guarantee function is associated with the stabilisation of markets by way of providing insurance. Moreover, some of the areas enumerated by these authors seem to duplicate one another. It can, therefore, be assumed that the available literature identifies these primary areas of the BGF's activities:

1) guarantee – related to the deposit guarantee,
2) restructuring – related to the possibility of supporting an entity's restructuring before it is deemed insolvent[25],
3) intervention – related to the ability to intervene when an entity is endangered with bankruptcy,
4) analytical – related to the technical capacity of the Fund to pursue various tests and analyses.

From a practical standpoint, the restructuring and intervention functions are very similar in nature; therefore, it seems that they could be analysed jointly, as one area of the Fund's activity.

In the areas mentioned above, the operations of the Fund have been modified in recent years, mainly due to the need to implement EU directives. As regards the **guarantee activity**, the time frame for the deposit payout and the breadth of entities covered by the guarantee were changed, as summarised in Table 1.

Beyond the review of the scope of the BGF's guarantee activity (and its modifications), it should be noted that the issue of changes in deposit guarantee features (in multiple countries) is a relatively popular area of scientific research, in particular immediately following the banking crisis of 2008[26].

[23] P. Zawadzka, P. Zimmerman and R. Sura, *Ustawa o Bankowym Funduszu Gwarancyjnym, systemie gwarantowania depozytów oraz przymusowej restrukturyzacji. Komentarz [Act on the Bank Guarantee Fund, deposit guarantee system and forced restructuring. Comment]*, C.H. Beck, Warszawa 2017.

[24] J. Pruski, J. Szambelańczyk, *Systemy gwarantowania depozytów w sieciach bezpieczeństwa finansowego na tle konsekwencji globalnego kryzysu finansowego*, Safe Bank 2014, no. 4 (57).

[25] The crucial issue of the guarantee and restructuring function is the financing of the deposit insurance fund. More on that topic in: M. Gospodarowicz, *System gwarantowania depozytów z uwzględnieniem indywidualnego ryzyka banku i ryzyka systemowego [Deposit guarantee systems taking into account individual bank risk and systemic risk]*, Oficyna Wydawnicza Szkoły Głównej Handlowej w Warszawie, Warszawa 2015.

[26] As an example, see the research: E. Ślązak and A. Dunaszewska, *Zamiany w unijnych systemach gwarantowania depozytów, dokonane w odpowiedzi na kryzys finansowy [Changes in the EU deposit guarantee schemes implemented as an answer to the financial crisis]*, "Bezpieczny Bank" 2008 no 2 (37), and M. Zaleska, *Zmiany zasad gwarantowania depozytów w odpowiedzi na globalny kryzys finansowy [Changes in the rules of deposit guarantees as an answer to the global financial crisis]*, [in:] J. Nowakowski (ed.),

Table 1. Basic features of the deposit guarantee system in Poland

Features of the deposit guarantee	Rules applicable to the Polish deposit guarantee
guarantee limit	Equivalent in PLN of EUR 100,000 – unchanged from 2010 * Compensation is not paid if the account has not been actively used and the balance on the account is less than the equivalent of EUR 2.50.
types of bank liabilities covered by the guarantee	Receivables and cash deposited in accounts – a separate limit for each depositor * Guarantee protection also covers receivables arising from securities issued before 2 July 2014. * Shares, registration fees, and membership fees as well as electronic money are not subject to the guarantee.
extent of coverage	Physical people; legal entities; organisational units that are not legal entities (which a separate law grants legal status); school savings and credit unions; employee loan unions – In 2016, the scope was extended to include deposits of management staff, while deposits of local government units were excluded.
payout time frame	7 business days from the date of fulfillment of the guarantee condition, i.e., suspension of the entity's activity – The period was shortened from 20 business days in 2016.

Source: own study based on: Act of 14 December 1994 on the Bank Guarantee Fund (OJ 1995, no 4, item 17 and 18, as amended), Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee System and Forced Restructuring (OJ 2016, item 996), (NBP 2017).

Literature regarding the BGF's **restructuring and intervention functions** is much more limited. Until 2016, this included the Fund's implementation of its so-called assistance activities (the supportive function). It encompassed the ability to provide financial aid to banks threatened with bankruptcy (in the form of a loan, a guarantee, or the purchase of receivables financed from the BGF's assistance fund) and to support the consolidation process in the cooperative bank sector (in the form of financial aid from the cooperative bank restructuring fund)[27]. Since 2016, the BGF's non-guarantee activities have been significantly reorganised with its designation

Instrumenty i regulacje bankowe w czasie kryzysu [Instruments and regulations during crisis], Difin, Warszawa 2010.

[27] The purpose of the supportive activity was to provide assistance in the restructuring activities of banks threatened with insolvency – i.e., those which incurred a loss but were not considered insolvent. In accordance with the BGF Act, such aid could take the form of loans, guarantees, or the purchase of receivables of banks on the verge of bankruptcy. The source of financing for this activity was funds accumulated in the support fund. Source: BGF (2015), *2014 Raport roczny Bankowego Funduszu Gwarancyjnego [2014 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2014.pdf

as the national resolution authority for both banks (commercial and cooperative) and credit unions. The key change in this area was assuming responsibility for the preparation and execution of resolution actions regarding credit institutions. At the same time, its previous assistance activities (the supportive function) were restricted to only credit unions, and its restructuring aid for the cooperative sector was gradually eliminated[28] from the scope of the BGF's powers[29].

This arrangement of the crisis management structure within the banking sector led to the situation where the potential costs of the bankruptcy of smaller entities increased. Due to their non-systemic nature, the standard resolution could not be triggered, so the only way to solve their problems was the payout of insured deposits. The sum that the deposit guarantee scheme was required to utilise to settle covered deposits was usually higher than the financial aid that could have been provided to support the acquisition of the ailing bank by another entity – in which case, the BGF's involvement would have been limited to financing only the difference between the value of the transferred assets and the liabilities (i.e., the guaranteed deposits) as was the case within its previously performed assistance activities. This was a decisive factor contributing to the next expansion of the scope of the BGF's powers in 2019. This amendment gave the BGF the ability to apply an alternative measure instead of the deposit payout, namely support of a bank takeover[30]. It should be emphasised, however, that the amendment to the BGF's competencies does not allow it to provide financial assistance to prevent a bank from going bankrupt. The aim of the change is to permit the application of an alternative to the payment of guaranteed deposits, thereby ensuring the continuous access of depositors to their funds, which is the primary task of the BGF.

[28] https://www.bfg.pl/dla-instytucji-finansowych/fundusz-restrukturyzacji-bankow-spoldzielczych/ (access 03.06.2019).

[29] Since the establishment of the BGF as a resolution authority, the provisions entitling it to provide assistance to commercial and cooperative banks on the verge of bankruptcy have been removed from its statutory framework. This action would be justified by implementing other forms of interventions towards banks. In this way, bank resolution became the mechanism that was supposed to replace financial support for commercial banks in danger of bankruptcy (typically larger than cooperative banks). In principle, the resolution process is triggered when the bank is "failing or likely to fail". In the face of one of the formulated conditions for launching a resolution, the BGF's supportive activity was seen as duplicating its new powers. As regards cooperative banks, it is worth noting that the provisions of the CRR Regulation and amendments to the Act on the Functioning of Cooperative Banks, their Associations and Affiliating Banks established in Polish law a new entity in the institutional protection system (IPS), created by the cooperative banks themselves. Its obligatory elements include joint and several liability of the banks forming the scheme, as well as liquidity and capital support mechanisms. It can, therefore, be concluded that the IPS took over the BGF's supportive function in relation to cooperative banks.

[30] It should be noted that the alternative measures are permissible according to the DGS Directive. Nevertheless, they are allowed when the ailing bank is declared bankrupt. In regard to the powers granted to the BGF, the support of a bank takeover takes place without declaring the bank bankrupt. This may raise concerns as to whether the Fund's new powers are compatible with EU law.

Table 2. The evolution of the BGF's restructuring and intervention functions.

The BGF's restructuring and intervention activities	before 2016	between 2016 and 2019	after 2019
financial support to prevent a bank from collapse	x	–	–
financial support to prevent a credit union from bankruptcy	x	x	x
bank resolution	–	x	x
credit union resolution	–	x	x
alternative measure to the payment of bank deposits: financial support to facilitate the takeover of an ailing bank	–	–	x
alternative measure to the payment of covered deposits in a credit union: financial support to facilitate the takeover of an ailing credit union	–	–	–

X – the ability to take the specified action.
Source: own study based on an analysis of: the Act of 14 December 1994 on the Bank Guarantee Fund (OJ 1995, no 4, item 17 and 18, as amended), the Act of 10 June 2016 on the Bank Guarantee Fund, the Deposit Guarantee System and Forced Restructuring (OJ 2016, item 996), and the Act of 9 November 2018 on Amending Certain Acts in Connection with the Strengthening of Supervision over the Financial Market and Protection of Investors on this Market (OJ 2018, item 2243).

The final but not less important sphere of the BGF's activities identified in the domestic literature is the **analytical one.** Its purpose is to monitor the state of the domestic banking sector (which results in the Fund's preparation of the composite review of the financial status of banks which is published on the BGF's website). However, the BGF's analytical capabilities are concentrated in the area of designing and developing an early warning system that aims to identify entities for which the risk of bankruptcy has increased. Owing to such a scheme, the BGF can start preparations more rapidly for potential intervention in a problematic bank. Moreover, the systems for analysing the situation of banks are also developed to constantly monitor the use of the financial support provided by the BGF – as part of its restructuring and intervention function[31]. Moreover, the BGF's analytical capabilities are used in the course of normal operations, for example, to estimate the level of contributions that banks should transfer to the respective BGF funds[32]. It is worth noting that due to the significant expansion of financial institutions' reporting obligations to the Fund[33], the analytical capabilities of the BGF have significant development potential.

31 A. Stelmach, *Zakres działania Bankowego Funduszu Gwarancyjnego [Scope of the Bank Guarantee Fund's activities]*, [in:] J. Świderska (ed.), *Współczesny system bankowy. Ujęcie instytucjonalne [Contemporary banking system. Institutional approach]*, Difin, Warszawa 2013.

32 Zawadzka P., Zimmerman P. and Sura R., *Ustawa o Bankowym Funduszu..., op. cit.*

33 This results from assuming responsibility for running the resolution process, and is defined in numerous national and EU regulations. The list of information requirements applicable to institutions

Although the literature does not identify any additional BGF tasks beyond those already discussed, the Fund itself draws attention to at least two additional functions (i.e., areas of potential activity) that are essential to the BGF and need at least to be flagged. These are **investment activities** in the management of contributions collected from banks (for the steady build-up of the BGF's guarantee and resolution funds) and **information and educational activities**[34]. Moreover, it should be emphasised that the statutory framework regulating the BGF's activities also indicates **powers of a supervisory nature**, which consist of[35]:

1) examination of banks' systems identifying depositors and the level of their guaranteed funds at the time that the guarantee condition is met (the so-called calculation systems),
2) the establishment of the Minimum Requirement for its own funds and Eligible Liabilities (MREL) under which banks are to cover their losses and recapitalise themselves in the event of a crisis (especially within the resolution process).

3. Comparison of the scope of the Bank Guarantee Fund's activities with international practice

To determine the adequacy of the operating model of the Polish deposit guarantee scheme, an analysis was performed regarding the functions of 109 deposit insurance systems worldwide[36]. The tasks performed by the BGF were then compared with the areas of activity identified for foreign guarantors. Considering that the payment of covered deposits is a standard (i.e., common to all) element of deposit guarantee systems, the greatest added value for the BGF comes from identifying other complementary functions that could augment or support its primary operations. For this reason, the dominant part of the analysis comprises a comparison between the BGF's and other guarantors' activities in areas other than the deposit payout. By

is detailed by the BGF on its website. Source: https://www.bfg.pl/dla-instytucji-finansowych/obowiazki-informacyjne/ (access 30.05.2019).

34 BGF (2018), *2017 Raport Roczny Bankowego Funduszu Gwarancyjnego [2017 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2017.pdf

35 Act of 10 June 2016 on the Bank Guarantee Fund, the Deposit Guarantee System and Forced Restructuring (OJ 2017 item 1937, with later amendments).

36 The group included deposit guarantee systems in the following countries: Afghanistan, Albania, Algeria, Argentina, Armenia, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Bermuda, Bosnia and Herzegovina, Brazil (2 systems), Brunei, Bulgaria, Canada, Chile, Columbia (2 systems), Croatia, Cyprus, the Czech Republic, Denmark, Ecuador, El Salvador, Estonia, Finland, France, Germany, Ghana, Great Britain, Greece, Guatemala (2 systems), Guernsey, Honduras, Hong Kong, Hungary, Iceland, India, Indonesia, Iran, Ireland, Italy (2 systems), Jamaica, Japan, Jersey, Jordan, Kazakhstan, Kenya, Korea, Kosovo, Kyrgyzstan, Latvia, Libya, Liechtenstein, Lithuania, Luxembourg, North Macedonia, Malaysia, Malta, Morocco, Mexico, Moldova, Mongolia, Montenegro, the Netherlands, Nicaragua, Nigeria, Norway, Palestine, Paraguay, Peru, the Philippines, Poland, Portugal, Romania, Rwanda, Russia, Serbia, Singapore, Slovakia, Slovenia, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Taipei, Tajikistan, Tanzania, Thailand, Trinidad and Tobago, Turkey, Uganda, Ukraine, Uruguay, the United States, Uzbekistan, Vietnam, WAEMU, Yemen, Zimbabwe.

scrutinising the activities of the Polish Fund against that of the guarantors in other countries, recommendations are provided as to how the BGF's operating model could be enhanced concerning the BGF's functions already identified, as well as to how it could be expanded into completely new areas.

The following functions were identified for the world DGSs (apart from the deposit payout): restructuring, investment, supervisory, disciplinary, cooperative, analytical and social. They constitute the consecutive areas of the comparison with the BGF.

The assessment of the BGF's functions follows the hierarchical taxonomy according to which the core areas of activity (deposit payout) are analysed first. In the following step, the functions are evaluated that might be complementary to its basic activity (restructuring measures). At the end, other – judged as supplemental – functions are investigated.

3.1. Deposit payout

In comparison with the reviewed group of guarantors, the maximum payout of the BGF guarantee stands at a relatively high level – EUR 100,000 against the average of EUR 54,000 for all of the analysed schemes[37]. Also, in terms of the payment time frame, the position of the BGF lies within the leading group of European Union countries, where the deposit payout must be concluded within 7 business days compared to the world average of around 43 days[38]. It should be emphasised, however, that the Polish rules are the result of the need to meet EU standards, which, according to the European Banking Authority (EBA) assessment, are adequate and should not be changed[39].

Nevertheless, the BGF is not able to transfer deposit payouts of covered accounts directly to an account designated by the depositor[40]. That direct method of payment was

[37] The average level of insurance is reduced by the low maximum payouts of African countries, where it typically amounts to no more than EUR 15,000. In some countries, the insurance equals just several hundred euros (e.g., in Zimbabwe, Sudan, Tanzania, Rwanda and Uganda). The high level of deposit coverage results from the implementation of the DGSD, where the limit was harmonised for all EU countries (including the highly developed western Member States). The aim of such a solution was to hamper potential regulatory arbitrage, which could arise in the world of free capital movement and single bank licenses – deposits could flow from countries where the deposit coverage is lower to those where it is higher, potentially destabilising domestic banking systems. It should, however, be emphasised that the implemented coverage in the amount of EUR 100,000 is common for all EU countries – large and highly developed, as well as smaller or developing ones. This raises the question to what extent the agreed level of coverage is appropriate for the particular countries. Nevertheless, assessment of the coverage level does not fall within the scope of this article, which aims to assess the functional shape of the BFG's activity (not the technical and prudential one). Another issue that is not part of the analysis of the functional shape of the BGF is the scope of eligible depositors.

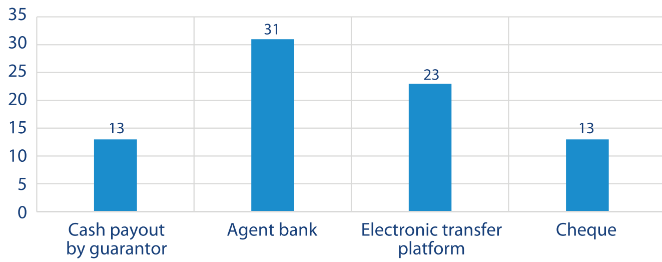
[38] The shortest period is in Malaysia (3 days) and the longest is in Kenya (720 days).

[39] EBA (2019b), *Opinion of the European Banking Authority on deposit guarantee scheme payouts*. Retrieved from: https://eba.europa.eu/taxonomy/term/448

[40] In Poland, transmitting the deposit payout directly into an account indicated by the depositor is possible only through an agent, and requires depositors to appear in person at the agent's office to verify their identity and provide the data for the transfer (e.g., the account number).

identified as available in 23 foreign systems. Due to the growing popularity of electronic channels for the provision of banking services, it can be expected that this method of making deposit payouts may gain importance (it is currently the second most popular method of deposit payout in the world – see Figure 1). Such a solution also excludes the necessity to engage agent banks, which is usually associated with additional costs.

Figure 1. Guarantors' methods of deposit payouts



Cash payout by guarantor – payout of the deposits in cash directly by the insurer (at its premises).
Agent bank – transfer of deposits to the agent bank and then payout by agent in cash or via bank transfers.
Electronic transfer platform – direct transfer by the guarantor to the deponents via electronic transfers using special platforms.
Cheque – payout by cheques issued by the guarantor.

Source: own study.

The BGF's activities also follow the global trend of collecting deposit guarantee funds in advance of crisis events – the model present in 102 of the 109 systems. Also, the target level of deposit guarantee funds (2.6% of the total guaranteed deposits in the system vs. the EU minimum of 0.8%) is relatively high, although there are countries where this level is even higher (e.g., in Kyrgyzstan, 15% of deposits are covered by guarantees)[41]. Such high levels of guarantee funds are exceptional, but the BGF should be encouraged to constantly monitor the adequacy of its funds, especially taking into account the possibility of using them not only for the purpose of the plain deposit payout. The target level of funds might be raised together with the potential broadening of the BGF's scope of duties. It should, however, be noted that some of the potential additional tools that could be entrusted to the BGF have a preventive nature (more in point 3.2.) – they limit the probability of bank failure and thus reduce the amount of the fund that would have to be used. Moreover, imposing levies on banking sector impacts its profitability and consequently its ability to attract investors and further support the economy (via lending). Therefore constant monitoring of the appropriateness of the level of the BGF's funds in necessary.

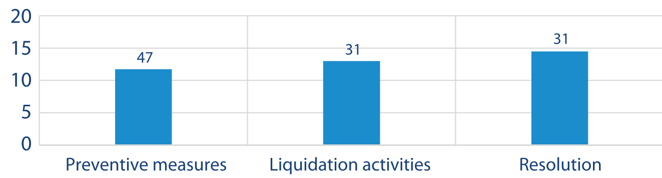
[41] It should, however, be noted that in Poland, banks are obliged to fulfill the MREL requirement, according to which banks have to maintain an appropriate level of own funds and so-called eligible liabilities (mainly bonds), which create a "cushion" for loss absorption and recapitalisation of the bank. Therefore, it may be less probable that the deposit guarantee funds are used, which could justify a not so high target minimum level. It seems however that this issue requires further analysis.

