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The Stabilisation Policy and Its Macroeconomic Consequences During the COVID-19 Pandemic in Poland[1]

Abstract. When the COVID-19 pandemic began, the first infections occurred in Poland at the beginning of March 2020. Their multi-aspect consequences played a specific role in the economy. Although these processes were caused by a specific biomedical situation, the stabilisation activities implemented under such conditions should coincide with the actions taken during the period of changes in business activity, generated by economic factors. They require quick and adequate fiscal and monetary instruments. The aim of this study was to analyse and assess the fiscal and monetary tools applied in Poland in order to stabilise the macroeconomic situation during the COVID-19 pandemic, i.e. between March 2020 and June 2021. The analysis of the macroeconomic situation encompassed the phenomena and processes occurring in the real and the nominal spheres of Poland's economy. Special attention was paid to business fluctuations in the GDP series, investments, consumption, unemployment, inflation-induced changes and disturbances in the state budget. There are two parts of the study. The first part discusses the aims of stabilisation instruments used in market economies as well as the tools applied in anti-crisis shields. They were supposed to support Poland's economy affected by the consequences of the COVID-19 pandemic. The second part is an analysis of the macroeconomic effects of these measures under a limited amplitude of business fluctuations, unemployment, inflation, and the aggravating situation of the state budget.

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JEL classification: E30, E31, E32, E52, E62

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Introduction

In December 2019 the COVID-19 epidemic broke out in Wuhan, China. The Sars-CoV-2 virus spread around the world very quickly. In early March 2020 the first cases of the epidemic were recorded in Poland. The COVID-19 pandemic had multi-aspect consequences, especially in the economy, which declined deeply. Although the genesis of this breakdown was exogenous and resulted from biomedical conditions, the stabilisation measures should coincide with the steps taken during the period of changes in business activity, generated by factors resulting from the economic system.

The aim of the article was to analyse and assess the tools applied in the fiscal and monetary policy in Poland in order to stabilise the macroeconomic situation during the coronavirus pandemic. The article consists of two parts. The first part discusses the aims and instruments of the stabilisation policy. It also describes the monetary and fiscal stabilisation tools which were applied in anti-crisis shields introduced to counteract the negative effects of the coronavirus epidemic on the economy in Poland. The second part analyses the measurement of the effectiveness of these stabilisation tools. The study concludes with an assessment of the effectiveness of stabilisation measures undertaken so far in the nominal and the real spheres of Poland's economy.

1. Aims and tools of macroeconomic stabilisation policy in market economies — review of scientific publications

The stabilisation policy is an important task for state institutions. This policy includes all the measures whose aim is to create and maintain the conditions of general economic equilibrium, i.e. to counteract or mitigate the impact of short-term and medium-term changes in economic activity. A stabilisation policy is not meant to prevent any kind of economic fluctuations, but it should ensure that they cancel each other out rather than reinforce each other (Despres et al., 1975). The main goal of a stabilisation policy is to achieve market equilibrium. However, it does not only mean a general equilibrium between the effective demand and total supply in the goods and services market, with the preservation of the partial equilibria. A stabilisation policy is also supposed to neutralise the effects of cumulative processes in the economy so as to maintain a high economic growth rate, counteract excessively deep breakdowns as well as affect the growth dynamics and proportions in the supply of factors of production (Barczyk, 2004). The main goal formulated in this way refers to the ideal state with the optimal situation in the economy. However, when the stabilisation policy is brought closer to the economic reality, we can say that its goal in the market system is to achieve a high and sustainable

economic growth, a high employment level, a stable value of money and, in an open economy system — balance in international relations. In this way, the quadrilateral of stabilisation goals was formulated. It is frequently supplemented with additional goals, such as fair distribution of the national income and capital, ecological sustainability (Mussel & Pätzold, 2012), and a balanced state budget (Kołodko, 1993).

Regardless of the assumed conception of the stabilisation policy goals, in practice, the implementation of the stabilisation process is hampered mainly for two reasons:

- stabilisation policy goals are interrelated and some of them have the trade-off nature (one thing in return for another),
- the stabilisation policy is a kind of conglomerate of different types of economic policy (Urbanowicz, 2014, p. 251).