3.2. Restructuring and intervention functions

Among the group of 109 deposit guarantee systems, three types of actions were identified that can be taken by guarantors within the scope of restructuring and intervention tasks:

1) Preventive measures – e.g., the guarantor performs in a bank administrator or conservator capacity, providing financial assistance to bolster the financial state of an ailing entity – 47 systems in the world may undertake such actions,
2) Liquidation activities – e.g., the guarantor performs in a liquidator or receiver capacity, which may include measures aimed at reducing the cost of a guaranteed deposit payout (e.g., the transfer of assets and guaranteed deposits[42] from a collapsing bank to another institution) – such actions may be taken by 52 systems worldwide,
3) Resolution – the guarantor participates by supporting the resolution procedure with the deposit guarantee fund – acceptable in 58 systems.

Figure 2. Restructuring and intervention functions of deposit guarantors around the world



Source: own study.

In terms of the adopted division of deposit guarantee schemes' restructuring and intervention activities, the BGF performs all of the aforementioned functions. It is worth adding, however, that in the area of preventive measures, it does not have the power to provide financial assistance to banks – only to credit unions. Within the Polish banking sector, the systemic importance of banks is more significant (in terms of the value of assets and accumulated deposits) than that of credit unions[43]. Therefore, it is more likely that the payment of guaranteed deposits to banks (not credit unions) may exceed the financial capabilities of the BGF. This justifies the expansion of the BGF's purview with mechanisms that may mitigate

[42] Guaranteed deposits are of a main concern for the deposit insurers. However, there are also schemes that are allowed to engage in the transfer of uninsured deposits (e.g. Canada, Colombia, Indonesia, Italy, Jamaica, Mexico, Mongolia, Morocco, Nigeria, the USA) or even other liabilities (e.g. Canada, Colombia, Italy, Jamaica, Mexico, Mongolia, the USA). The results of the study are confirmed by the Bank for International Settlements's analysis of the guarantors' role in the management of the bank crisis (P. Baudino, R. Defina, J.M.R. Fernandez, K. Hajra, R. Walters, *Bank failure management – the role of deposit insurance*, BIS FSI Insights on policy implementation 2019, No 17).

[43] NBP (2018), *Financial System in Poland 2017*. Retrieved from: http://www.nbp.pl/en/systemfinansowy/fsd_2017.pdf

the risk of the total depletion of the BGF's funds and any shortfall in the event of subsequent payouts (preventive measures). Such mechanisms may comprise various means of supporting a bank's recovery process (e.g. loans). However, it is necessary to ensure the greatest possible commitment of the banks themselves to independent self-restructuring and to establish appropriate conditions for the Fund's assistance that galvanise the banks to recover as soon as possible and return the granted assistance[44]. Otherwise, an extension of the BGF's powers to support banks may result in the banking sector assuming more risk. Also, an enlargement of the BGF's functions by enabling support for banks (usually via loans) has the potential mainly to support banks' liquidity (which may ultimately require support from central banks due to its specificity) and may have limited impact on improving banks' solvency.

3.3. Analytical function

In the realm of their analytical activities, three main tasks were identified as being performed by deposit guarantee systems in international practice: system testing (testing the operational and financial capacity of the fund to payout deposits under various scenarios), monitoring the current state of banks, and developing early warning systems. An analysis of the BGF's annual reports suggests that it performs all of these tasks. It should be noted, however, that according to the reports, the Fund tested its ability to payout deposits less than once a year[45] – the latest information on effectiveness tests was included in the 2015 report, although the report for 2017 indicated that the BGF had a permanent task force for stress testing of the Fund's systems, which may indicate continuity in the task being performed.

Moreover, according to the guidance paper of IADI[46], the BGF does not test the adequacy of its funds. However, taking into account the possibility of using the BGF's funds not only for deposit payouts, it seems necessary to adequately monitor the level of its resources.

In view of the above, it appears unnecessary to expand the BGF's tasks within the scope of its analytical activities, although they must be constantly improved, especially

44 Such a solution mitigates the legal risk for the financial safety net institutions, since they do not have to intervene deeply in the functioning of a bank, which may result in lawsuits from the bank's shareholders in which they may accuse the financial safety net of too stringent measures employed towards the bank. More about such a risk in: Kozińska M., *Ryzyko prawne w zarządzaniu kryzysowym – wnioski z upadłości Banco Popular Espanol [Legal risk in crisis management – conclusions from the Banco Popular Espanol's collapse]*, Safe Bank 2017, no. 3 (68).

45 This complies with the requirements placed on the BGF, which obliges it to perform stress tests at least once every 3 years. Source: "Act of 10 June 2016 on the Bank Guarantee Fund, Deposit Guarantee System and Forced Restructuring" (OJ 2017 item 1937, with later amendments).

46 IADI (2019), *Deposit Insurers' Role in Contingency Planning and System-wide Crisis Preparedness and Management*. Retrieved from: https://www.iadi.org/en/assets/File/Papers/Approved%20Guidance%20Papers/IADI%20Guidance%20Paper_DI%20role%20in%20contingency%20planning%20&%20crisis%20management.pdf

in the field of self-testing (operational and financial). It should be noted that the scope of the BGF's activities was subject to substantial amendments within previous years, however these did not correspond with the parallel enhancement of the scope of the BGF's stress-testing of its operational preparation to fulfill the modified set of tasks (at least according to the BGF's reporting). Also, as suggested in the last paragraph of point 3.1., it is necessary to monitor the adequacy of the BGF's funds.

3.4. Investment function

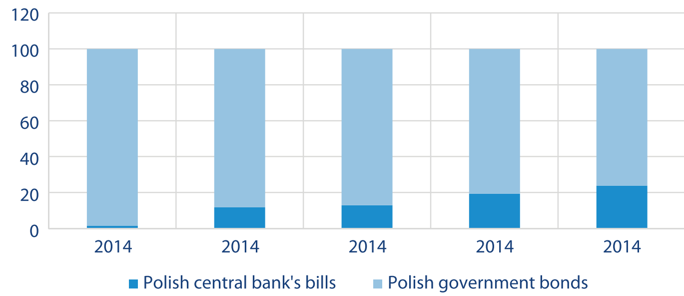
As the BGF points out in its annual reports, provisions of its statutory framework oblige it to invest the funds accumulated as contributions in specific forms of securities and financial instruments. This statutory obligation seems to be reasonable since it allows the BGF to earn additional money on the investment, but at the same time, it requires that the BGF perform another function – an investment function, which is not a standard component of guarantors' activities (identified in only 42 systems worldwide). As part of these investment activities, the BGF is allowed to purchase primarily securities issued or guaranteed by the national government, the Polish central bank, and the central governments or the central banks of EU member states. It may also acquire participation units in money market funds and make term deposits with the National Bank of Poland. Comparing the investment range of the BGF with what is acceptable for other guarantors around the world, the range is relatively broad, as some of the analysed foreign systems allow investments only in their government's debt (e.g., Ukraine). Nevertheless, there are guarantors which have even broader investment options. For example, the Kazakhstan guarantee system can invest in high-rated securities of issuers operating internationally, while the Armenian guarantor can purchase gold.

In practice, however, the BGF's investment activity comes down to investing in government bonds and the Polish central bank's bills[47].

For this reason, the BGF's investment portfolio seems to be insufficiently diversified, and – due to the amount of government bonds managed by the BGF which could require quick liquidation – it also has the potential to destabilise the financial markets and, consequently, have a negative impact on the country's financial stability. Considering this, it is recommended that the portfolio of the Fund's investments be expanded by also investing in the other securities that are legally allowed. This however should be carefully considered, since the scope of sufficiently safe and liquid assets (from the point of view of the BGF) may be limited (especially at the time of a crisis on the financial markets). Nevertheless, together with the development of the financial markets, greater diversification should be taken into account. In this regard, the positive trend in the management of the BGF's resources should be noted, which consists in the permanent departure from the complete reliance on government bonds (Figure 3).

[47] BGF (2018), *2017 Raport Roczny Bankowego Funduszu Gwarancyjnego [2017 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2017.pdf

Figure 3. The BGF's investment portfolio



Source: own work based on: BGF (2015), *2014 Raport roczny Bankowego Funduszu Gwarancyjnego [2014 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2014.pdf; BGF (2017), *2016 Raport roczny Bankowego Funduszu Gwarancyjnego [2016 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2016.pdf; BGF (2019), *2018 Raport Roczny Bankowego Funduszu Gwarancyjnego [2018 Annual report of Bank Guarantee Fund]*. Retrieved from: https://www.bfg.pl/wp-content/uploads/bfg-rr-2018-pl.pdf

3.5. Information and educational functions

Citizens' awareness of the protection offered by the deposit guarantee system lies at the foundation of the effectiveness of deposit insurance in preventing bank runs (outbreaks of bank panic). Consequently, many guarantors strongly embrace information and educational activities, sometimes including propagation of knowledge about deposit guarantees as one of the formal goals of their activity (e.g., Albania, the Bahamas, Jordan, and Ukraine). In international practice, guarantee systems employ various methods to promote their activities, including: publishing standard Q&As (Questions & Answers) or FAQs (Frequently Asked Questions) dealing with the most important issues related to the guarantee, preparing information brochures, placing advertisements in newspapers, on the radio or TV, and providing on-line deposit guarantee calculators. The most state-of-the-art guarantors extend their information policy via social media (14 systems in the world).

Analysing the foregoing forms of guarantor promotion, the BGF does not utilise advertising in the media or calculators, nor is it active on social media. Although information on the Fund's activities are clearly and extensively presented on its website, it is worth noting that the growing role of social media in contemporary society will require the BGF to develop its activities in this field. Dissemination of messages via services such as Facebook, Instagram, and Twitter is becoming a basic channel of communication, particularly among young clients of the banking sector. Nevertheless, it is worth noting the activities of the BGF in the field of science. Comparing the Fund to foreign guarantors, the development of *Safe Bank*, a scientific journal dedicated to the banking sector and financial stability, is a positive action. This type of activity is rare on a global scale; more typically, guarantors organise conferences, workshops, or courses on topics complementary to their activities – an undertaking currently absent at the BGF (although present in the past).

3.6. Supervisory function

Certain powers of the BGF (the control of calculation systems, the setting of the MREL) are examples of activities of a supervisory nature. Although the literature does not identify such a guarantor function (in Poland or abroad), it may be noted in operational practice. The international review suggests that this function is performed by 69 of 109 analysed deposit guarantee systems. The guarantors' supervisory function focuses on monitoring the aspects of banks' activities related to deposit insurance. Among these there are two worth mentioning as they are not performed by the BGF:

1) monitoring banks' compliance with the criteria for participation in the system,
2) defining requirements related to advertisements for deposit products.

In the first case, since participation in the guarantee system in Poland is compulsory, banks are not subject to any requirements conditioning their involvement in the scheme[48]. So, additional functional rights for the Fund in this regard are unnecessary. The second issue, related to advertising for bank deposits, has not yet provoked controversy due to the relatively stable state of liquidity in the Polish banking sector. It could appear if the situation were to deteriorate, and banks would then be forced to compete with each other for their clients' funds to maintain an adequate level of liquidity. This, in turn, could raise the risk of abuse in advertising deposit products[49]. It is, therefore, worth considering supplementing the Fund's powers in this regard, while also factoring in the potential role of the Office of Competition and Consumer Protection (UOKiK), the main authority responsible for the protection of consumer rights in Poland.

Moreover, it should be emphasised that those supervisory powers that are already held by the BGF (and were mentioned previously) are usually shared with the Polish Financial Supervisory Authority (PFSA), the main entity responsible for prudential supervision. This arrangement, however, leads to a duplication of authority and blurring of the lines of responsibility. Meanwhile, the BGF has no power to discipline banks that do not fulfill certain obligations – worldwide, disciplinary powers granted to guarantors are rare, with only 18 of 109 analysed systems indicating such authority. In Poland, this is the prerogative of the PFSA, so it seems advisable to

[48] It should be added, however, that the BGF can exclude a bank from the guarantee system if it does not fulfill its obligations resulting from participation, for example, it does not pay contributions or does not create and maintain the so-called calculation systems. Source: Act of 10 June 2016 on the Bank Guarantee Fund, deposit guarantee system and forced restructuring (Journal of Laws of 2017, item 1937, as amended).

[49] It should, however, be noted that this issue is partially addressed in the national legal framework, which requires that banks inform their clients about their financial standing. Moreover, the law clearly states that the information on the participation in the obligatory deposit insurance scheme must not be a part of any deposit advertisements. Source: Act of 10 June 2016 on the Bank Guarantee Fund, deposit guarantee system and forced restructuring (Journal of Laws of 2017, item 1937, as amended).

consider an appropriate reshaping of the division of powers between the BGF and the PFSA so that each institution would be fully responsible for a well-defined area.

Another area of consideration is connected with the overlaps between the BGF's restructuring and resolution powers, and the PFSA's early intervention powers. The responsibilities is this regards are usually shared between the two mentioned institutions.

Conclusions and recommendations

Recently, the scope of the Banking Guarantee Fund's functional activities has been subjected to numerous changes resulting from the need to implement EU regulations as well as (though to a lesser extent) to incorporate lessons learned from the Polish domestic experience. These reforms to the activities of the financial safety net institution are, however, a good incentive to assess the adequacy of its current architecture. For this reason, it was decided to conduct an analysis of the Fund's powers in order to evaluate the adequacy of the range of its statutory activities. Based on international experience, it was determined that at least several areas of the BGF's activities could be improved. The list of suggested changes includes five proposals, which can be divided into two groups: fundamental and supplemental changes. The first group embraces the following recommendations:

1) Allow the BGF to fulfill its obligation to pay out deposits in a liquidated bank by means of the direct transfer of funds into accounts indicated by depositors (bypassing a payment agent),
2) Supplement the BGF's powers with the ability to provide financial support to banks whose financial situation has deteriorated (to avoid their bankruptcy or resolution),
3) Increase the diversification of the investment portfolio of the contributions collected for the BGF funds,
4) Establish a distinct range of rights and responsibilities within the supervisory function between the BGF and the. PFSA

The last recommendation proposes the development of the BGF's information and educational function via an active presence on social media. This change seems to be of lesser importance and therefore can be assessed as a supplemental one.

It should be noted that these recommendations primarily supplement or modify the range of existing BGF powers, as the current scope of the Polish guarantor's rights appears to be broadly developed. Nevertheless, there is one function that the BGF does not perform at all – a disciplinary one. The need to supplement the Fund's activities with such powers depends on the reshaping of the financial safety net framework and the division of duties between the participating institutions. Apart from the disciplinary function, there is no other area of activity (such as restructuring, intervention, or analytical), which is lacking a place among the

Fund's powers. In this regard, the BGF's operating model is viewed as broad and well-developed, although improvement by implementing the changes mentioned above is still recommended.

References

Legal acts

DIRECTIVE 2014/49/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on deposit guarantee schemes (Official Journal of the European Union L 173/149).

DIRECTIVE 2014/59/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council (Official Journal of the European Union L 173/190).

Act of December 14, 1994 on the Bank Guarantee Fund (OJ 1995, no 4, item 17 and 18, with later amendments).

Act of 9 November 2018 on amending certain acts in connection with the strengthening of supervision over the financial market and protection of investors in this market (OJ 2018, item 2243).

Act of 10 June 2016 on the Bank Guarantee Fund, deposit guarantee system and forced restructuring (OJ 2017, item 1937, with later amendments).

Act amending the act on credit unions and certain other acts (OJ 2013, item 613).

Monographs and scientific articles

Angkinand A., Whilborg C., *Deposit Insurance Coverage, Ownership, and Bank's Risk-Taking in Emerging Markets*, Journal of International Money and Finance 2010.

Baudino P., Defina R., Fernandez J.M.R., Hajra K., Walters R., *Bank failure management – the role of deposit insurance*, BIS FSI Insights on policy implementation 2019, No 17.

Bernet B., Walter S., *Design, Structure and Implementation of a Modern Deposit Insurance Scheme*, SUERF Studies 2009, 5.

Cull R., Senbet L., Sorge M., *Deposit Insurance and Financial Development*, Policy Research Working Paper 2001, 2682.

Demirguc-Kunt A., Detragiache E., *Does Deposit Insurance Increase Banking System Stability? An Empirical Investigation*, Policy Research Working Paper 1999, 2247.

Demirguc-Kunt A., Kane E., Laeven L., *Deposit Insurance Database*, IMF Working Paper 2014, WP/14/118/.

Dewenter K., Hess A., Brogaard J., *Institutions and Deposit Insurance: Empirical Evidence*, Journal of Financial Services Research 2017.

Flejterski S. and Zioło M., *A safe and stable banking and financial system as the basis for the development of the economy and society*, Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie, Ekonomika i Organizacja Gospodarki Żywnościowej 2015, nr 110.

Garcia G., *Deposit Insurance: A Survey of Actual and Best Practices*, IMF Working Paper 1999, WP/99/54.

Gospodarowicz M., *System gwarantowania depozytów z uwzględnieniem indywidualnego ryzyka banku i ryzyka systemowego [Deposit guarantee systems taking into account individual bank risk and systemic risk]*, Oficyna Wydawnicza Szkoły Głównej Handlowej w Warszawie, Warszawa 2015.

Gropp R., Vesala J., *Deposit Insurance, Moral Hazard and Market Monitoring*, Working Paper Series 2004, No. 302.

Ioannidou V., de Dreu J., *The Impact of explicit Deposit Insurance on Market Discipline*, DNB Working Paper, 2006, No. 89.

Jackowicz K., Kozłowski Ł., Kowalewski O., *Depositor Discipline Through Interest Costs During Good and Bad Times: The Role of The Guarantor of Last Resort*, Journal of Financial Services Research 2016, 54, Issue 2.

Janc A., *Financial Regulation in Poland*, [in:] Kattel R., Kregel J. and Tonveronachi M. (ed.), *Financial Regulation in the European Union*, Routledge, London 2015.

Kahn Ch., Santos J., *Allocating bank regulatory powers: lender of last resort, deposit and supervision*, BIS Working Papers 2001, No 102.

Kane E., Demirguc-Kunt A., *Deposit Insurance Around the Globe: Where Does It Work?*, NBER Working Series, Working Paper 2001, 8493.

Koleśnik J., *Pożądany kształt europejskiego, zintegrowanego systemu restrukturyzacji i uporządkowanej likwidacji banków oraz gwarantowania depozytów [Desired shape of the European, integrated system of bank resolution and deposit guarantee]*, [in:] Zaleska M. (ed.), *Unia bankowa*, Difin, Warszawa 2013.

Kozińska M., *Ryzyko prawne w zarządzaniu kryzysowym – wnioski z upadłości Banco Popular Espanol [Legal risk in crisis management – conclusions from the Banco Popular Espanol's collapse]*, Safe Bank 2017, no. 3(68).

Laeven L., *The Political economy of Deposit Insurance*, World Bank Policy Research Working Paper 2004, 3247.

Pruski J., Szambelańczyk J., *Systemy gwarantowania depozytów w sieciach bezpieczeństwa finansowego na tle konsekwencji globalnego kryzysu finansowego*, Safe Bank 2014, no. 4(57).

Stelmach A., *Zakres działania Bankowego Funduszu Gwarancyjnego [Scope of the Bank Guarantee Fund's activities]*, [in:] Świderska J. (ed.), *Współczesny system bankowy. Ujęcie instytucjonalne [Contemporary banking system. Institutional approach]*, Difin, Warszawa 2013.

Ślązak E. and Dunaszewska A., *Zamiany w unijnych systemach gwarantowania depozytów, dokonane w odpowiedzi na kryzys finansowy [Changes in the EU deposit guarantee schemes implemented as an answer to the financial crisis]*, "Bezpieczny Bank" 2008, no 2(37).

Talley S.H., Mas I., *Deposit Insurance in developing countries*, Policy Research Working Paper WPS 1990, 548.

Zaleska M., *Zmiany zasad gwarantowania depozytów w odpowiedzi na globalny kryzys finansowy [Changes in the rules of deposit guarantees as an answer to the global financial crisis]*, [in:] Nowakowski J. (ed.), *Instrumenty i regulacje bankowe w czasie kryzysu [Instruments and regulations during crisis]*, Difin, Warszawa 2010.

Zaleska M., *System gwarantowania depozytów [Deposit guarantee systems]*, [in:] Zaleska M. (ed.), *Świat bankowości [World of Banking]*, Difin, Warszawa 2018.

Zawadzka P., Zimmerman P. and Sura R., *Ustawa o Bankowym Funduszu Gwarancyjnym, systemie gwarantowania depozytów oraz przymusowej restrukturyzacji. Komentarz [Act on the Bank Guarantee Fund, deposit guarantee system and forced restructuring. Comment]*, C.H. Beck, Warszawa 2017.

Reports

BGF (2014), *2013 Raport roczny Bankowego Funduszu Gwarancyjnego [2013 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2013.pdf

BGF (2015), *2014 Raport roczny Bankowego Funduszu Gwarancyjnego [2014 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2014.pdf

BGF (2016), *2015 Raport roczny Bankowego Funduszu Gwarancyjnego [2015 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2015.pdf

BGF (2017), *2016 Raport roczny Bankowego Funduszu Gwarancyjnego [2016 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2016.pdf

BGF (2018), *2017 Raport Roczny Bankowego Funduszu Gwarancyjnego [2017 Annual report of Bank Guarantee Fund]*. Retrieved from https://www.bfg.pl/wp-content/uploads/raport-roczny-2017.pdf

BGF (2019), *2018 Raport Roczny Bankowego Funduszu Gwarancyjnego [2018 Annual report of Bank Guarantee Fund]*. Retrieved from: https://www.bfg.pl/wp-content/uploads/bfg-rr-2018-pl.pdf

EBA (2019a), *Opinion of the European Banking Authority on the eligibility of deposits, coverage level and cooperation between deposit guarantee schemes*. Retrieved from: https://eba.europa.eu/taxonomy/term/448

EBA (2019b), *Opinion of the European Banking Authority on deposit guarantee scheme payouts*. Retrieved from: https://eba.europa.eu/taxonomy/term/448

NBP (2017), *Financial System in Poland 2016*. Retrieved from: http://www.nbp.pl/en/systemfinansowy/fsd_2016.pdf

NBP (2018), *Financial System in Poland 2017*. Retrieved from: http://www.nbp.pl/en/systemfinansowy/fsd_2017.pdf

IADI (2014), *IADI Core Principles for Effective Deposit Insurance Systems*. Retrieved from: https://www.iadi.org/en/assets/File/Core%20Principles/cprevised2014nov.pdf

IADI (2017), "Mind the gap!" A comparative analysis between the IADI CPs and the DGSD. Retrieved from: https://www.iadi.org/en/assets/File/Papers/Regional%20Papers/Mind_the_Gap__Final.pdf

IADI (2018), *Deposit Insurance Fund Target Ratio Research Paper*. Retrieved from https://www.iadi.org/en/assets/File/IADI_Research_Paper_Deposit_Insurance_Fund_Target_Ratio_July2018.pdf

IADI (2019), *Deposit Insurers' Role in Contingency Planning and System-wide Crisis Preparedness and Management*. Retrieved from: https://www.iadi.org/en/assets/File/Papers/Approved%20Guidance%20Papers/IADI%20Guidance%20Paper_DI%20role%20in%20contingency%20planning%20&%20crisis%20management.pdf

Internet sources

Fundusz restrukturyzacji banków spółdzielczych (15.02.2019). Retrieved from https://www.bfg.pl/dla-instytucji-finansowych/fundusz-restrukturyzacji-bankow-spoldzielczych/

Obowiązki informacyjne (19.08.2019). Retrieved from https://www.bfg.pl/dla-instytucji-finansowych/obowiazki-informacyjne/

Internet websites of deposit guarantee schemes

Safe Bank 2 (79) 2020

DOI: 10.26354/bb.6.2.79.2020

Wojciech Kaczmarczyk*
ORCID: 0000-0003-2037-2568
wojciech.kaczmarczyk@ue.katowice.pl

Commission for granting a loan as an instrument for transferring the cost to a consumer by financial institutions in Poland

Abstract

The aim of the study is to analyse the manner of using the commission instrument for granting loans by financial institutions in Poland, with particular emphasis on cases including early repayment of debt. The research was based on a study of 12 cases of consumer loans repayment before the due date. The study identified the impact of the commission on the APRC (particularly in case of early repayment) and the risk associated with the borrower's claim for repayment of part of the commission. The results obtained indicate that the commission for granting a loan is not only an instrument that increases the cost of the loan, but also the one which guarantees the achievement of a certain profitability in the event of early repayment thereof. Moreover, the results lead to the conclusion that, taking into account legal fees and court costs, consumers may waive the right to reclaim commission in the event of early repayment of a loan.

Key words: consumer credit, credit early repayment, APRC

JEL: G21, H81

Prowizja za udzielenie kredytu jako instrument zapewniający stabilny zysk instytucjom finansowym w Polsce

Streszczenie

Celem opracowania jest analiza sposobu wykorzystania instrumentu prowizji za udzielenie kredytu przez instytucje finansowe w Polsce ze szczególnym uwzględnieniem przypadków, gdy doszło do przedterminowej spłaty całego zadłużenia. Badania przeprowadzono w oparciu o studium 12 przypadków kredytów konsumenckich, które zostały spłacone przed terminem. W ramach badań określono wpływ prowizji na wysokość APRC (zwłaszcza w przypadku wcześniejszej spłaty) oraz ryzyko związane z dochodzeniem przez kredytobiorcę zwrotu

* Wojciech Kaczmarczyk – University of Economics in Katowice; Attorney focused on financial law.

części prowizji. Uzyskane wyniki wskazują, że prowizja za udzielenie kredytu stanowi nie tylko instrument podnoszący koszt kredytu, ale przede wszystkim gwarantujący osiągnięcie określonej rentowności w przypadku jego wcześniejszej spłaty. Nadto wyniki prowadzą do konkluzji, że z uwagi na wysokość kosztów sądowych konsumenci mogą rezygnować z dochodzenia zwrotu prowizji w przypadku wcześniejszej spłaty kredytu.

Słowa kluczowe: kredyt konsumencki, wcześniejsza spłata kredytu, RSSO

Introduction

Undoubtedly, the cost of a loan is one the most important elements thereof. Strong competition on the consumer credit market leads financial institutions to try and present their offer in a manner that makes it more attractive to the consumer. Thus, the cost of a loan often includes not only interest (resulting directly from the interest rate), but also other additional, non-interest-bearing costs, in particular the commission for granting the loan.

Currently, charging an additional fee for granting a loan is an instrument used not only by non-bank institutions, but also by SKOKs (Spółdzielcza Kasa Oszczędnościowo-Kredytowa – *Cooperative Savings and Loan Fund* – financial institutions similar to Credit Unions) and banks. Despite the fact that commissions are now a typical element of loan agreements, it is debatable how much the instrument negatively affects the consumer's situation.

The purpose of this article is to analyse the use of the loan-granting commission instrument by financial institutions in Poland in the context of increased loan costs, with particular emphasis put on the increase in the actual loan cost in a situation where the borrower decided to repay the entire debt earlier. The publication also analyses the risk incurred by consumers wishing to settle their commissions in the event of early repayment. The obtained results have practical significance for institutions and organisations focused on consumer protection on the financial market.

Literature review and hypotheses development

Both EU and national legislators aim to improve the situation of consumers on the credit market, in particular by limiting the maximum credit cost and providing protective instruments. The main act of national law regulating the matter of credit activity provided to consumers is Law on Consumer Credit[1], which simultaneously transfers the regulations laid down in Directive 2008/48/EC to credit agreements for consumers[2] into national law.

1 Ustawa z dnia 12 maja 2011 roku o kredycie konsumenckim [Law on consumer credit of 12 May 2011]. Dz. U. of 2019, item 1083.

2 Directive 2008/48/EC of the European Parliament and of the Council of 23 April 2008 on credit agreements for consumers and repealing Council Directive 87/102/EEC. OJ L 133, 22.5.2008.

The aforementioned regulations provide for a maximum credit cost, a requirement to provide the consumer with a range of information, including the Annual Percentage Rate of Charge (APRC) and the calculation method thereof. In addition, they introduce a number of rights to which the consumer is entitled to, including the possibility of credit early repayment without the need to incur costs attributable to the credit period which has been shortened.

Despite the above-mentioned regulations, practice still shows that the level of effective protection afforded to consumers is still insufficient. The experience proves, among others, that the excessively detailed information included in the form causes the average consumer to feel overloaded with information and practically discourages the consumer from understanding the details of the offer [Czech Republic 2018]. It is also claimed that information overload ultimately leads to a decrease in decision-making capacity[3]. The creditor may therefore be tempted to use its contractual and informational advantage over the consumer.

Research on consumer credit regulation often shows that more and more detailed regulations still do not solve the problem of insufficient consumer protection and may even have adverse effects on consumers[4], with the main emphasis on the activity of non-bank lending institutions. While available studies indicate that non-bank institutions are indeed more affected by this problem, in banks there are also loans with high APRC level offered. It is emphasised that the only way to solve the problem is to increase consumers' financial literacy[5].

The practice of the Polish consumer credit market indicates that the commission for granting a loan is used not only as a non-interest-bearing instrument increasing the overall cost of the loan, but also as an instrument ensuring the lender's profit regardless of the actual duration of the loan relationship. Although Article 49 of the Law on consumer credit provides for the settlement of all costs in the event of early repayment of a loan, financial institutions have so far refused to do so, pointing to, inter alia, an interpretation laid down in a letter from the President of the Foundation for the Development of the Financial Market (incidentally representing the interests of lending institutions), which advocated an interpretation that pre-contractual costs (including commission) are not reimbursable in any part[6].

3 J. Fazlagić, *Zjawisko "nadmiaru informacji" a współczesna edukacja [The phenomenon of "information overload" and modern education]*, E-mentor 2010, 4(36).

4 K. Kurzępa-Dedo, A. Gemzik-Salwach, *Ustawa antylichwiarska a zmiany na rynku instytucji pożyczkowych – wybrane zagadnienia (część 1) [Anti-usury Act and changes on the market of loan institutions – selected issues (part 1)]*, Humanities and Social Sciences 2018a, 2(25); K. Kurzępa-Dedo, A. Gemzik-Salwach, *Ustawa antylichwiarska a zmiany na rynku instytucji pożyczkowych – wybrane zagadnienia (część 2) [Anti-usury Act and changes on the market of loan institutions – selected issues (part 2)]*. Humanities and Social Sciences 2018b, 3(25); P. Nowak, *Ochrona Konsumenta przez ustawowe limitowanie opłat kredytowych [Consumer Protection through Statutory Debt Limits]*, Przedsiębiorczość – Edukacja [Entrepreneurship – Education] 2019, 1(15).

5 Z. Korzeb, *Lichwa – fikcja czy rzeczywistość [Usury – fiction or reality]*, Bezpieczny Bank 2017, 2(67).

6 Pismo Prezes Fundacji Rozwoju Rynku Finansowego do Rzecznika Finansowego z dnia 13 marca 2017 roku [Letter from the President of the Financial Market Development Foundation to the Financial Ombudsman of 13 March 2017].

The opposite position was taken by both the Financial Ombudsman and the President of the Office of Competition and Consumer Protection, who supported an interpretation according to which the earlier repaid commission shall be refunded appropriately[7]. The above position of the Financial Ombudsman is also presented as significant in specific court cases – however, the described position and important views are not binding in interpretation of the law[8].

On the other hand, in the legal literature it is stressed that the intention of this regulation is to ensure that the economic interest of the consumer is protected, so the way in which costs are determined in the credit agreement does not prevent the consumer from exercising his or her right to early repayment of the loan[9]. The regulation is intended to ensure effective protection of the consumer (borrower), whereas interpretation from this perspective shall lead to the conclusion that all costs are reduced, including the commissions charged previously[10].

Moreover, in that area, the case-law of common courts is also not uniform. It is important to mention that at an interval of only one month, the final judgments of the District Court in Gliwice were issued in cases against the same financial institution and concerning a loan concluded on the basis of the same agreement (a loan granted on the basis of this agreement is included in the research material). By judgment of 20 December 2017, file reference no. III Ca 1489/17, the court dismissed the claim in its entirety, claiming that the consumer had not demonstrated that the fee was linked to the credit period[11], but by judgment of 18 January 2018, file reference no. III Ca 1653/17, the court granted the claim in its entirety, emphasising that the content of the agreement indicated that the fee was linked exclusively to the credit period[12].

A deadlock will likely be solved by the Judgment of the Court of Justice of the European Union of 11 September 2019, issued in the case reference no. C-383/18, in which the need to settle all costs incurred by the consumer (including the commission for granting a loan) was clearly indicated[13]. However, there are doubts about how the judgment

7 Stanowisko Rzecznika Finansowego i Prezesa Urzędu Ochrony Konkurencji i Konsumentów w sprawie interpretacji art. 49 ustawy o kredycie konsumenckim z dnia 16 maja 2016 roku [Statement of the Financial Ombudsman and the President of the Office of Competition and Consumer Protection on the interpretation of art. 49 of the Consumer Credit Act of 16 May 2016].

8 A. Jurkowska-Zeidler, *Aktualne problemy ochrony klienta na rynku bankowym z perspektywy działalności Rzecznika Finansowego [Current problems of customer protection in the banking market from the perspective of the activity of Financial Ombudsman,* Gdańskie Studia Prawnicze 2018, 39.

9 Z. Ofiarski, *Ustawa o kredycie konsumenckim. Komentarz [Law on consumer credit. Comment]*, Wolters Kluwer Polska, Warszawa 2014, e-LEX, comment to article 49.

10 E. Rutkowska-Tomaszewska, *Redukcja kosztów kredytu konsumenckiego a przedterminowa jego spłata w świetle art. 49 Ustawy o kredycie konsumenckim [Reducing the cost of consumer credit and an early repayment of it in the light of art. 49 of the Consumer Credit Act (UKK)].* Studia Prawno-Ekonomiczne 2016, 100.

11 Judgment of the District Court in Gliwice of 20 December 2017 in case III Ca 1489/17, e-LEX.

12 Judgment of the District Court in Gliwice of 18 January 2018 in case III Ca 1653/17, Portal of judgments of the District Court in Gliwice.

13 Judgment of the Court of Justice of the European Union (First Chamber) of 11 September 2019 in case C-383/18. InfoCuria.

should exactly be applied[14] and, at the moment (end of 2019), the vast majority of financial institutions still refuse to settle their credit commissions voluntarily. At the same time, possible court proceedings are connected with the necessity to incur the costs of initiating the proceedings and long-term commitment, but also with the risk of incurring further costs in the case of losing thereof. It is also underlined that the costs associated with court proceedings often turn out to be too high for the consumer[15].

The presented literature describes in detail the theoretical issues related to the protection of the borrower-consumer, but does not focus much on the practical aspects of the issue. There are no studies indicating the impact of commission (and the current settlement system adopted by financial institutions) on the cost of loan in the event of its early repayment. Therefore, in order to determine the actual impact of the commission on the total cost of the loan, the following hypothesis was adopted: (1) the commission for granting the credit has a significant impact on the credit cost (APRC) – particularly in case of early repayment.

It is also significant whether consumers are ready to use their instruments to protect their rights. Analysis of the literature leads to the conclusion that the most effective method of settling commissions is legal action. However, it involves the risk of losing (as indicated above, the same court may differently assess almost identical facts), and thus incurring further costs. Due to the lack of practical studies focused on the risk of consumers deciding to take legal action, the following hypothesis was adopted: (2) the costs associated with seeking commission settlement in case of early repayment are inordinately high.

Material and methods

The research material used for the purposes of the study was detailed data on 12 consumer loans granted to consumers included in the same creditworthiness category and repaid significantly before the agreed credit term. The research included in particular loan agreements, loan documentation, documents related to the complaint procedure and possible arbitration or court proceedings. Seven of the analysed loans were granted by SKOKs and 5 by banks, while all loans were distinguished by a fixed total amount. A summary of the basic information concerning the analysed loans is presented in Table 1.

On the basis of the above-mentioned data, a study of each credit ratio was carried out. First of all, the WIBOR6M rate was determined as of the day of concluding the agreement, in relation to which the margin of each credit was calculated. The

[14] A. Wachnicka, *Redukcja kosztów w razie przedterminowej spłaty kredytu konsumenckiego w świetle orzeczenia TSUE C-383/18 [Reduction in the total cost of consumer credit in case of early repayment in light of the CJEU ruling C-383/18]*, Internetowy Kwartalnik Antymonopolowy i Regulacyjny (iKAR) [Online Antitrust and Regulatory Quarterly (iKAR)], 2019, 8(8).

[15] A. Bogusławski, *Pozasądowe rozwiązywanie sporów z podmiotem rynku finansowego jako element ochrony konsumenta [Out-Of Court Settlement Of Disputes With An Entity Operating On The Financial Market As An Element Of Consumer Protection]*, Journal of Finance and Financial Law 2016, 1(3).

amount actually paid to the consumer (the amount of the loan minus the amount of the commission) was determined, in respect of which the relative share of the commission charged for granting the loan was calculated. The results obtained for each individual loan were then compared.

Table 1. Basic loan parameters used for research

Loan	Conclusion date of the agreement	Type of institu-tion	Amount of loan (PLN)	Amount of commis-sion (PLN)	Contractual lending period (months)	Actual lending period (months)	Interest rate on the day of concluding the agre-ement
A	10/18/2013	SKOK	140,000.00	2,800.00	120	13	12%
B	10/23/2013	SKOK*	37,500.00	7,500.00	60	1.5	14%
C	10/30/2014	Bank	99,960.00	4,760.00	96	36	9%
D	11/13/2014	Bank	208,947.49	3,134.21	84	22	6.99%
E	12/8/2014	Bank	237,800.00	4,756.00	98	39**	7.26%
F	5/22/2015	SKOK	25,000.00	3,500.00	120	6	9.40%
G	6/30/2015	SKOK	25,000.00	3,500.00	60	4	9.75%
H	11/20/2015	SKOK	37,000.00	6,660.00	120	23	9.70%
I	2/29/2016	SKOK	47,000.00	5,640.00	120	20	9.70%
J	2/29/2016	SKOK	10,000.00	1,950.00	120	20	9.20%
K	10/17/2017	Bank	140,000.00	2,800.00	72	16	10%
I	10/23/2017	Bank	200,000.00	30,800.00	120	13	9.90%

* SKOK was taken over by the bank (after the loan was repaid).
** loan repaid earlier after 36 months in part and after 39 months in full.
Source: own materials.