Trade-off makes it impossible to accomplish all stabilisation policy goals simultaneously. Achieving one of the goals creates an opportunity cost, i.e. resignation from the accomplishment of another goal. For example, a higher rate of economic growth may contribute to higher employment, but at the same time, it will increase inflation, as indicated by the Phillips curve, defined by Akerlof as "probably the single most important macroeconomic relationship" (Mankiw & Taylor, 2009, p. 372). A negative slope of the Phillips curve in the short run excludes the possibility to simultaneously achieve price stability and full employment, which indicates the substitutability of those two goals[2]. This conclusion gave rise to a dilemma concerning the stabilisation policy. According to some economists, the course of the Phillips curve in the short term indicates that reduction of unemployment by means of monetary expansion is possible at the price of only a moderate increase in inflation (Godłów-Legiędź, 2005). However, Friedmann (1968) proved that in the long term the Phillips curve was vertical. This means that the achievement of equilibrium in the labour market by means of monetary expansion is impossible and dangerous because in the long run it will only end in higher inflation (Hübner, 1992; Winniecki, 1986; Welfe, 1993; Pollok, 2000).

Moreover, the stabilisation policy is primarily a set of tools applied in monetary and fiscal policies as well as exchange rate, income, and supervisory policies (Urbanowicz, 2014). For this reason, it is a problem to coordinate decisions made by various institutions responsible for specific areas of state interventionism. Each of the aforementioned policies has its own, specific, primary goals which can be directly referred to individual goals of the stabilisation policy (Przybylska-Kapuścińska, 2008). In accordance with the trade-off phenomenon, the implementation of the primary goals of individual types of

[2] For more about the Phillips curve see: (Phillips, 1958; Samuelson & Solow, 1960; Blaug, 2000; Bludnik et al., 2009; Bludnik, 2010).

the economic policy may, or may not, indirectly foster the achievement of the other goals of the stabilisation policy. Therefore, the problem of coordination of decisions taken as part of the stabilisation policy should also be considered in the context of the hierarchy of importance of the tasks to be accomplished (Urbanowicz, 2014). The main goal of the monetary policy is to stabilise prices. The main goal of the fiscal policy is to maintain taxes at the level optimising the rate of growth and satisfying the financial needs of the state. The fiscal policy has far-reaching goals, touching on economic aspects as well as social and demographic aspects related to them. Moreover, the monetary policy goals are incorporated in highly important legal acts, whereas the goals of the fiscal policy in its broad sense are not precisely defined and may be changed when the government changes. Both the monetary and the fiscal policy are pillars of the economic policy. Therefore, they should be coherent, well-coordinated and implemented in an uninterrupted manner. Unfortunately, sometimes the government's fiscal policy is in disagreement with the monetary policy. Moreover, the government sometimes exerts a political pressure on the monetary policy, which has to co-exist with the goals that are competitive to stability, i.e. an increase in output or reduction of unemployment. The shaping of the national policy mix, which is a combination of the monetary and fiscal policies, is not an easy task (Przybylska-Kapuścińska & Szyszko, 2017).

The following fiscal instruments are used as stabilisation policy tools (Owsiak, 2005, p. 361):

- budget expenses on goods and services,
- dynamics and structure of transfer expenses,
- changes in the tax policy.

The public spending policy plays a significant stabilising role because it directly determines changes in the demand not only for consumer goods but also for investment goods. Changes in the consumer demand are conditioned by personal and social spending and, partly, by transfer expenses. The demand for investment goods is shaped by material budget expenditures and subventions. This influence is more direct, because no savings are generated to modify the investment demand. However, the stabilisation policy encounters some barriers in this case, too (Pätzold, 1991). Transfers to individual business entities are also a component of budget expenditures which stabilise the economy. This instrument of the fiscal policy is more flexible to operate than investment expenditures. However, the possibilities to increase them are restricted by the situation in the state budget.

In the market economy the tax policy used as an instrument of stabilisation is oriented at the income of consumers and investors, or at their business activity. However, its influence on consumers' income is indirect and can be exerted through additional tax

burdens or exemptions, or through changes in tax rates on consumer goods, e.g. VAT or excise tax. State bodies may also use the tax policy to influence the demand for investment goods. Investment bonuses are an important tool used in this area. Non-permanent investment bonuses cover only profit-making firms, whereas permanent bonuses cover all businesses, regardless of their financial outcome. The state may also allow investment funds in enterprises as part of the tax policy. Investment funds are created from the profit and accumulated in special accounts to be used at the time of low business activity (Teichmann, 1988)[3].