The amount of the fee to be refunded to the consumer in accordance with the judgment of the Court of Justice of the European Union (the value of the fee charged was multiplied by the ratio of the unused credit period to the contractual credit period, where actual duration in days was applied) was calculated. Complaint, amicable and court proceedings were analysed to determine whether the institutions had voluntarily settled commissions.

The next step was to calculate the APRC (assuming no change in the interest rate) in accordance with the methodology laid down in Annex 4 to the Law on consumer credit: 1) contractual loan duration taking into account the commission charged for granting the loan; 2) contractual loan duration assuming no commission for granting the loan (each time a repayment plan was properly simulated, the loan amount less commission was assumed as the loan amount); 3) actual loan duration, taking into account the commission charged for granting the loan.

The last element of the research was the calculation of costs that the consumer would have to hypothetically bear in advance in the case of a court settlement of commissions (each time it was assumed that the consumer uses professional assistance and incurs costs: claim fees, minimum advocate fees, stamp duty on the granted power of attorney) and costs that hypothetically will be incurred jointly if the case is lost (claim fee, appeal fee, minimum legal fee in the second instance, minimum costs of representation of the bank, stamp duty on the granted power of attorney). The amounts were calculated in accordance with the Act on Court Fees in Civil Cases[16] and the Regulation of the Minister of Justice on lawyers' fees[17] (up to date as on the date of the audit). A percentage ratio between the values obtained and the amounts to be recovered has been calculated.

Results and discussion

Commissions charged by lenders in the examined cases ranged from PLN 1,950.00 (J) to PLN 30,800.00 (L) and represented between 1.52% (D) and 25% (B) of the amount disbursed to the borrower. On average, in all cases, commission constituted 12.35% of the amount disbursed (5.76% for banks and 17.06% for SKOKs). The margin (interest minus WIBOR6M) ranged from 4.96% to 11.30% and 7.73% on average (6.70% for banks and 8.47% for SKOKs). Detailed data are presented in Table 2.

According to the results obtained in studied cases, it is difficult to find a correlation between the amount of commission for granting a loan and the borrower's margin and other loan parameters, in particular amount or time thereof. The loans of the highest value had the lowest interest rates (D and E) and there was no correlation between the value of the loan and the interest rate of the commission (D and E versus L). At the same time, commissions exceeding 20% of the value were charged for the shortest and longest loans (B, H and J). Moreover, the amount of the margin is not related to the loan term. There is also no relationship between the amount of the margin and the percentage share of the commission charged (Figure 1).

The recorded differences in the margin could be dictated by changes in the credit market situation (loans were granted within 3 years). However, having taken into account that in all examined cases there was a similar creditworthiness, it is difficult to find a correlation between the market situation, creditworthiness and credit

[16] Ustawa z dnia 28 lipca 2005 roku o kosztach sądowych w sprawach cywilnych [The Act on court fees in civil cases of 28 July 2005]. Dz. U. of 2019 items 785, 1043, 1469, 1553, 1655, 1802, 1815, 2020.

[17] Rozporządzenie Ministra Sprawiedliwości z dnia 22 października 2015 roku w sprawie opłat za czynności adwokackie [Regulation of the Minister of Justice of 22 October 2015 on fees for lawyers' activities]. Dz. U. of 2015, item 1800, Dz. U. of 2016 item 1668, Dz. U. of 2017 item 1797.

parameters and the amount of commission charged for granting the credit. Indeed, this amount appeared to be established on a discretionary basis. Nevertheless, the number of cases studied is too low to draw conclusions about the entire credit market (which is not the purpose of this publication).

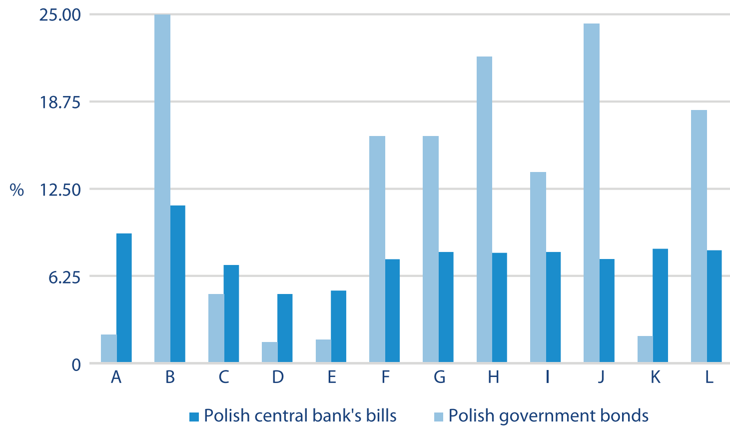
Table 2. Basic parameters of loans and costs incurred by the borrower

Loan	Amount of loan (PLN)	Amount of com-mission (PLN)	Duration of the Agre-ement (months)	Interest rate	WIBOR6M (as of the day of concluding the agre-ement)	Margin	Share of commission in the amo-unt at the borrower's disposal
A	140,000.00	2,800.00	120	12%	2.70%	9.30%	2.04%
B	37,500.00	7,500.00	60	14%	2.70%	11.30%	25.00%
C	99,960.00	4,760.00	96	9%	1.96%	7.04%	5.00%
D	208,947.49	3,134.21	84	6.99%	2.03%	4.96%	1.52%
E	237,800.00	4,756.00	98	7.26%	2.06%	5.20%	2.04%
F	25,000.00	3,500.00	120	9.40%	1.96%	7.44%	16.28%
G	25,000.00	3,500.00	60	9.75%	1.79%	7.96%	16.28%
H	37,000.00	6,660.00	120	9.70%	1.80%	7.90%	21.95%
I	47,000.00	5,640.00	120	9.70%	1.74%	7.96%	13.64%
J	10,000.00	1,950.00	120	9.20%	1.74%	7.46%	24.22%
K	140,000.00	2,800.00	72	10%	1.81%	8.19%	2.04%
I	200,000.00	30,800.00	120	9.90%	1.81%	8.09%	18.20%

Source: own materials.

The APRC calculated for original terms of loans ranged from 7.71% (D) to 27.52% (B), with 14.19% on average (10.63% for banks and 16.74% for SKOKs). Excluding commission (simulation of a loan without commission), APRC ranged from 7.22% (D) to 14.95% (B), 10.21% on average (banks – 9.01%, SKOKs – 11.06%). More diverse results were obtained in the case of APRC, according to the actual loan repayment date. The values ranged from 8.05% (D) to 560.20% (B), with 68.00% on average, while 14.23% for banks and 106.40% for SKOKs (mostly due to taking into account the B loan, the average for SKOKs without B is 30.77%). Detailed results are presented in Table 3.

Figure 1. Overview of the lenders' margin and the ratio of commission to loan value



Source: own materials.

Table 3. List of APRC values obtained

Loan ratio	Contractual APRC	APRC excluding commission	APRC in case of early repayment
A	13.25%	12.68%	15.05%
B	27.52%	14.95%	560.20%
C	10.91%	9.41%	11.30%
D	7.71%	7.22%	8.05%
E	8.02%	7.43%	8.20%*
F	13.90%	9.81%	50.48%
G	17.76%	10.19%	50.51%
H	15.56%	10.10%	23.99%
I	13.62%	10.14%	18.89%
J	15.61%	9.59%	25.71%
K	11.53%	10.68%	12.92%
L	14.96%	10.33%	30.71%

* The calculation also includes partial early repayment.
Source: own materials.

The results obtained indicate that the commission for granting a loan leads to an increase of 3.99% of APRC on average in the case of the loan term specified in the agreement. However, APRC significantly increases in the case of early repayment of a loan – this phenomenon is particularly visible in case of SKOKs (logical consequence of higher average commissions). While verifying hypothesis 1, it should therefore be stated that the commission for granting a loan in the case of repayment according to the schedule does not significantly affect the cost thereof (APRC), whereas the situation is different in the case of early repayment when the commission charged rises the cost multiple times.

Importantly, in all analysed cases, the lenders did not reimburse (settle) the commission for granting the loan due to early repayment thereof by the borrower (December 2019). In 11 examined cases, a complaint procedure was conducted, which also did not result in a refund of the commission. Following the judgment of the Court of Justice of the European Union referred to hereinabove, until the end of 2019 only one bank (C) verified its decision and obliged itself to settle the commission. In 8 cases, court proceedings are pending (A, D, F, G, H, I, J and L), while in one case, arbitration proceedings are pending before the Financial Ombudsman (B). In some cases, intervention proceedings before the Financial Ombudsman were also carried out but did not bring any results.

The amount of commission to be reimbursed to the borrower ranged from PLN 1,621.68 to PLN 27,528.60 and usually it was approximately PLN 3,000. Initial costs related to the judicial hearing of a case mostly amounted to PLN 1,117 (maximum value of PLN 4,617) and ranged from 16.77% (L) to 68.88% (J) of the claim value (39.47% on average). The total costs that a consumer would have to incur if a court case was lost most frequently amounted to PLN 3,134 (maximum PLN 12,834) and ranged from 40.81% (L) to 193.26% (J) of the value of the enforced claim (109.98% on average). Detailed results are presented in Table 4.

The analysis of the results obtained leads to the conclusion that the lower the amount to be cleared, the higher the relative costs the borrower (consumer) has to bear at the beginning, the higher the amount at risk of pursuing the claim is consequently. The need to incur costs in the order of 40% of the value of the claim compared to the expected duration of the proceedings and the risk of incurring further costs (exceeding the value of the claim on average, in J case more than 190%) may undoubtedly constitute a barrier for a large group of consumers, which discourages effective litigation with the lender (in some of the cases examined, consumers, due to high costs were afraid of court issue). Thus, hypothesis 2 has been verified positively. Additionally, consumer behaviour will depend on current case-law, and further research is necessary for their precise assessment.

Table 4. A list of expenses related to the claims for commission settlement by way of legal actions in case of early repayment of a loan

Loan ratio	Amount of commission to be settled (PLN)	Costs in advance (PLN)	Percentage of the amount claimed	Costs in case of a loss (PLN)	Percentage of the amount claimed
A	2,500.14	1,117.00	44.68%	3,134.00	125.35%
B	7,306.85	2,217.00	30.34%	6,234.00	85.32%
C	2,971.53	1,117.00	37.59%	3,134.00	105.47%
D	2,305.61	1,117.00	48.45%	3,134.00	135.93%
E	2 933,59*	1 117,00	38.08%	3 134,00	106.83%
F	3,326.53	1,117.00	33.58%	3,134.00	94.21%
G	3,241.23	1,117.00	34.46%	3,134.00	96.69%
H	5,376.83	2,217.00	41.23%	6,234.00	115.94%
I	4,709.08	1,317.00	27.97%	3,534.00	75.05%
J	1 621.68	1,117.00	68.88%	3,134.00	193.26%
K	2,162.35	1,117.00	51.66%	3,134.00	144.93%
L	27,528.60	4,617.00	16.77%	11,234.00	40.81%

* The settlement shall also take into account any partial early repayment.
Source: own materials.

Conclusions

The results obtained prove that the commission for granting a loan is an instrument often used by lenders (whereas it was noted that SKOKs charge higher commissions on average than banks). In the cases studied, the amount of commissions charged seems to be discretionary and non-based on specific loan parameters. Nevertheless, commissions have a small impact on APRC when the loan is repaid as specified in the schedule.

However, in the event of early repayment, financial institutions do not reimburse the fee for the part of the unused credit period, even though such an obligation can be inferred from Article 49 of the Law on consumer credit. Thus, the lending commission is used by lenders as an instrument to guarantee a certain profit irrespective of the actual time of capital provision, transferring at the same time the lender's risk of early repayment directly to the borrower. Due to the above, the cost of a loan repaid earlier is significantly higher.

In the vast majority of cases, complaint or intervention proceedings shall not result in the settlement of commissions. Therefore, borrowers are forced to seek settlement through court proceedings. The costs to be incurred at the beginning of the proceedings, including the costs to be incurred by the consumer in the event of a loss, undoubtedly create a significant barrier, which discourages from court settling thereof (especially if lower amounts are claimed). The risk incurred in bringing a court case often exceeds the value of the claim.

The fact that not all borrowers will decide to pursue judicial recovery of an appropriate part of the commission, may lead – despite the Court of Justice of the European Union ruling – to financial institutions in Poland maintaining a policy related to the non-settlement of commissions in the event of early repayment of a loan and consequently to further use of commissions as an instrument to guarantee the assumed profitability of the loan. Therefore, high court costs, due to the ineffectiveness of other state institutions, lead to the limitation of consumer rights protection.

References

Bogusławski A., *Pozasądowe rozwiązywanie sporów z podmiotem rynku finansowego jako element ochrony konsumenta [Out-Of Court Settlement Of Disputes With An Entity Operating On The Financial Market As An Element Of Consumer Protection]*, Journal of Finance and Financial Law 2016, 1(3), pp. 25–36.

Czech T., *Kredyt konsumencki. Komentarz [Consumer credit. Comment]*, Wolters Kluwer Polska, e-LEX, Warszawa 2018, comment to article 13.

Directive 2008/48/EC of the European Parliament and of the Council of 23 April 2008 on credit agreements for consumers and repealing Council Directive 87/102/EEC. OJ L 133, 22.5.2008, pp. 66–92.

Fazlagić J., *Zjawisko "nadmiaru informacji" a współczesna edukacja [The phenomenon of "information overload" and modern education]*, E-mentor 2010, 4(36), pp. 37–42.

Judgment of the District Court in Gliwice of 20 December 2017 in case III Ca 1489/17, e-LEX.

Judgment of the District Court in Gliwice of 18 January 2018 in case III Ca 1653/17, Portal of judgments of the District Court in Gliwice.

Judgment of the Court of Justice of the European Union (First Chamber) of 11 September 2019 in case C-383/18. InfoCuria.

Jurkowska-Zeidler A., *Aktualne problemy ochrony klienta na rynku bankowym z perspektywy działalności Rzecznika Finansowego [Current problems of customer protection in the banking market from the perspective of the activity of Financial Ombudsman,* Gdańskie Studia Prawnicze 2018, 39, pp. 29–44.

Korzeb Z., *Lichwa – fikcja czy rzeczywistość [Usury – fiction or reality]*, Bezpieczny Bank 2017, 2(67), pp. 127–142.

Kurzępa-Dedo K., Gemzik-Salwach A., *Ustawa antylichwiarska a zmiany na rynku instytucji pożyczkowych – wybrane zagadnienia (część 1) [Anti-usury Act and changes on the market of loan institutions – selected issues (part 1)]*, Humanities and Social Sciences 2018a, 2(25), pp. 149–172.

Kurzępa-Dedo K., Gemzik-Salwach A., *Ustawa antylichwiarska a zmiany na rynku instytucji pożyczkowych – wybrane zagadnienia (część 2) [Anti-usury Act and changes on the market of loan institutions – selected issues (part 2)]*. Humanities and Social Sciences 2018b, 3(25), pp. 171–183.

Nowak P., *Ochrona Konsumenta przez ustawowe limitowanie opłat kredytowych [Consumer Protection through Statutory Debt Limits]*, Przedsiębiorczość – Edukacja [Entrepreneurship – Education] 2019, 1(15), pp. 230–241.

Ofiarski Z., *Ustawa o kredycie konsumenckim. Komentarz [Law on consumer credit. Comment]*, Wolters Kluwer Polska, Warszawa 2014, e-LEX, comment to article 49.

Pismo Prezes Fundacji Rozwoju Rynku Finansowego do Rzecznika Finansowego z dnia 13 marca 2017 roku [Letter from the President of the Financial Market Development Foundation to the Financial Ombudsman of 13 March 2017].

Rutkowska-Tomaszewska E., *Redukcja kosztów kredytu konsumenckiego a przedterminowa jego spłata w świetle art. 49 Ustawy o kredycie konsumenckim [Reducing the cost of consumer credit and an early repayment of it in the light of art. 49 of the Consumer Credit Act (UKK)]*. Studia Prawno-Ekonomiczne 2016, 100, pp. 163–177.

Stanowisko Rzecznika Finansowego i Prezesa Urzędu Ochrony Konkurencji i Konsumentów w sprawie interpretacji art. 49 ustawy o kredycie konsumenckim z dnia 16 maja 2016 roku [Statement of the Financial Ombudsman and the President of the Office of Competition and Consumer Protection on the interpretation of art. 49 of the Consumer Credit Act of 16 May 2016].

Ustawa z dnia 28 lipca 2005 roku o kosztach sądowych w sprawach cywilnych [The Act on court fees in civil cases of 28 July 2005]. Dz. U. of 2019 items 785, 1043, 1469, 1553, 1655, 1802, 1815, 2020.

Ustawa z dnia 12 maja 2011 roku o kredycie konsumenckim [Law on consumer credit of 12 May 2011]. Dz. U. of 2019, item 1083.

Wachnicka A., *Redukcja kosztów w razie przedterminowej spłaty kredytu konsumenckiego w świetle orzeczenia TSUE C-383/18 [Reduction in the total cost of consumer credit in case of early repayment in light of the CJEU ruling C-383/18]*, Internetowy Kwartalnik Antymonopolowy i Regulacyjny (iKAR) [Online Antitrust and Regulatory Quarterly (iKAR)], 2019, 8(8), pp. 78–91.

Rozporządzenie Ministra Sprawiedliwości z dnia 22 października 2015 roku w sprawie opłat za czynności adwokackie [Regulation of the Minister of Justice of 22 October 2015 on fees for lawyers' activities]. Dz. U. of 2015, item 1800, Dz. U. of 2016 item 1668, Dz. U. of 2017 item 1797.

Miscellanea

DOI: 10.26354/bb.7.2.79.2020

Ludwik Kotecki*
ORCID: 0000-0001-8791-1218
lkotecki@protonmail.com

Leszek Pawłowicz**
ORCID: 0000-0003-2580-6708
leszek.pawlowicz@gab.com.pl

Marta Penczar***
ORCID: 0000-0002-3564-1460
marta.penczar@ug.edu.pl

Macroeconomic challenges and forecasts for Poland according to experts of the European Financial Congress

Introcudtion

The macroeconomic forecasts drawn up in the first half of 2020, during a period of deep economic crisis of supply and demand, triggered by measures taken to protect population's health and life in response to the threat of the pandemic, are subject to large average errors in estimates. They cannot be a continuation of current trends as they apply to an unprecedented and unique situation, which makes statistical

* Ludwik Kotecki – Instytut Odpowiedzialnych Finansów (Responsible Finance Institute).
** dr hab. Leszek Pawłowicz – prof. UG, Department of Banking and Finance, Faculty of Management, University of Gdańsk; Gdansk Institute for Market Economics.
*** dr Marta Penczar, Department of Banking and Finance, Faculty of Management, University of Gdańsk; Gdansk Institute for Market Economics.

and econometric models virtually inapplicable. Similarly, analog and simulation models based on analogies to similar epidemics (e.g. the Spanish flu pandemic in 1918–1920) in the past do not seem fully legitimate. This does not mean, however, that in these unusual conditions one should not build forecasts or scenarios for the future. Our predictions are based on group expertise. We have requested the assistance of outstanding Polish macroeconomists and experts of the European Financial Congress, mainly current and former major banking economists, but also academic professors as well as specialists from the National Bank of Poland, the Polish Financial Supervision Authority and rating agencies. We assume that their predictions rely on their expertise and intuition rather than on formal models.

The forecasts and opinions presented below constitute a quantitative and qualitative consensus of the 36 responses to our questions, that we have received by 9 June 2020. Quantitative forecasts were provided by 13 experts, while 34 experts presented their opinions on:

- major threats to the economic situation,
- major threats to the financial system stability,
- major opportunities for economic development and greater financial stability,
- recommended economic policy measures.

Forecasts

According to the forecasts of experts associated with the EFC, 2020 is expected to see economic recession and negative GDP dynamics at approx. -4.5 percent, followed by growth at approx. 4 percent in 2021 and 3.4 percent in 2022. The greatest discrepancies in opinions concern the situation in 2020.

This means a more pessimistic GDP forecast for the current year than that in the government convergence program updated in April of this year (-3.4 percent) and a slightly more pessimistic forecast than projected by the World Bank (-4.2 percent). On the other hand, EFC experts are more optimistic about the expected GDP growth in 2021 and 2022.

The forecast consensus also predicts a deeper decline in investment and consumption compared to the government convergence program.

Despite the economic recession in 2020 and the slowdown in 2021 and 2022, Poland will remain a leader in economic growth among the largest economies of the European Union.

However, our inflation forecasts are more pessimistic. The convergence program assumes that in 2020, inflation (CPI) will be at 2.8 percent, while the EFC experts' consensus estimates inflation at 3.1 percent. The differences of opinion among experts in this case are relatively small (standard deviation is 0.2 percentage point).

We predict a moderate increase in unemployment given the depth of the economic downturn. According to experts, unemployment will rise to 6.7 percent at the end of 2020, and fall in 2021 to 5.6 percent (according to BAEL).

Foreign trade will be of key importance for Poland's economic development, as experts predict a -6.2 percent slump in exports in 2020, but a relatively fast bounce--back to high positive rates.

Last year's expert forecasts about a gradual increase in the NBP reference rate and interbank rates have not come true. NBP's three cuts of the reference rate surprised all experts. They currently predict a much lower WIBOR3M in 2020–2022 but still expect interbank rates to grow. Although rate cuts slightly reduced the burden for borrowers, they significantly worsened the condition of the banking sector, especially that of cooperative banks. In our view, such a significant weakening of the banking sector may be counterproductive.

The outbreak of COVID-19 and the unprecedented scale of its economic and financial implications must result in a huge growth of public finance deficit and public debt. EFC experts estimate the average deficit for central and local government at 9.3% of the GDP in 2020 (1 percentage point more than the government) and its reduction to 4.9% of the GDP next year. As for public debt, the economists who have provided their quantitative forecasts predict central and local government debt at 57.4% of the GDP in 2020 and its further increase to 58.1% next year. Also in this case, the government is more optimistic in estimating the debt according to the EU methodology at 55.2% of the GDP this year.

Major threats to Poland's economic development

In addition to quantitative macroeconomic forecasts, we are providing the EFC experts' synthesis of major threats to economic development.

As in previous years, we have mapped internal and external threats.

The synthetic weight (importance) of individual threats is the total score assigned by experts to individual threats, with a total of 100 points being available to each expert.

In addition, each expert rated the subjective probability of individual threats, and the synthetic assessment of the likelihood of each threat is the arithmetic mean of their ratings.

We are also providing an assessment of the convergence of experts' ratings as a percentage of the total number of experts who pointed to a specific threat.

Graphically, the results of expert opinions are presented in the figure (p. 10 – "Major threats to Poland's economic situation in the perspective of 2022"), where the size of circles illustrating individual threats is the sum of the products of weight and probability of a given factor.

According to experts, external factors will have a greater impact on the economic situation in Poland in the coming years.

Among the external threats, the deep recession in the EU (rise of unemployment, drop in production, falling volumes of international trade) and a long return to the 2019 GDP level will have the greatest impact on Poland's economic growth.

It should be remembered that as early as in 2019, EFC experts claimed that the biggest threat to Poland's growth would be an economic downturn in our major trading partners and a weakening of the economic situation in China. Certainly, nobody had expected the economic downturn to be so deep. The risks highlighted by macroeconomists confirm the role of external demand as a key driver of Poland's economic growth in the recent period. This is shown by the fact that the increase in so-called value-added exports accounted for most of Poland's GDP growth in the 21st century. In this context, most survey participants underline their concerns about the effects of deepening protectionism and restrictions on international trade.

An important external threat to harmonious development, which is indicated by 82 percent of EFC experts, comes not only from disrupted supply chains, but also from a less globalized and less liberal market economy.

Another serious external threat to the economic situation in Poland in the next two years is the risk of a recurrence of infections and "lockdowns". The risk will be reduced if a COVID-19 vaccine is introduced.

Asymmetric economic recovery in Poland's main economic partners (countries' asymmetric fiscal response and adequacy of government programs) will be a significant hindrance in the phase of recovering the economy.

In this context, one should also note the Italian-German appeal to the governments of EU Member States and institutions regarding the issue of European health bonds as well as to the call for a common, uniform tax policy, a decisive fight against financial crime and a radical reduction of tax dumping[1].

In turn, business bankruptcies and rising unemployment as well as a fall in investment in response to the sharp supply and demand restrictions have been mentioned as the main internal threat to the country's economic development. A vast majority of experts are also concerned about a public finance crisis and an increase in taxes and para-taxes. Already last year, experts pointed to the excessive burden of social transfers for the state budget as a primary internal threat to harmonious economic development. Now, this threat is much greater.

In emergency situations, during a deep economic crisis, public finance along with automatic stabilizers are an important component of countercyclical economic policy. The use of budgetary policy instruments must not, however, undermine the security of state finances. Given the absence of a clear plan to return to safe levels

1 https://weareinthistogether.eu/petition/tax-dumping/

of the public finance deficit and public debt in Poland, EFC economists point to the public finance crisis as one of the greatest threats in the coming years.

Experts have also pointed out some opportunities for further development of the Polish economy, which may improve Poland's competitive position in the international arena.

First, Poland's investment appeal may increase, in particular due to lower labor costs, Asia's reduced role in supply chains and accelerated digitization and automation processes.

Second, a potential opportunity for rebuilding the value of the economy after the crisis is Poland's presence in the EU and the ability to use EU funds from the European reconstruction fund.

Third, the effectiveness of anti-crisis measures (so-called shields) and support for the development of services and industry as well as public investments contributing to the creation of jobs and reduction of unemployment provide another opportunity.

Fourth, another opportunity is the possible growth in exports due to the weak Polish zloty and low interest rates.

Threats to the stability of the financial system

EFC experts have identified two key factors threatening the stability of the domestic banking sector in the realities of the COVID-19 pandemic. First, the quality of banks' lending portfolios is expected to deteriorate (the highest probability in this edition of the survey: 82.3 percent and the highest weight: 16.3 points). The increase in irregular loans will mainly result from the higher number of business bankruptcies and their financial restructuring, higher unemployment, as well as from a reduced supply of loans from banks in the conditions of economic downturn and a lower demand for loans from customers in the conditions of uncertainty.

Second, according to EFC experts, the NBP policy of cutting interest rates three times (from 1.5% to 0.1%) combined with the Polish quantitative easing program may have a negative impact on the stability of the banking sector (threat weight: 12.6 points, with the 68.3% probability rate). This threat arises from declining net interest margins at banks in the conditions of interest rate cuts, which means a stronger decline in interest income (interest on loans) in relation to a decline in interest costs (interest on deposits), and thus a higher base risk. This will be associated with faster alignment of interest rates on loans and a limited ability to adjust the passive side (lower the price of deposits), due to the fear of losing depositors, which will lead to a higher cost of financing for banks and reduced profitability of banking activities.

As the third factor threatening the stability of the financial system, taking into account the weight and probability of occurrence, the experts name issues involved in the significant ownership participation of the State in the banking sector (probability: 58.6%; threat weight: 9.2 points), which may lead to inefficient allocation of funds, project financing based on political criteria and deterioration of the quality of management in controlled banks, including as a result of non-market based but politically motivated decisions.

A new emphasized threat, which did not appear in previous editions of the survey, is the risk of deterioration of the situation on the corporate bonds market (probability: 71.4%; threat weight: 7.5 points) resulting from a limited ability to issue debt instruments in the conditions of uncertainty, higher cost funds, as well as, indirectly, the condition of bond/debt investment funds struggling to maintain liquidity due to units redemption by clients.

From the point of view of financial system stability, EFC experts also point to the following threats:

- high fiscal burdens (including bank tax), which reduce the efficiency of government programs transmission by the banking sector to the real economy (factor L – probability: 52.9%; threat weight: 8.5 points);
- insolvencies of cooperative banks (factor E – probability: 53.9%; threat weight: 7.8 points);
- insolvencies and restructuring of the largest credit unions (SKOK) (factor F – probability: 52.9%; threat weight: 6.0 points);
- the problem of mortgage loans linked to foreign currencies – higher uncertainty on global markets translating into weaker Polish zloty, growing scale of litigation wins by clients, LIBOR rate left in contracts when the loan is converted from a foreign currency (factor D – probability: 47.6%; threat weight: 7.0 points).

A factor helping to maintain financial stability would certainly be to reduce regulations and fiscal burdens. Therefore, on the one hand, one opportunity is the absence of further legal changes causing an even greater uncertainty about the conditions for the operation of financial institutions and their more flexible alignment to actual sector problems, and, on the other hand, elimination of the bank tax, at least as for new loans for development and rebuilding of the capacity.

Another element enhancing the stability of the financial system would be to ensure that anti-crisis measures are effective, both in relation to banks themselves and to their clients. EFC experts emphasize the need for the state, on the one hand, to support the non-financial sector to limit bankruptcies and to relatively quickly restore economic activity, and on the other hand, to intervene to stabilize the financial sector. Important in this respect is a responsible NBP policy which would guarantee banks' continued access to financial operations with the central bank to support the liquidity of the banking system, and which would be focused on measures helping to grow market interest rates.

An opportunity for financial system stability would also be to ensure properly functioning restructuring mechanisms, which in the conditions of deteriorating economic conditions would limit irregular loan portfolios at banks. To this end, it is being proposed that a specialized asset management institution be established to manage "bad assets" of the banking sector.

Figure 1. Forecasts of selected macroeconomic indicators in 2020–2022

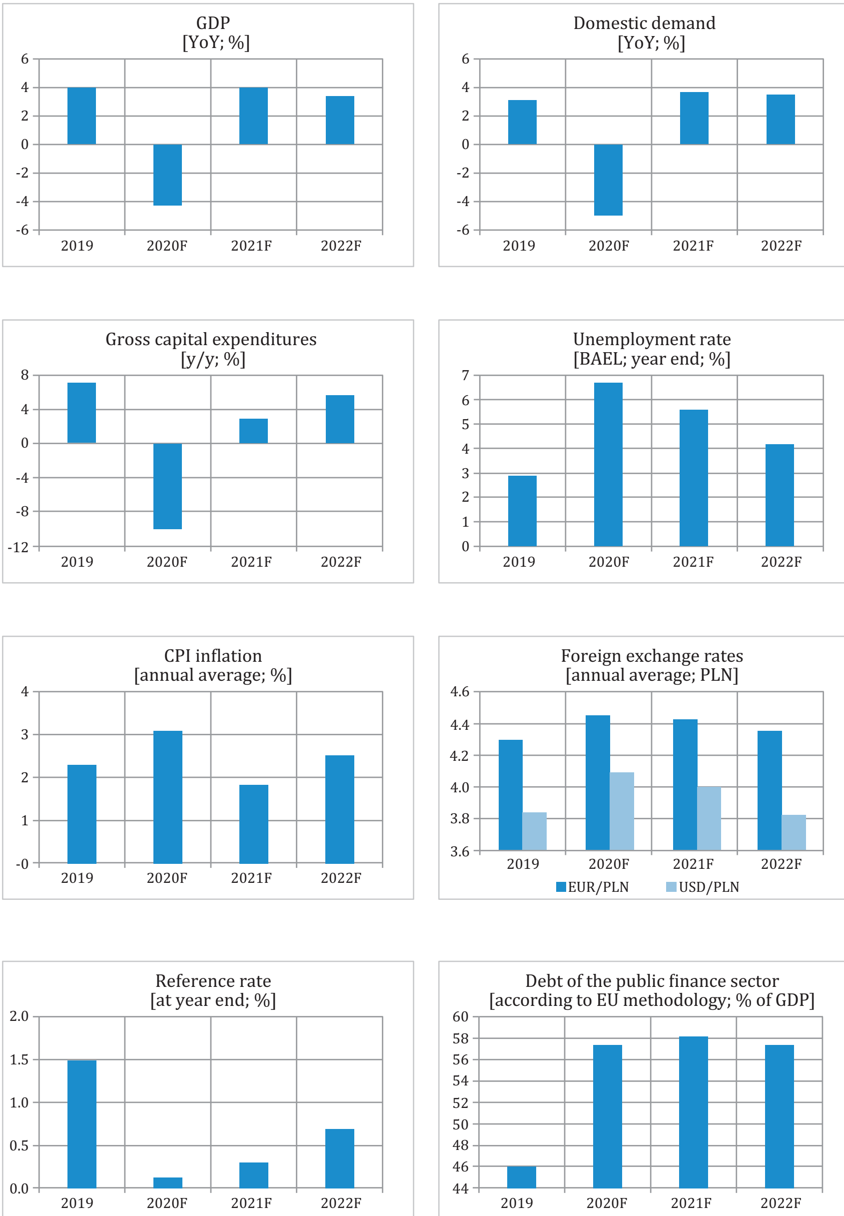


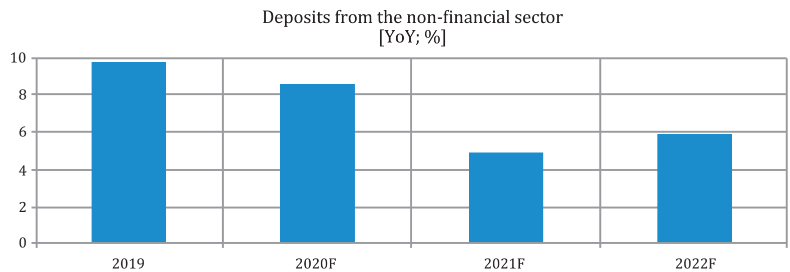
Table 1. Forecasts of selected macroeconomic indicators in 2020–2022

Ratio	Measure	2019	SURVEY RESULTS 2020F	2021F	2022F	NUMBER OF EXPERTS
GDP (y/y; %)	mean	4.1	**-4.5**	**4.0**	**3.4**	[13]
	st. deviation		1.4	1.4	1.0	
Domestic demand (y/y; %)	mean	3.0	**-5.0**	**3.8**	**3.6**	[10]
	st. deviation		1.7	2.1	1.1	
Individual consumption (y/y; %)	mean	3.9	**-4.2**	**4.3**	**3.1**	[12]
	st. deviation		2.3	2.3	0.8	
Gross fixed capital formation (y/y; %)	mean	7.2	**-10.1**	**3.0**	**5.7**	[12]
	st. deviation		2.8	2.7	3.8	
Unemployment rate (BAEL; year end; %)	mean	2.9	**6.7**	**5.6**	**4.2**	[9]
	st. deviation		1.1	2.0	0.7	
Gross wages in national economy (y/y; %)	mean	7.2	**3.6**	**3.8**	**4.6**	[10]
	st. deviation		0.7	0.9	0.7	
Employed in national economy (end of period; y/y; %)	mean	2.2	**-2.8**	**0.4**	**1.2**	[6]
	st. deviation		2.4	1.7	1.3	
Inflation (CPI; annual average; %)	mean	2.3	**3.1**	**1.8**	**2.5**	[12]
	st. deviation		0.2	0.9	0.5	
Base inflation excl. food and energy prices [%]	mean	2.0	**3.1**	**1.4**	**2.4**	[10]
	st. deviation		0.4	1.2	0.8	
EUR/PLN (annual average)	mean	4.30	**4.45**	**4.43**	**4.36**	[13]
	st. deviation		0.07	0.11	0.14	
USD/PLN (annual average)	mean	3.84	**4.09**	**4.01**	**3.82**	[13]
	st. deviation		0.28	0.33	0.17	
Reference rate (year end; %)	mean	1.50	**0.13**	**0.30**	**0.71**	[13]
	st. deviation		0.12	0.51	0.72	
WIBOR 3M (year end; %)	mean	1.71	**0.33**	**0.39**	**0.69**	[10]
	st. deviation		0.13	0.18	0.46	
5Y bond yield (annual average; %)	mean	1.97	**1.08**	**1.30**	**1.42**	[10]
	st. deviation		0.50	0.61	0.29	
Public finance sector balance according to EU methodology (% GDP)	mean	-0.7	**-9.3**	**-4.9**	**-4.3**	[11]
	st. deviation		0.9	1.8	1.8	
Public finance sector debt according to EU methodology (% GDP)	mean	46.0	**57.4**	**58.1**	**57.4**	[11]
	st. deviation		2.9	3.6	3.5	

Table 1 – continued

Ratio	Measure	2019	SURVEY RESULTS 2020F	2021F	2022F	NUMBER OF EXPERTS
Export of goods and services (fixed prices; y/y; %; according to national accounts)	mean	4.7	**-6.2**	**6.4**	**6.5**	[9]
	st. deviation		6.5	5.2	3.4	
Import of goods and services (fixed prices; y/y; %; according to national accounts)	mean	2.7	**-6.5**	**5.9**	**7.2**	[9]
	st. deviation		5.6	5.6	3.4	
Current account balance of payments (% GDP)	mean	0.5	**0.6**	**0.4**	**-0.3**	[10]
	st. deviation		1.6	1.3	0.8	

Figure 2. Forecasts of change dynamics for selected banking sector indicators in 2020–2022



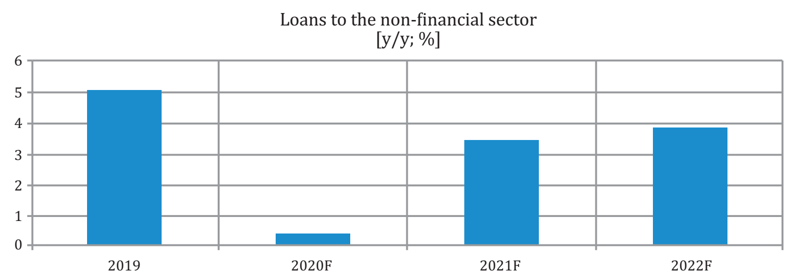
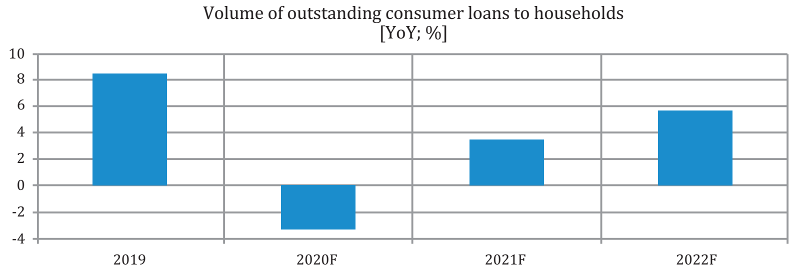