The second group of stabilisation policy tools comprises monetary policy instruments. The most important of these instruments in Poland are (The National Bank of Poland Act of 29 August 1997, 2005, item 938):

- open market operations,
- deposit and credit operations,
- minimum (required) bank reserve.

The National Bank of Poland uses the aforementioned instruments to determine the interest rates which will maximise the probability of reaching the assumed inflation target. Communication between the central bank and other institutions plays an important role in the contemporary monetary policy. Transparent communication under forward guidance is supposed to shape the expectations of market participants and accelerate the transmission of monetary impulses to the economy.

Since the 1990s the new neoclassical synthesis has been the theoretical basis for the stabilisation policy. This trend is based on the assumption that the inflation target is a priority. This means that other stabilisation goals can be supported to an extent which does not interfere with the achievement or maintenance of price stability. For this reason, the monetary policy is attributed the dominant role in the stabilisation policy. The 2007 crisis revealed on a global scale that standard monetary policy instruments were unable to effectively overcome the negative consequences of the collapse of economies. This was reflected by the lack of the expected effects of drastic cuts of interest rates. Liquidity on the interbank market did not improve nor did the lending activity of commercial banks increase. Due to the ineffectiveness of traditional monetary policy instruments, central banks were forced to loosen the monetary policy solutions they were using by applying

[3] Neck et al. (2021) researched the effectiveness of budget expenditures in stimulation of the economy in a case study of Slovenia. They proved that budget expenditures affected both the demand and supply. They were particularly effective in stimulating the real GDP and increasing employment, as compared with the expenditures which affected the demand only. This is due to the fact that operations affecting the supply increase not only the real but also the potential GDP. Expenditures on research and development as well as funds spent on the improvement of qualifications of workforce proved to be particularly effective. Moreover, the research showed that employment could be effectively stimulated by reducing income tax rates and social insurance premiums.

quantitative and qualitative easing, i.e. they had to use non-standard tools in the monetary policy (Przybylska-Kapuścińska, 2012)[4]. In the face of the limited effectiveness of monetary policy, large-scale fiscal stimulus packages were also introduced in most countries in the world, which largely contributed to reversing the effects of the crisis. These events were accompanied by a noticeable change in the assessment of the effectiveness of the monetary and fiscal policies in the post-crisis stabilisation (Urbanowicz 2014; Gajda-Kantorowska, 2011).

When the pandemic started, it turned out again that the monetary policy tools alone would not be able to stop the negative economic effects (especially when combined with the low interest rates). The heads of the largest central banks demanded again that the economies should be supported by higher budget spending. The independence of central banks from political influence was to guarantee that inflation would be kept low. The introduction of the 'inflation-safe' fiscal policy by the governments of individual countries was supposed to ensure the introduced prudential thresholds within the budget deficit and public debt (The Economist, 2020). However, although the struggle with the consequences of the financial and economic crisis in 2007 by means of a strong monetary and fiscal expansion did not result in increased inflation, this risk appeared during the pandemic[5].

2. Macroeconomic stabilisation policy tools applied in Poland during pandemic

After the end of the global crisis Poland's economy reached the trough point in the first quarter of 2013. This initiated the phase of high growth dynamics in the business cycle. The growth phase came to an end in the second quarter of 2019, because the GDP and consumption dynamics reached the maximum values then. The maximum dynamics of investment activity had ended two quarters earlier.

In the first quarter of 2017 the prices of goods and services started to increase slowly, whereas the unemployment rate was decreasing until the third quarter of 2019. At the end of the first quarter of 2020 the first coronavirus infections were recorded in Poland. The government introduced a lockdown and started to prepare and implement anti-crisis shields in order to curb the negative consequences of the pandemic in the economy.

[4] For more information see: (Kołodziejczyk, 2012).

[5] The pandemic sparked a discussion on its effect on economic theory, including the economic policy. For more information see: (Banaszyk et al., 2021; Bonatti, Fracasso & Tamborini, 2020).