Figure 2 – continued



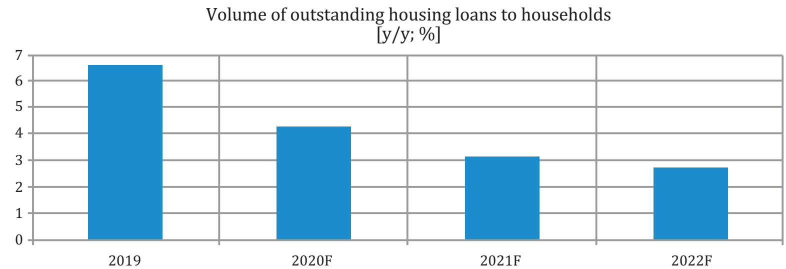
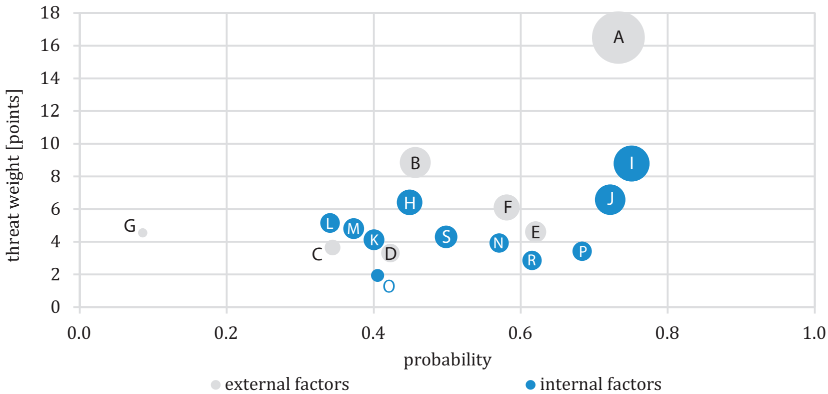


Table 2. Forecasts of change dynamics for selected banking sector indicators in 2020–2022

Ratio	Measure	2019	SURVEY RESULTS 2020F	2021F	2022F	NUMBER OF EXPERTS
Loans to the non-financial sector (y/y; %)	**mean**	5.1	**0.5**	**3.4**	**3.9**	[5]
	st. deviation		2.7	0.8	0.8	
Deposits from non-financial sector (y/y; %)	**mean**	9.8	**8.5**	**4.9**	**5.9**	[5]
	st. deviation		4.9	1.2	0.8	
Volume of outstanding consumer loans to households (y/y; %)	**mean**	8.4	**-3.3**	**3.5**	**5.7**	[5]
	st. deviation		4.4	1.7	1.6	
Volume of outstanding housing loans to households (y/y; %)	**mean**	6.6	**4.3**	**3.1**	**2.7**	[5]
	st. deviation		2.4	2.1	1.3	
Volume of outstanding loans to non-financial enterprises (y/y; %)	**mean**	3.0	**-0.9**	**1.9**	**4.5**	[5]
	st. deviation		3.8	0.9	1.6	
Deposits from households (y/y; %)	**mean**	9.7	**7.1**	**4.9**	**6.3**	[5]
	st. deviation		3.5	1.8	1.2	
Deposits from non-financial enterprises (y/y; %)	**mean**	10.0	**12.7**	**4.9**	**5.2**	[5]
	st. deviation		10.4	1.9	0.6	

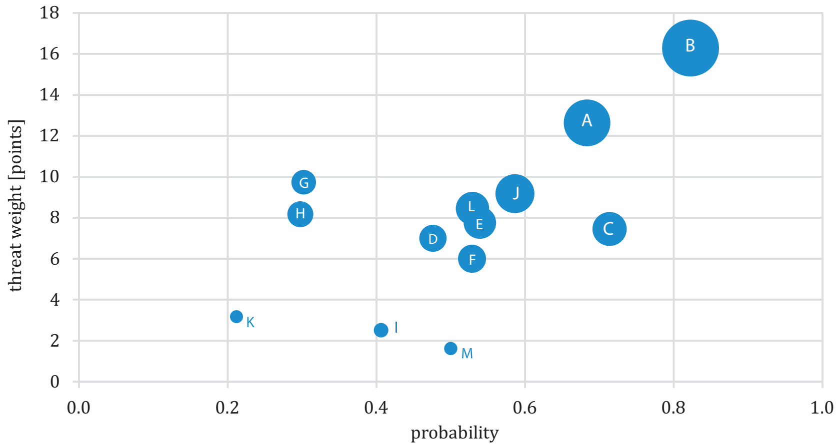
Figure 3. Major threats to the economic situation of poland in the perspective of 2022



* circle size indicates the sum of the products of the indicator's weight and probability, as assigned by individual experts

		Weight (1 means the highest weight)	Probability	Percentage of respondents
A	In 2020, a deep recession in the European Union and a long return to the 2019 GDP levels.	1	0.73	94%
B	New infection waves and lockdowns until a COVID-19 vaccine is introduced.	2		88%
C	Insufficient and/or ineffective monetary and fiscal packages			59%
D	Asymmetrical economic recovery of Poland's main economic partners			65%
E	Greater volatility on global financial markets		0.62	74%
F	Greater volatility on global financial markets			82%
G	Collapse of the euro zone due to the crisis			56%
H	Public finance crisis	5		82%
I	Bankruptcies and rising unemployment	3	0.75	85%
J	Decline in investment	4	0.72	82%
K	Reduced EU funds for Poland as a result of EU procedures on the rule of law			71%
L	Banking/financial crisis			68%
M	No control over coronavirus infections, problems in the healthcare sector			65%
N	Higher taxes and para-taxes (fees, contributions)			79%
O	Risk of political instability			47%
P	Deterioration of financial conditions (more difficult access to credit, limited ability to issue bonds or equities)		0.69	65%
R	Postponement of major structural reforms			68%
S	Restrictions on democracy/ civil liberties			71%
T	Other external factors			6%
U	Other internal factors			6%

Figure 4. Major threats to the stability of the polish financial system in the perspective of 2022



* circle size indicates the sum of the products of the indicator's weight and probability, as assigned by individual experts

		Weight (1 means the highest weight)	Probability	Percentage of respondents
A	NBP policy – interest rate cuts, quantitative easing (Polish QE)	2	0.68	72%
B	Deterioration of the credit portfolio quality	1	0.82	83%
C	Deterioration of the situation on the corporate bond market		0.71	76%
D	The problem of mortgage loans linked to foreign currencies (higher uncertainty on global markets translating into weaker Polish zloty, growing scale of litigation wins by clients, LIBOR rate left in contracts when the loan is converted from a foreign currency)			83%
E	Insolvencies of cooperative banks		0.54	83%
F	Insolvencies and restructuring of the largest credit unions (SKOK)			79%
G	Collapse of a medium-sized bank causing destabilization of the Polish banking system	3		72%
H	Banking/financial crisis in the European Union resulting from problems being magnified during the COVID-19 pandemic			72%
I	Structural mismatch of domestic banks' assets and liabilities			55%
J	Excessive State participation in the banking sector	4	0.59	76%
K	Aggressive marketing of toxic financial instruments			52%
L	High fiscal burdens (including bank tax) which reduce the efficiency of government programs transmission by the banking sector to the real economy	5		83%
M	Other			10%

Five major economic policy measures recommended for Poland by 2022

I. Continued anti-crisis measures

For obvious reasons, the economic measures recommended by EFC experts differ from those advised in previous editions of "Macroeconomic Challenges and Forecasts for Poland". Among the recommendations in this edition, anti-crisis and short-term measures are definitely predominant. Economists point to the necessity of state aid in terms of liquidity, flexibility and deregulation of the economy, and loan guarantees. These include, in particular:

- support for financial liquidity, including through loan guarantees or merchant credit insurance, subject to job retention,
- deregulation, simplification of business activity,
- supporting measures aimed at aligning production and services with the "new normalcy",
- intensification of active labor market measures vis-a-vis the unemployed and economically inactive through training, assistance in retraining,
- adoption of a migration policy aimed primarily at workers from the East and favouring their permanent settlement in Poland,
- improvement of the restructuring program for businesses and banks,
- monitoring the efficacy and flexible adjustment of the anti-crisis package.

II. Increasing the transparency of public finance and rationalizing the budgetary policy

Despite the crisis and the need to pursue a counter-cyclical fiscal policy leading to an increase in the deficit and public debt, concern for transparency and efficacy of the budgetary policy ranks at the top of recommended measures. What is particularly surprising is the repeated call for restoring transparency in public finance, and respecting Polish, constitutional and statutory, as well as EU fiscal rules. EFC economists recommend:

- a reduction of irrational public spending, better targeting of social spending,
- putting additional welfare projects on hold and increasing allocations to public investment,
- restoring credibility of public finance through greater transparency and planned return to the stabilizing expenditure rule.

III. Increasing healthcare system capacity

The crisis caused by a dangerous virus with a diameter of about 100 nanometers has laid bare the glaring unreadiness of the Polish administration and healthcare system for such threats. One cannot rule out that a longer time will be needed to fight the epidemic or that successive epidemiological threats of this kind may occur in the future. Hence, in addition to current coping with the epidemic, it is so important to learn lessons as we go. Specific recommendations with regard to health protection and health care include:

- higher expenditure on health care (salaries, staff, tests, test laboratories, etc.),
- development of an efficient information gathering system enabling early identification of potential outbreaks,
- preparation (strengthening) of the health care system, as well as administration (including local governments) and businesses, to rapidly extinguish new outbreaks (through mass testing, monitoring of new cases, quick isolation of those infected and/or at risk of infection, etc.) in order to avoid another lockdown,
- development and immediate implementation of a public sanitary protection plan, careful lifting of epidemic restrictions, perhaps geographically selective.

IV. Increasing public investment as a way of rebuilding the post-crisis economy

Another area that has received great support among experts includes public investment, a classic way of stimulating the economy. It proves to be essential for at least three reasons: it is a good response to a crisis of the demand, it is important to maintain or increase the economic potential of the Polish economy, it can be a way to obtain support from the EU. The following in particular are being recommended:

- public investment in key areas: digitization (infrastructure, 5G) and the green economy, which would favour both a change in the energy mix and the use of a significant pool of EU funds for this purpose,
- support for private investment through government and EU aid programs,
- expansion of the scope of pro-investment instruments (tax breaks, subsidies) geared toward investment in innovation,
- intensification of communication measures regarding available automation/robotization technologies and the resulting potential for growing business efficiency.

V. Improving regulatory and legal stability

The factor contributing to the growth of private investment is the stability of law and regulations. EFC experts once again call for the need to reduce legal and institutional uncertainty, to enhance stability of the rules of the game and predictability of the regulatory environment.

To improve regulatory and legal stability, it is necessary to:

- depoliticize the economy and introduce fundamental changes in the current corporate governance policy applied toward the economic entities effectively controlled by the state,
- seek a permanent agreement with the European Commission on the rule of law, resuscitate the "fuses" of democracy – the Constitutional Tribunal, the Supreme Court, prosecutors and the President,
- improve the transparency, stability and predictability of the regulatory environment in order to mitigate risks and to make private investment more attractive.

DOI: 10.26354/bb.8.2.79.2020

Position of the European Financial Congress[1] with regard to the European Commission's consultation document on Digital Operational Resilience Framework for Financial Services[2]

based on expert responses in a group expertise of EKF

Methodology for preparing the answers

The answers were prepared in the following stages:

Stage 1

A group of experts from the Polish financial sector were invited to participate in the survey. They received the consultation document and selected consultation questions in Polish.

The experts were guaranteed anonymity.

Stage 2

Responses were obtained from experts representing:
- banks,
- insurance companies,
- e-commerce companies,
- consulting firms,
- the academia.

Stage 3

The survey project coordinators from the European Financial Congress prepared a draft synthesis of opinions submitted by the experts. The draft synthesis was sent to the experts participating in the survey with the request to mark the passages that should be modified in the final position and to propose modifications and additions as well as marking the passages they did not agree with.

[1] European Financial Congress (EFC – www.efcongress.com). The EFC is a think tank the purpose of which is to promote debate on how to ensure the financial stability and sustainable development of the EU and Poland.

[2] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12090-Digital-Operational-Resilience-of-Financial-Services-DORFS-Act-/public-consultation

Stage 4

On the basis of the responses received, the final version of the European Financial Congress' answers was prepared.

Answers of the European Financial Congress to the consultation questions

1

EC.CD	Question	Yes	No
Q1	Taking into account the deep interconnectedness of the financial sector, its extensive reliance on ICT systems and the level of trust needed among financial actors, do you agree that all financial entities should have in place an ICT and security risk management framework based on key common principles?	15	3

Building the principles of ICT risk management within the complex and thoroughly regulated sector of financial services in a way that requires reconciliation and making joint and agreed arrangements does not raise doubts among respondents. 83% of respondents see value in establishing a common template for ICT risk management rules within the sector.

As with any standardization approach, it is pointed out that standardization and appropriate principles of ICT risk management may prove useful. On the other hand, it should be understood that compliance with the new ICT risk management standards will entail compliance costs. Banks and other financial institutions are already heavily burdened with regulations, in addition, they currently manage operational risk and comply with the provisions of normative acts as well as supervisory guidelines and recommendations. One should consider (and estimate) whether the benefits will exceed the costs in the particular areas of ICT risk management in which new rules and requirements will be introduced. Therefore, there is a need to conduct a detailed Cost-Benefit analysis and feasibility studies on the implementation of risk management recommendations and rules, which will again increase the cost of managing the banking institutions' security area. One should consider using security experience from other areas of the market and sharing experience within the financial sector. This may contribute to reducing the expenditure concentrated within the financial sector institutions. It would, therefore, be appropriate to analyze the usefulness of possible new regulations in terms of the cost and risk of their implementation into business models and operational models of financial institutions and their partners.

2

EC.CD	Question	Area	1	2	3	4	5
Q2	Where in the context of the risk management cycle has your organization until now faced most difficulties, gaps and flaws in relation to its ICT resilience and preparedness? (1 – not problematic, 5 – highly problematic)		18	43	21	10	11
	»	Identification	1	7	2	2	1
	»	Detection	1	5	3	2	2
	»	Ability to protect	1	8	2	1	1
	»	Respond	2	6	3	0	2
	»	Recovery	2	6	2	1	2
	»	Learning and evolving	2	5	4	0	1
	»	Information sharing with other financial actors on threat intelligence	4	1	3	4	1
	»	Internal coordination (within the organization)	5	5	2	0	1

Respondents' answers indicate that organizations are unlikely to face security gaps that are highly problematic (around 60% rated the occurrence or identification of gaps as not problematic). About 20% treat major security gaps as a problem. It is not problematic to identify and ensure organization's preparedness for the ability to protect against gaps.

It also seems that organizations are prepared to respond appropriately to a gap and to recover from the effects of gaps. Attention should be drawn to the considerable willingness to share information about threats with other market participants and to the certainty about efficient management of that information within the respondents' organization.

Indicated currently as particularly problematic are areas of managing solutions located in the cloud – in terms of data security (in particular the ability to detect risks in the Cloud environment, docker, etc., and the ability to detect and eliminate risks in the development process of SDLC software).

3

EC.CD	Question	Area					
Q3	A) What level of involvement and/or what type of support/ measure has the Board (or more generally the senior management within your organization) offered or put in place/provided for, in order to allow the relevant ICT teams to effectively manage the ICT and security risk?						
	B) Is the Management Board of your organization involved in effective management of security incidents? (1 – no involvement, 5 – high involvement)	Rating scale	1	2	3	4	5
		Answers total	1	6	9	13	24
	»	Appropriate allocation of human and financial resources	1	2	2	3	5
	»	Appropriate investment policy	0	1	3	4	5
	»	Formal support and approval of security standards	0	0	1	4	8
	»	Active involvement and advice of the Board on security matters	0	3	3	2	6

Part A

Most responses highlighted the organization's Board's high involvement in supporting ICT departments to effectively manage security risks. The respondents defined the level of involvement as high or adequate to the requirements properly defined in this respect in the applicable KNF Guidelines. The high rank of this process was also pointed out as a company level strategic goal identified not only in the area of operations.

It was frequently emphasized that the Board should be realistically involved in key issues related to security risk management. They should regularly receive management information in this regard in a form adapted to the recipient. The replies also stipulated that there should be no belief that security risk management topics are confined to the ICT and CIO areas.

Additionally, the area of the Board's responsibility for the following issues was determined:

- determination of risk appetite, indicating issues that the ICT team can determine on its own;
- verification and acceptance of remedial plans for all risks beyond the scope delegated to be handled by the ICT team;
- acceptance of risks against which no remedial action will be taken;
- determination and review of an acceptable level of security risk (risk appetite);
- setting priorities to protect the organization's systems and information in accordance with the minimum security requirements, policies, business risk and applicable regulatory requirements;
- ensuring the provision and appropriate distribution of resources;
- promoting appropriate security behavior patterns throughout the organization;
- ICT security monitoring based on management information.

The Board's responsibility was also defined as direct involvement in making decisions regarding security risk management. It is important to ensure that the organizational structure has units responsible for monitoring the ICT area in terms of detecting and responding to security incidents. In addition to rapid response to security incidents, ensuring business continuity, it is necessary to use systemic risk management that will ensure the implementation of safeguards to minimize the vulnerability of ICT resources to emerging threats.

It was noted that in the era of digitization of financial sector services and the opening of banking systems, be it for regulatory or business reasons, the level of involvement on the part of the Management Board should be as high as possible from the point of view of direct supervision and reporting, participation in decisions and far-reaching support in terms of resource and budget. Periodic reporting of risks and their materialization potential, and fraud levels is required. The Management Board should also be made aware, including through training, of the types of risks, and management decisions should be expected when implementing solutions related to covering these risks or introducing additional ones (based on risk analysis in individual projects).

In addition, the role of the Management Board may be extended to include arbitration tasks, relevant members of the Management Board may or should sit on the ICT security committee and settle disputes between experts within a financial institution.

An adequate level of the Management Board's involvement to the risks, needs and outlays of the organization resulting from the work of the ICT department should be considered appropriate. In practice, this means that depending on the complexity of issues and the impact / results of work, Board Members should be involved accordingly.

Part B

Respondents identify the highest involvement of the organization's Board in the area of formal support and approval regarding security standards. Management Boards are active and participate in and advise on security matters. Less but still active support of the Management Boards of financial institutions can be seen in the area of allocation of human resources for effective management of security incidents. High and medium support is noted in the right investment policy in this area and in consulting.

4

EC.CD	Question
Q4	How is the ICT risk management function implemented in your organization? To the extent possible, please provide a description.

As should be expected, in the case of financial institutions which, by definition, care for high confidentiality standards, in most cases the answer was that they were unable to provide such information, but it was confirmed that the IT risk management process is set up in accordance with applicable good market practices and ICT risk management standards.

ICT risk management for financial institutions in Poland is a component of the Business Continuity Management procedure (simulations of total server room failure and data recovery solely from LTO backup tapes, failures of the Internet channel and replacement of optical fibers with a backup connection based on GSM access, etc.).

Financial institutions in Poland manage risk based on a standardized operational risk management model. Most institutions have documentation regulating in detail the process of technological risk management, including cyber risk.

The risk management process (including ITC risk) usually has the following scope and subprocesses:

- Planning and budgeting
- Identification and assessment
- Monitoring
- Risk mitigation
- Reporting

In financial institutions, ICT risk management processes are usually built into formally defined processes as part of operational risk management.

5

EC.CD	Question	Area	Answers	
Q5	Which of the listed main measures do you have in place to identify and detect ICT risks?		Yes	No
		Established and updated mapping of the organization's business functions, roles and supporting processes in relation to ICT risk management	8	4
		Registry of supporting ICT assets (systems, staff, contractors, third parties and dependencies on external systems)	11	2
		Defined and maintained IT support processes based on criticality	12	1
		Risk assessment performed before deployment of new ICT technologies / models	9	2

An overwhelming number of experts state that their organizations use defined and maintained mappings of business functions, roles and supporting processes in relation to ICT risk management, registers of ICT support elements, defined and maintained IT support processes depending on the degree of criticality and risk analyzes being carried out before deployment of new ICT models and technologies. In practice, it seems that due to the size of respondent institutions, this type of practice may exist in a smaller part of the market (smaller banks, cooperative banks and smaller insurance institutions).

It should be noted that standard ICT risk identification and detection measures are maintained in Polish financial institutions, based mainly on defined and maintained mapping of business functions, roles and supporting processes in relation to ICT risk management. Also registries of ICT support assets (systems, staff, contractors, third parties and dependencies on external systems) are maintained. All respondents confirmed identification and definition of the degree of criticality for ICT support processes. Institutions perform periodical risk assessment analyses before deployment of new ICT technologies / models.

Active risk reporting (including ICT risks) is confirmed at the following levels:

- during meetings of the Organization Management,
- on expert forums,
- at the Operational Risk Management Committee,
- at Management Board meetings.

One example of risk management control (including ICT risk) is the following process:

- self-assessment – a process of qualitative and quantitative risk assessment enabling identification, assessment, management and reporting of operational risk;
- the risks associated with operations, defined by organizational entities are mitigated by audits subject to the audit model;
- if the risk materializes, the internal escalation regulations are followed.

6

EC.CD	Question
Q9	Has your organization established a Multicloud (hybrid cloud) strategy?

Half of the respondents confirm willingness to construct multicloud or hybrid cloud solutions in their own organization. This means a great deal of readiness and flexibility in the choice of technology. Readiness refers to the mode of operation of financial institutions and openness to a variety of cloud solutions, but with signaled limitations on how to build this flexibility and independence. The hybrid cloud strategy provides the opportunity to ensure the necessary and expected reliability and performance, as well as considerable resilience to ICT risks. Reliability and performance are important factors for the financial institutions operating under service level regimes defined in contracts with end customers. The reason for choosing between a multicloud and hybrid cloud strategy is often the difference in the quality of individual available services, but also the specialization of specific suppliers and solutions. Hybrid cloud for financial institutions is a combination of opportunities offered by a public cloud and its private mutation. Hybrid operation makes it possible to migrate data and resources between both types of resources. A characteristic feature of the hybrid cloud is its versatility and greater possibilities of implementing critical systems – flexible technology offers wide possibilities of adapting the cloud to current needs or security formats. Resources of expected utilization are generated from a private cloud; in the event of shortage, they are deployed to the public cloud.

Implementation of a cloud-based operational model is the subject of cost and benefit analyses, especially in terms of information security and confidentiality, but also demonstrates that banks are open to new technologies. Half of respondents did not identify any of the available cloud technologies as being preferred or selected for implementation in their organizations. This may mean that institutions are only getting ready for implementation or even for building new business strategies based on cloud computing.

7

EC.CD	Question
Q11	Do you have legacy ICT systems that create new ICT security requirements? What are those requirements?

Changing new requirements regarding the need to ensure security also for legacy systems (often without support) are a problem for Polish financial institutions. Many respondents hide behind business secrecy or do not perceive requirements (about 60% of responders) for legacy systems in the area of security, with changing security risk standards. However, some financial institutions see the possibility of ensuring safe cooperation of legacy systems in most cases through integration with new technologies, in particular cloud technologies and containerization. Financial institutions recognize the need to respond to new challenges regarding the security of legacy systems, and in particular entire areas of ICT architecture, by the need to adapt them to new technological solutions and to provide an adequate level of support from suppliers.

Basically, problems with legacy systems result from the nature of their development, use and maintenance, and relate to lack of updates. The remedy is the need to implement solutions that provide additional separation, protection systems supporting virtual patching, purchase of additional extended support.

8

EC.CD	**Question**	**Area**	**1**	**2**	**3**	**4**	**5**
Q12	What in your view are possible causes of difficulties you experienced in a cyber-attack / ICT operational resilience incident? (rate from 1 – not problematic to 5 – highly problematic)		16/18	14/18	12/18	7/18	7/18
	»	ICT environmental complexity	2	3	4	1	4
	»	Issues with legacy systems	7	1	3	3	0
	»	Lack of analysis tools	2	4	3	2	3
	»	Lack of staff support	5	6	2	1	0

The answers to this question perfectly illustrate the low significance of problems with legacy systems, as identified in Question 11 and its answers. As may be seen, in the case of cyber attacks or security incidents problems are least related to legacy ICT systems. Probably due to their role in application architecture (legacy systems have been replaced with new, more secure ones in the front-end areas that are vulnerable to cyber attacks). Legacy systems are usually transactional systems located in the back-end areas of the application architecture of financial institutions. In addition, new integration methods, which have been well tested for ICT risks and subjected to frequent security audits, have most likely been used in their case. It seems that possible operational difficulties in an organization in the event of a cyber attack may relate to the high complexity of the ICT environment and the low availability of analytical tools (in terms of availability – price of use, advanced functions, ability to use advanced functions – limitations in the education of staff operating the tools).

9

EC.CD	Question
Q15	Do you consider that your organization has established and implemented security measures (e.g. organizational structure, physical security, logical security, security monitoring, security reviews, assessment and testing, and training)?

Most respondents pointed to all the listed security mechanisms as already implemented within the organizations of financial institutions, but also indicated additional processes, mechanisms and tools (e.g. in the Threat intelligence family). The organizations of financial institutions have implemented many security mechanisms, both technological, process-based, procedural and administrative. Banks often ensure compliance with applicable regulations regarding security mechanisms, including Recommendation D, H, M (and other relevant) and the Act on the National Cybersecurity System. The above Recommendations of the Polish Financial Supervision Authority are issued on the basis of Article 137 (5) of the Banking Law Act and form a set of good practices for prudent and stable management of banks. Banks should expect their activities to be assessed based on recommendations.

The practice of issuing recommendations dates back to June 1996, when a recommendation of the National Bank of Poland was issued, signed by the General Inspector of Banking Supervision (executive body) „Recommendations for banks regarding the financial liquidity monitoring system". The prototype for the recommendation was the guidance for all banks from the President of the National Bank of Poland.

Drafts of individual recommendations are subject to public consultations, in particular with the National Bank of Poland, the Bank Guarantee Fund, the Association of Polish Banks and the National Association of Cooperative Banks.

Legal regulations and applicable market standards

As part of dedicated security policies, financial institutions maintain processes to ensure appropriate levels of security:

- patching and updating policy
- authentication management
- physical security
- reviews and audits
- resource management
- data processing policies
- incident management

Typical mechanisms used by financial institutions are:

- comprehensive and flexible security management system (understood as a part of security) based on three main principles: defense, prediction and involvement
- physical protection of the circuit with: ACS, CCTV,
- logical security measures (network security, endpoint protection, data encryption in transit and rest)
- incident recovery processes and capabilities
- security monitoring and incident response using SOC
- security awareness campaigns
- general control mechanisms in processes
- application-based control mechanisms together with dedicated SIEM, DLP, etc. class systems
- periodic penetration testing
- periodic checking of controls adequacy and effectiveness.

Sometimes, at organizations with a smaller scale of operations and potentially low business model complexity, only basic security tools (physical and logical security, monitoring and testing, incident reporting, training in the BCM / Disaster Recovery) may be implemented.

In general, security mechanisms are understood and organized as a multilayered and integrated defense system with three security barriers: protection, detection and response.

- protection – a set of systems, tools and services for preventing cyber attacks and for protecting client and organization information. It includes, among others: firewalls, anti-virus systems, e-mail filters and privileged access control mechanisms. In addition to other security systems, firewall also includes secure configuration and patching for all organization systems
- detection – a set of systems, tools and services used to monitor and quickly detect cyber attacks. These include: security operation center (SOC), incident monitoring tools, cybersecurity data lake, anomaly detection tools and machine learning.

- response – a set of systems, tools and services for analyzing cyber attacks, responding to them and mitigating their effects. These include: computer event response team (CERT), tools for taking over operations and system deactivation, forensic analysis and analysis of error causes.

Responses frequently pointed out to necessary regular monitoring of the organization's systems and networks for undesirable activities and constant readiness to respond to an effective cyber attack making it possible to cut its duration to a minimum and to mitigate the damage caused.

10

EC.CD	Question
Q17	Which issues do you struggle most with, when trying to ensure a quick restoration of systems and the need to maintain continuity in the delivery of your (critical) business functions?

Respondents report a frequent lack of problems, but each new attack is accompanied by only new challenges that the organization has to face within a properly planned budget.

Such challenges may be:

- network recovery
- unverified recovery procedures for some systems and data
- continued absence of current backups for some critical but locally managed systems and data

Interestingly, when preparing for quick system recovery after attacks in order to maintain critical business functions of the organization, a human factor was identified as a significant problem. Especially when it comes to carrying out the necessary activities to be completed within a specific timeframe. In addition to staff failure, low efficiency (performance) of backup systems was identified as a problem.

A potential problem identified in the case of system recovery after an attack is the scale effect in terms of the size and complexity of the ITC system, the number of users and clients, efficient cooperation among sectors and/or with law enforcement agencies.

In addition to backup systems, as a remedy for the speed and reliability of system recovery after a failure, implementation of a fully cloned and redundant test environment in the form of pre-production was pointed out, on which all patch tests can be run just as if implemented in a production environment.

Due to the scale of the enterprise and the quantitative range of data, in the case of financial institutions, comprehensive copies of systems, data and IT virtualization infrastructure are created within one volume of external media, which ensures high security of recovery with full data integration.

In the case of rapid recovery of systems after attacks, generally speaking, each organization faces financial, organizational and technical issues in this area. For example, in the case of an attack of a larger scope than the area of business (attack affecting a wider group of entities or a larger region of the country), there may be problems with access to services necessary to maintain critical business functions of the organization. In this case, also for security and confidentiality reasons, an appropriate channel should be provided for the transmission of information on threats and failure effects to entities affected by the legislative process.

11

EC.CD	Question
Q18	What are your views on having in the legislation a specific duration for the Recovery Time Objective (RTO) and having references to a Recovery Point Objective (RPO)?

Respondents' answers entail various opinions, from a positive attitude: that they are needed and if properly discussed with business, supported with arguments, they permit adequate management of business continuity risks; to negative views that legislative definition of RTO or ROP is harmful, as these parameters should remain varied. These parameters are specific to each process and should be defined individually for each of them. There are propositions that an attempt to harmonize indicators across the industry would significantly reduce the efficiency of the entire sector, while not yielding any systemic benefits.

It is being suggested that these parameters should not be specified since access to data is an element that affects the quality of service more than the confidentiality and integrity of customer data, which should be of key interest for the regulator. Accessibility, as a feature of the service being purchased, should be regulated through competition between enterprises. In the market game, customers should decide whether they prefer a more expensive but less unreliable service or one that is cheaper but with the risk of longer downtime.

Observing various institutions operating in the local financial market, one can see that, as a rule, RTO and RPO times should be defined individually by organizations on the basis of risk analysis. This is due to the fact that each organization has a different risk profile and risk appetite. However, there may be resources whose criticality may be considered more broadly (in terms of potential sectoral, national or regional effects) – thus their RTO/RPO thresholds could be determined by legislation.

Statutory definition of RTO and RPO should not impose rigid parameters but rather refer to their adaptation to business operations and local conditions, at the most, with possible consideration of minimum RTO and RPO parameters for individual areas. It should be remembered that incorrectly defined parameters may result in entities incurring costs that are disproportionate to the threat.

In today's development and condition of the Polish ICT market, the problem that is being pointed out is that RTO and RPO parameters are achievable at the 0 level since the technology available locally on the market (available for purchase by financial institutions) does not keep up with ICL solutions available globally.

Considering that these parameters are a derivative of the reliability and characteristics of business processes themselves, it is worth noting that the parameters should be defined for individual IT systems. Usually, they are the result of a Business Impact Analysis (BIA). If these types of parameters are set out in legislative documents, they may be harder to update later in the event of changes in business requirements.

12

EC.CD	Question
Q19	Through which activities or measures do you incorporate lessons post-incidents and how do you enhance the cyber security awareness within your organization? (please describe)

To implement lessons post-incidents to educate the organization, the basic system mechanism being used is the continually developed Security Awareness Program. After an incident, the root causes are analyzed and action proposals are put forward to reduce the risk of the incident's future recurrence, incident and problem management processes are analyzed, dedicated task groups are set up to solve the problem, the risk management process is used, and knowledge is shared on various internal forums. The ICT department management or the Management Board approve security measures for implementation. There are also additional recommended methods, such as internal training dedicated to a specific group of employees, covering detailed problem analysis (especially in the aftermath of an incident that is avoidable by enhancing employees' competences).

There are also limited post-incident methods being used, not the entire organization but only the units responsible for the incident are educated.

Often, financial institutions have formal rules for managing security incidents, whereby, if needed, actions are taken to provide appropriate units with recommendations about necessary corrective and remedial actions, followed by monitoring of their implementation and verification of their efficacy. This is accompanied by a dedicated process of raising users' awareness.

Appropriate risk mitigation measures are also used: Process Lessons Learned is an in-depth form of implementing risk mitigation measures. Corrective actions are carried out taking into account each layer where gaps could occur: procedures/configurations/lack of awareness.

Risk mitigation measures are based, among others, on:

- implementation of proper control processes and procedures,
- provision of classic or e-learning training to employees,
- information campaigns targeted at employees, contractors or clients of the bank
- changes in systems (parameterization),
- limitation of a possible recurrence of loss-generating adverse events.

Experts point to the mandatory post-incident analysis and a well-defined change management process in the context of post-incident recovery. A top-down approach may seem necessary to ensure proper communication and enforcement of changes throughout the organization.

13

EC.CD	Question
Q21	Do you agree that a comprehensive and harmonized EU-wide system of ICT and security incident reporting should be designed for all financial entities?

88% of respondents agree that a comprehensive EU-wide system of ICT and security incident reporting system should be designed for all financial entities. However, they signal a lack of a unified approach to the proper classification of event categories and classes.

14

EC.CD	Question	Area	Yes
Q22	If the answer to the previous question is yes, please explain which of the following elements should be harmonized?		
	»	Taxonomy of reportable incidents	13/18
	»	Reporting templates	13/18
	»	Reporting timeframe	10/18
	»	Materiality thresholds	13/18
	»	Other (please specify)	3/18

Respondents actively support the view that as part of a comprehensive EU-wide system for reporting security incidents for financial entities, the following elements (in the order of materiality) should be harmonized:

- Taxonomy of reportable incidents,
- Reporting templates,
- Materiality thresholds,
- Reporting timeframe.

As an additional comment, harmonization should encompass a breakdown and identification of attacks outside and within the EEA.

15

EC.CD	Question
Q24	Do you believe that the scope of reporting on security threats should be limited by materiality thresholds or unlimited?

The prevailing view among experts is that the scope of reporting on security threats should be limited by thresholds and to the data necessary to enable appropriate preventive measures to be taken by other market players. Also for security reasons, it should preferably be anonymized. It should be limited by thresholds so that only new/poorly identified threats that have a significant impact on system security are reported. In terms of information, the scope of reporting could be limited to a minimum necessary for the Supervisory Authority to make decisions and inform the public about the scope of possible consequences. All this information should be quantified to the extent possible. Excessive detail slows down the process of analyzing events and generating reports, raises the costs of its maintenance and additionally exposes the organization to difficulties with incident handling or to disclosure of sensitive data. Limiting and quantifying incident description may also be valuable for Supervisory Authorities which, due to limited resources and a large number of reports, will be forced to develop efficient processes for their assessment.

Other opinions take the view that only the full range of threats can provide a comprehensive picture of the security status. Thresholds should be maintained for detailed descriptions of serious incidents. In the annual cycle, the numbers of all incidents (as in PSD2) should be reported. Knowledge of the scale of threats and trends makes it possible to build detect and response strategies. Due to the changing nature of threats, as well as the diversity and volume of incidents, the scope of reporting should be limited.

It seems that a reasonable approach will be to work out an intermediate solution (analytical and synthetic). The most significant threats should be reported. Neither a full approach (e.g. each organization has a multitude of incidents related to e.g. breaches of internal procedures) nor a threshold-based solution (a short range incident may have serious consequences) is the best. The sector should develop an intermediate solution that takes into account incidents reported by thresholds (e.g. accessibility incidents) and cybersecurity incidents (advanced targeted attacks or attacks using advanced malware).

16

EC.CD	Question	Rating
Q26	Should there be a national platform for reporting incident reports?	13/16

In principle, there is an unequivocal view that a national incident reporting platform should be set up (over 80% of experts were in favor).

At the moment, provisions already regulate the issue of reporting and responsibility for collecting that information under the Act on the National Cyber Security System. There are reasonable suggestions that a platform could help but effective implementation of the current legislation in this area would probably be sufficient. The platform would provide data and knowledge about the type and scale of threats related to cybersecurity and operational risk. The pre-requisite for correct analysis results being provided to interested parties is that the platform should be fed good quality data from its stakeholders and other data providers.

17

EC.CD	Question
Q29	Should all financial entities be required to perform a baseline testing/assessment of their ICT systems and tools at the country level?Please provide a brief description.

The question gives rise to concerns about the scope and purpose of such tests. If the purpose were to help enhance ICT security of the Organization, the measure is assumed to be reasonable.

Guidelines should be defined for each type of financial institution, setting out:

- the scope of testing
- testing frequency and conditions
- the method and place of reporting on test completion

Hard centralized management of this type of testing may be difficult due to differences between financial institutions (e.g. bank vs non-banking financial intermediaries).

However, the confidentiality of test results raises concerns. This, in turn, suggests that ICT risk management is sufficiently regulated by BCM requirements, therefor, security tests at the national level could, for example, be an option for market participants to enhance their credibility. This role may also be played by periodically completed ICL Risk questionnaires that verify the organization's maturity in terms of security (incident management; information security; infrastructure of network devices).

Most critical organizations should be required to prove that they carry out such tests at their organization level. Participation in national level testing may be voluntary.

An option could also be the scope of selected tests (some tests could, therefore, be selected as mandatory). At the public sector level, it is practically impossible to recruit enough competent people to conduct such tests. The only compromise would be to reduce the quality and scope of testing to a level that would be unreliable due to the complexity of the issue. At the regulatory level, however, the minimum scope of testing should be indicated, based on the adequacy mechanism – adapted to the scope of information processed (client volumes). Initially, three to five levels of test detail could be adopted. Adequacy assessment should be based on a defined key to limit discretion in determining the scope, as was the case with the GDPR implementation.