2.1. Anti-crisis shields and financial packages

Anti-crisis shield 1.0 was a package of government acts approved in early March 2020 to protect Poland from the crisis caused by the coronavirus pandemic. The shield was based on five pillars (COVID-19 Prevention, Counteraction, and Combat Act of 31 March 2020, 2020, item 568):

- job security and employees' safety (maximum expenses of 30 bn zlotys),
- business financing (maximum expenses of 74.2 bn zlotys),
- health protection (maximum expenses of 7.5 bn zlotys),
- strengthening of the financing system (maximum expenses of 70.3 bn zlotys),
- public investments (maximum expenses of 30 bn zlotys).

The first shield was to stabilise the economy and give it an investment impulse, with the total expenditure of approx. 212 billion zlotys (10% of Poland's GDP). The support provided under this shield amounted to:

- the government cash component — 67 bn zlotys,
- the government liquidity component — 75.5 bn zlotys,
- the NBP liquidity package — approx. 70 zlotys.

The first pillar of the shield provided:

- wage subsidies in case of threatened jobs, stoppage, or reduction of workload,
- assistance to the self-employed, employees working under specific task contracts or fee-for-task agreements (80% of the minimum remuneration),
- additional carer's allowance for children up to 8 years of age,
- bank loan repayment deferral by 3 months.

The second pillar of the shield covered the financing of enterprises and provided:

- non-returnable loan for businesses maintaining permanent employment,
- automatic revolving credit,
- loan guarantee programme for micro- , small, and medium-sized businesses,
- Capital for Security and Growth of the Polish Development Fund (PFR).

The third pillar covered health protection and supported the health service by:

- combating the coronavirus,

- creating new information channels in the health service,
- building a medical infrastructure,
- digitisation of the healthcare system.

The next pillar strengthened the financial system. It consisted of two packages:

- the regulatory package of the Polish Financial Supervision Authority (KNF) and the Ministry of Finance (MF) (the package included lower capital buffers or recommendations of the Financial Stability Committee and reduced the requirements for banks' capital or liquidity),
- the NBP financial package to improve the liquidity of banks, lower the base interest rates and the required reserve rates.

The last pillar of the shield covered public investments. The Public Investment Fund was used to develop the infrastructure, modernise schools and hospitals, for energy and digital transformation, biotechnology, pharmaceutics, and environmental protection.

Individual business entities showed some distrust when shield 1.0 was introduced. They were particularly concerned about the organisation, forms and scope of assistance, as well as the amount of cash benefits. Therefore, in April 2020 the government prepared shield 2.0. The most important solutions approved in this package included greater financial assistance for the self-employed, employees working under specific task contracts or fee-for-task agreements. The period of additional carer's allowance paid to parents with children under 8 years of age was also extended. Moreover, another allowance was introduced for parents under obligatory quarantine, epidemiological surveillance or hospitalisation. The system of social assistance for people remaining in isolation due to a suspected infectious disease or total incapacity for work was simplified. The validity of certificates of total incapacity for work was extended. The payment deadlines of perpetual usufruct fees and the transformation of perpetual usufruct into ownership were shifted.

Nevertheless, all those solutions were still insufficient for some business entities. Therefore, they were modified and another two shields with new solutions were introduced, i.e. shield 3.0 in May 2020 and shield 4.0 in June 2020.

Shield 3.0 altered 47 acts, including:

- conditions for receiving stoppage allowances,
- extension of the conditions of paying insurance premiums to the Polish Social Insurance Institution,
- conditions for receiving micro-loans.

The following solutions were included in Shield 4.0:

- interest rate subsidies on bank loans,
- simplified restructuring procedures,
- rules for remote work,
- supervision over the takeover market transferred to the President of UOKIK (Competition and Consumer Protection Office).

The stabilisation measures also included a financial shield, which was a part of the anti-crisis shield, implemented by the Polish Development Fund. The financial shield was addressed to microenterprises (employing 1–9 people), small and medium-sized enterprises (10–249 employees) and large businesses (with over 250 employees) to secure employment. The amount of money allocated to this project was nearly 100 billion zlotys, including up to 60 billion zlotys as non-returnable support.

Subventions for microenterprises (maximum 25 billion zlotys) were planned. The maximum sum paid could not exceed 324,000 zlotys. The amount of support depended on the decrease in income and the number of employees (70,000–90,000 zlotys on average). It was assumed that 75% of the subvention could be non-returnable and 25% should be returned if the enterprise continued operating for 12 months after receiving the support. Moreover, an extra 50% could also be non-returnable if the enterprise maintained its average employment for 12 months. The remaining amount of the subvention needed to be repaid within 5 years. The financial aid could be used to pay the costs of the company's activity, especially to pay salaries, whereas 25% could be earmarked for the earlier repayment of the loan.