The method of notifying Supervisory Authorities about the results of completed tests should be regulated, ensuring comparability of those results within the sector.

Financial institutions should be subject to security and resilience tests at the national level in the sense of meeting requirements in this respect, implemented in various forms, but consistent with a jointly developed model/framework. In order to carry out those tasks, the work performed in this respect should be built upon, even if the EU Security Testing Framework TIBER-EU was defined at the level of the European Central Bank. Another example of the testing standard is the CBEST framework launched by the Bank of England, as well as CREST UK solutions which qualify entities, among others, for security testing. IT systems should also be subjected to penetration tests, and the most critical applications, also to source code reviews. The maturity of security processes should be periodically measured through audits. Operational effectiveness should be verified through periodic penetration tests under the „red teaming" approach (e.g. using the TIBER methodology).

18

EC.CD	Question	Rating
Q35	Have you experienced difficulties during contractual negotiations between your organization and any ICT third party providers, specifically with regard to establishing arrangements reflecting the outsourcing requirements of supervisory/regulatory authorities? If so, which specific requirements?	5/16

It should be noted that, in principle, Polish financial institutions have not experienced major difficulties during negotiations between their own organization and any ICT third party provider, especially with regard to the arrangements reflecting supervisory/regulatory outsourcing requirements (only ⅓ of experts mentioned such difficulties). There may be discrepancies in the understanding of the role and definition of outsourcing in relationships with suppliers. The most common problem is negotiation of the supplier's ability to use cloud-based solutions and legal compliance with regard to e.g. a chain of subproviders.

19

EC.CD	Question	Area	Yes
Q37	What is your view on the possibility to introduce an oversight framework for ICT third party providers of financial institutions (country and regional levels)?		
	»	Should an oversight framework be established?	11/18
	»	Should it focus on critical ICT third party providers?	4/18
	»	Should "criticality" of incidents involving third party providers be based on just qualitative and quantitative parameters (thresholds) of risk factors, or also should it include detailed descriptions?	8/18
	»	Should proportionality play a role in the identification of critical ICT third party providers?	5/18
	»	Should other related aspects (e.g. data portability, exit strategies, fair contractual practices, environmental performance, etc.) be included in the oversight framework?	4/18

Experts present quite decisive views on the oversight framework for ICT third party providers of financial institutions (country and regional levels), supporting its emergence. They also indicate that not only ICT providers should be registered on the platform. It is important that the criticality of registered incidents involving third party providers should reflect not just qualitative and quantitative parameters of risk factors (in the form of thresholds), but also detailed descriptions. Considering business secrecy and confidentiality of the business model, it seems reasonable not to register on the platform the proportional share of the supplier as an organization's business partner. For the same reasons, other parameters, such as data portability, exit strategies, fair contractual practices, supplier efficiency, should not be registered on the oversight platform.

20

EC.CD	Question		Area	Yes
Q38	What solutions do you consider most appropriate and effective to address concentration risk among ICT third party service providers?			
		»	Diversification strategies, including a potential mandatory or voluntary rotation mechanism (e.g. auditing model)	11/18
		»	Mandatory multi-provider approach	4/18
		»	Should limits be set by the legislator or supervisors to tackle the excessive exposure of a financial institution to one or more ICT third party providers?	3/18

Diversification strategies, including a mandatory or voluntary supplier rotation mechanism (e.g. audit model), were recognized as the most appropriate and effective solutions to address concentration risk among ICT third party service providers. Less enthusiasm was shown for mandatory use of multiple providers or limits set by the legislator or supervisory authorities to limit the excessive exposure of a financial institution to one ICT third party provider. In the subcontractor relationship model in relation to key business functions implemented as the financial institution's main responsibility, it is necessary to define the approach to basic services: if third parties, such as external ICT providers, are of key importance for the operation of key services. In this case, only the total assignment of risk and liability to the party providing the service ensures some security for the financial institution.

21

EC.CD	Question	Rating
Q39	Do you agree that the EU should have a role in supporting and promoting the voluntary exchanges of TTPs and IOCs between financial institutions?	16/18

In this case, the essentially unequivocal view is that the EU should have a role in supporting and promoting the voluntary exchanges of TTPs and IOCs between financial institutions. The question was basically closed, but respondents support voluntary exchange of information.

22

EC.CD	Question	Rating
Q40	Is your organization currently part of such information-sharing arrangements?	7/18

The Polish market is in the first phase of adopting a strategy for building security platform structures, and as may be seen, some institutions are already covered by voluntary exchange of TTPs and IOCs information between financial institutions.

23

EC.CD	Question	Area	Yes
Q45	Where do you see challenges in the development of an EU cyber insurance/risk transfer market, if any?		
	»	Lack of a common taxonomy on cyber incidents	8/18
	»	Lack of available data on cyber incidents	14/18
	»	Lack of awareness on the importance of cyber/ICT security	10/18
	»	Difficulties in estimating pricing or risk exposures	16/18
	»	Legal uncertainties around the contractual terms and coverage	10/18

Respondents see the lack of data on cyber-incidents as well as the problems and complexity of estimating the cost of exposure to cyber risk and ICT risk as the most important challenges in the development of the market of risk transfers or ICT risk insurance, and in particular cyber-attacks in the region. As in any phenomenon with an unknown or poorly understood and unpredictable structure and course, the greatest uncertainty is associated with the type of risk and with preparedness for risk materialization. One way to mitigate the risk could be to share information via an exchange platform among financial institutions and to simplify application and process architectures of financial organizations.

24

EC.CD	Question	Rating
Q46	Should the EU provide any kind of support to develop EU or national initiatives to promote insurance of ICT risk and risk transfer systems?	14/16

The European Union should support European and national initiatives for insurance against ICT risks. There is a definite view that the role of the European Union in the case of Poland is important in the area of supporting European and even national initiatives in the field of insurance against ICT risks and risk transfer systems. This should be one of the practical elements incentivizing implementation of security measures while enabling cyber risk transfers. Better risk management means lower probability of the risk materializing, a developed ICT risk insurance market and a risk transfer system promote better risk management.

25

EC.CD	Question
Q59	Which of the future or expected specific measures for ICT risk would be completely new for your organization and potentially require the most expenditure in their implementation? Please provide a brief description.

The highest implementation expenditures for future or expected ICT risk solutions will be required for process areas such as stress testing and penetration testing which permit realistic identification of the areas exposed to the greatest risk of incidents as well as monitoring of the efficacy of implemented risk mitigation measures and tools, as well as:

- Reporting to the new risk supervision platform – building control and measurement mechanisms for new regulations
- Mandatory security tests
- Systems for integration and joint reporting will require expenditures and additional recruitment
- Attacks complexity
- Supervision of privileged accounts
- NIS directive updates (especially so-called „construction requirements”). New requirements especially for cloud service providers.
- Cloud solutions
- Open banking
- Lack of adequate supply of human resources
- Process automation
- Replacement of legacy systems (not supported by manufacturers)
- Identity management
- Systems integration
- Purchase of tools to detect attacks and to automate responses to attacks.

As in any company with such a large scale of operations and complexity of operational processes, especially those regulated for financial institutions, the biggest problem is the human factor and problems resulting from mistakes or malicious actions of people from within the organization.

26

EC.CD	Question
Q61	Which administrative formalities or requirements in respect to the ICT risks are today the most burdensome? Which of them require high labor input and cost from an economic point of view? What can be changed in this area? Please provide a brief description.

Particularly difficult or problematic administrative requirements and formalities in the area of ICT risk management are considered to be those that require high labor input and cost from an economic point of view:

- mapping of IT processes and assets, and assigning specific elements of infrastructure and software to the functions performed by the institution, and designating persons responsible for efficacy and efficiency monitoring;
- lack of a developed and uniform partnership culture of cooperation between public and private institutions relying on trust and mutual benefit;
- legal restrictions on sharing knowledge regarding different types of information;
- short incident reporting time, longer reporting time would be better;
- reporting to regulators with no feedback;
- lack of awareness or knowledge about various risk management options and compliance with legal and regulatory requirements. One example is the volume of implementations in the sector of technical tools and technologies (very expensive), which in practice do not achieve their objectives. Such solutions often only satisfy the need to ensure compliance with a given provision, i.e. literal reading of the requirements that a given measure is to be implemented, without saying that the measure needs to be effective;
- in the case of companies of several dozen employees, it is difficult to obtain a correct and functional separation of competences that ensures an actual increase in security while maintaining mutual independence of individual, arbitrarily identified areas;
- requirements for the construction of buildings in the context of the Act on the National Cybersecurity System;
- inclusion of the financial sector in the group of critical infrastructure suppliers.
- lack of developed private-public partnership;
- no requirements as to adequate technological awareness among Board members;
- in practice, public procurement law leads to protracted proceedings which do not select the best security measures;
- recommendation D regarding IT system management – at a time when SI is gaining in significance;
- current reports: quarterly KNF surveys, BION report (annual), reporting on service work to the KNF Office;
- special functionality and service processes: GIIF reporting, MIFID2.

It also seems that the formalities involved in ICT risks registration are a challenge for small teams, in particular in the context of labor input versus resulting benefits.

Effective monitoring and response to cyber attacks is costly for individual institutions. It may be helpful to set up SOC/CSIRT industry teams.

Basing requirements on an enigmatic rule of adequacy, the assessment of which in most organizations is the responsibility of internal and external legal units that do not have the authority to make such a decision (lack of knowledge and experience in the areas of IT/IT Security). As a result, many organizations in the market have mechanisms that do not improve the level of security (there are even those that can harm), but instead make it difficult to introduce changes within the organization. This raises the costs of projects and may force the use of solutions that are not optimal.

In principle, it can be generally said that for mature institutions with an appropriate scale of operation (degree of organizational maturity) administrative requirements and formalities regarding the IT risk management area are not particularly difficult or problematic.

27

EC.CD	Question
Q62	Do you have an estimation of the costs that your company incurred because of ICT incidents, and in particular cyber-attacks? Please provide a brief description.

It is clear that sharing confidential information on estimated costs incurred in connection with ICT operational incidents, in particular cyber attacks, is a problem for respondents. As a rule, they hide behind business secrecy or confidentiality of this very type of information. From the point of view of informational value, such data are of particular importance in designing ICT risk response mechanisms and for the security of financial institution systems. In some cases, institutions (mostly insurance companies) did not estimate the costs associated with ITC incidents due to the fact that the organization is able to survive a relatively long period without access to IT infrastructure, which does not cause financial losses (RTO = nn days), while reducing the RPO time to an acceptable level is easy to obtain due to the scale of the company in both geographical and quantitative terms when it comes to electronic data. There are suggestions that such data, however, do exist in each of the financial institutions because the costs related to ICT operational incidents are mandatorily measured for purposes of operational risk assessment. Rarely, institutions confirm that the risk area has an estimate of the costs (losses) associated with operational risk incidents (including ICT), which is prepared as part of a periodic risk control self-assessment (RCSA) and within defined operational risk scenarios.

Safe Bank 2 (79) 2020

DOI: 10.26354/bb.9.2.79.2020

Edited by Monika Liszewska*
ORCID: 0000-0002-7714-602X

Answers of the European Financial Congress[1] in relation to the European Securities and Markets Authority's consultation paper on Draft Regulatory Technical Standards under the Benchmarks Regulation[2]

Methodology for preparing the answers

The answers were prepared in the following stages:

Stage 1

A group of experts from the Polish financial sector were invited to participate in the survey. They received the ESMA's consultation document and a form with consultation questions.
The experts were guaranteed anonymity.

Stage 2

Responses were obtained from experts representing:
- banks,
- consulting firms
- law firms,
- the academia.

* Monika Liszewska – Instytut Badań nad Gospodarką Rynkową (Institute for Market Economics).

1 European Financial Congress (EFC – www.efcongress.com). The EFC is a think tank whose purpose is to promote debate on how to ensure the financial security and sustainable development of the European Union and Poland.

2 https://www.esma.europa.eu/sites/default/files/library/esma70-156-1464_consultation_paper_benchmarks_rts.pdf

Stage 3

The survey project coordinators from the European Financial Congress prepared a draft synthesis of opinions submitted by the experts. The draft synthesis was sent to the experts participating in the survey with the request to propose modifications and additions as well as marking the passages they did not agree with.

Stage 4

On the basis of the responses received, the final version of the European Financial Congress' answers was prepared.

Answers of the European Financial Congress to the consultation questions

Re: Section 2: Governance arrangements (Article 4 BMR)

Q1: *Do you agree with the governance arrangements set above? Do you have any additional suggestions?*

Yes, the direction of changes proposed by ESMA is right. Most significantly, we agree with the application of the principle of adequacy and proportionality that will result in higher requirements being imposed on the administrators of critical benchmarks.

At the same time, we are of the view that the principle of adequacy and proportionality should also apply to administrators of interest rate benchmarks. In the consultation paper, ESMA points out that "the future provisions on "robust governance arrangements" should not jeopardise the operation of smaller administrators with limited resources". Furthermore, the interest rate benchmarks must not be non-significant; therefore, even when an administrator provides a benchmark that is of limited significance but it is an interest rate benchmark, the administrator may bear an excessive administrative burden. It is particularly divergent from the principle of proportionality, when a benchmark is created automatically only and does not include expert judgment. Consequently, we believe that the principle of adequacy and proportionality should also account for the benchmark methodology as it may determine the risk level and it may require a special approach from the administrator. In case of benchmarks determined on the basis of transaction data, the principles applying to benchmarks based on data from regulated markets should also be applied to interest rate benchmarks. The current requirements in regard to interest rate benchmarks make it generally impossible to create new benchmarks (which is visible on the market).

Q2: *Do you agree that administrators should have in place a remuneration framework?*

We believe that the establishment of a remuneration framework should be optional for the administrators, provided the establishment of such rules is an element of managing conflicts of interest. In our opinion, a remuneration framework is not the only solution that may be applied in order to avoid a conflict of interest, as per Article 4 point 5 of BMR. In this context, we request that administrators are able to adopt other solutions, depending on the scale and specific nature of their business. Such a solution would enable the application of the principle of adequacy and proportionality.

Q3: *Do you agree that the same requirements should apply to an administrator that is a natural person?*

Yes, we are of the view that the requirements towards administrators should be the same, regardless of their organisational form. There are no premises for the adoption of different requirements and standards towards natural persons. Such an approach equalises the responsibility on the administrator and it allows for mitigating the risk of regulatory arbitrage. An entity that applies a benchmark should have certainty as to the administrator's transparency, regardless of its organisational form. If different provisions are applied to legal persons and natural persons, it may be concluded that certain benchmark types may be more or less risky. Consequently, rather than the legal form, you should use the nature of the benchmark, including its complexity and materiality, as the criterion determining the application of different requirements. Such an approach would be in alignment with the proportionality principle.

Re: Section 3: Methodology (Article 12 BMR)

Q4: *Do you think that other conditions should be taken into account to ensure that the methodology complies with the requirements of the BMR?*

We think that the consultation paper has all features that a methodology should have to be in compliance with the BMR requirements. The principles clearly specify the priority in terms of transaction data on the underlying market, the circumstances under which transaction data from related markets are used and discretion may be exercised.

Q5: *Do you consider that additional requirements are needed to ensure that the methodology is traceable and verifiable?*

No, we do not think that it is necessary to add any additional requirements in that regard. All requirements needed to ensure that the methodology is traceable and verifiable have been defined in the consultation paper in an exhaustive manner. However, should additional requirements appear, we believe that they should depend on the benchmark's nature.

Q6: *Do you think that the back-testing requirements are appropriate?*

Where back-testing is not the right validation method, the Regulation should permit other methods that may be applied to check that the operation is correct. In our opinion, back-testing is not appropriate for benchmarks that are based on transactions only and that are determined in a fully automated manner.

Re: Section 4: Reporting of infringements (Article 14 BMR)

Q7: *Do you agree with the requirements set out above? Do you have any additional suggestions?*

We believe that the requirements in that respect should be aligned with the nature and complexity of the benchmark. Since there is no possibility of assigning the non-significant benchmark status to the interest rate benchmark, it may mean an excessive burden for the local benchmarks based on interest rate for which the data are generated in a fully automated manner.

Q8: *Do you agree with the systems suggested for the surveillance of market manipulation? In particular, do you think that an automated system should be required only when it appears to be adequate according to the nature, scale and complexity of the benchmark?*

While we believe that the automated system should be the preferred one for all benchmarks, we agree that the system should be required only if it appears adequate according to the nature, scale and complexity of the benchmark. Critical benchmarks should be examined with special care which may only rely on automated systems. Automated surveillance systems should not be mandatory for non-significant benchmarks. In case of those benchmarks, administrators should have the right to opt out of those solutions. We also believe that in certain instances it may be reasonable to recommend that administrators combine automated surveillance with non-automated surveillance. It applies to a situation where transaction data are accompanied by expert judgment, e.g. in the case of the cascade methodology.

Re: Section 5: Mandatory administration of a critical benchmark (Article 21 BMR), Section 5.2: Content of the draft RTS

Q9: *Do you think that other criteria should be considered in relation to the transition of the provision of the critical benchmark to a new administrator?*

In general, we agree with the criteria presented in relation to the transition of the provision of the critical benchmark to a new administrator. We also believe, however, that benchmark methodology continuity should be emphasised while transitioning the critical benchmark to a new administrator. We also believe that the criteria should clearly specify the requirement for the transfer of historical data gathered by the present administrator. Moreover, in order to ensure the same level of safety and operation method, the criteria should also account for the technology aspect. Most significantly, they should account for the new administrator's ability to gather and process all historical data in the appropriate manner and for the transfer of the processing/ calculation models (where appropriate) from the current administrator. Furthermore, the criteria should also account for the requirement to test the correct operation of any technologies required for the new administrator to serve the function.

Re: Section 5.2: Content of the draft RTS, Assessment of how the benchmark ceases to be provided

Q10: *Do you think that other criteria should be considered in relation to the cessation of the provision of a critical benchmark?*

In general, the conditions referred to in the consultation paper describe the cessation of the provision of a critical benchmark in an exhaustive manner. We believe, however, that in case of critical benchmarks, where the dynamics of the economic reality indicated that the underlying market was about to become inactive, in order to ensure macroeconomic stability, and especially to continue the service of the existing portfolio of loans based on the benchmark, it would be preferred to reinforce the critical benchmark with transaction data from related markets.

Furthermore, we also believe it is necessary to indicate all crucial elements that a clause ought to contain should a benchmark no longer be provided. Such an approach would also provide an additional opportunity to solve the issue of fallback clauses that the market participants have been tackling for several years now.

Re: Section 6: Non-significant benchmarks (Article 26 BMR)

Q11: *Do you agree with the criteria under which competent authorities may require changes to the compliance statement?*

Yes, we agree with the criteria under which competent authorities may require changes to the compliance statement. At the same time, we wish to emphasise that competent authorities should be empowered to decide on the exemption from certain requirements relating to conflict of interest and the description of organisational structure.

Q12: *Do you agree with the criteria under which competent authorities may require changes to the control framework requirements?*

Yes, we think that the criteria under which competent authorities may require changes to the control framework requirements are sufficient. Competent authorities should be empowered to decide on the exemption from certain requirements relating to input data, public consultations and comparative data in case of a material change.

We are also of the view that the possibility of expanding the said criteria should be considered during the BMR review, while considering the market practice and the regulatory policy in that respect to date.