The maximum value of the programme for small and medium-sized enterprises was set at 50 billion zlotys. The amount of non-returnable funds was 32 billion zlotys. 75% of the subvention was non-returnable, where 37.5% depended on the loss in sales and the other 37.5% was earmarked to maintain the current employment for 12 months. The subventions were 4%, 6%, or 8% of the yearly sales, whereas the maximum amount was 3.5 billion zlotys (19 million zlotys on average).

The maximum amount of financial support for large enterprises employing over 250 people was 25 billion zlotys, including 12 billion zlotys of non-returnable funds. The following three forms of the financing were possible:

- liquidity financing (two-year loans or bonds, up to 1 billion zlotys),
- preferential financing (three-year loans, partly non-returnable, depending on the amount of the financed loss and the maintenance of employment, up to 750 million zlotys per entity),
- investment financing — capital instruments in the enterprise which the state can overtake as shares on the stock exchange or as public assistance, up to 1 billion zlotys per enterprise.

During the second wave of coronavirus, further stabilisation solutions were approved in Poland, i.e. the sectorial shield of the Ministry of Development, Labour, and Technology, as well as anti-crisis shields: 5.0 in September 2020, 6.0 in December 2020, and 7.0 on 28 February 2021. In January 2021 the Polish Development Fund approved financial shield 2.0 to support 38 branches of the economy with 35 billion zlotys. All those solutions were mainly addressed to microenterprises and small enterprises, which were exempt from paying insurance premiums to the Polish Social Insurance Institution, received additional one-off stoppage benefits, and a subsidy of 5,000 zlotys. Apart from that, the regulations extended the number of economic sectors which could apply for financial support from the state.

Due to the ongoing coronavirus pandemic, on 28 February 2021 shield 8.0 was launched. It was addressed to enterprises in specific branches, which were affected by pandemic restrictions. Shield 8.0 prolonged and extended shield 7.0 and provided the following support:

- employment security benefits,
- successive stoppage benefits,
- subsidies to cover the running costs of business,
- exemptions from paying social insurance premiums.

On 26 April 2021 shield 9.0 was launched — the aid provided by the state was extended over 16 new branches. Moreover, starting from 4 May 2021 applications could be submitted for exemptions from insurance premiums for March and April 2021. This solution also offered employment security benefits and subsidies to cover the current costs of running a business.

As results from the analysis of the stabilisation programmes implemented in Poland's economy during the COVID-19 pandemic, their primary aim was to prevent the rapid growth of unemployment, i.e. to reduce the increase in the dynamics of supply disequilibrium on the labour market. At the same time, the shields were introduced to improve the financial situation of individual entities, curb the dynamics of decrease in the disposable income of consumers, especially those losing their jobs, raise the liquidity of enterprises and reduce the rate of their bankruptcies. Those measures were applied to slow down the GDP decline rate. Other stabilisation aims were not formulated, especially those regarding inflation, state budget result or macroeconomic equilibrium in international relations.

The programmes were mainly based on fiscal tools, such as increased expenditures on subventions for consumers, investments in the public sector, and health protection, especially to combat the coronavirus. This means that much less attention was paid to the income part of the budget, which led to a rapid growth of the budget deficit and increased the public debt. The instruments used by the central bank to lower interest

rates and guarantee credit operations of commercial banks were much less important. This bank paid relatively less attention to the implementation of the anti-inflation policy.

Individual economic entities often negatively responded to the implemented legislative solutions because they were incomplete and delayed. The financial support was insufficient, especially when compared with the other EU member-states. These opinions about the stabilisation activities were confirmed by frequent modifications of the approved legislation.

2.2. Methods of analysis of accomplishment of selected stabilisation aims in Poland during pandemic

The accomplishment of the stabilisation aims during the pandemic in Poland was analysed against a longer period of time, i.e. from the first quarter of 2003 until the second quarter of 2021. The following indicators from the nominal and the real sphere were selected from the available time series showing the measurable effects of macroeconomic stabilisation:

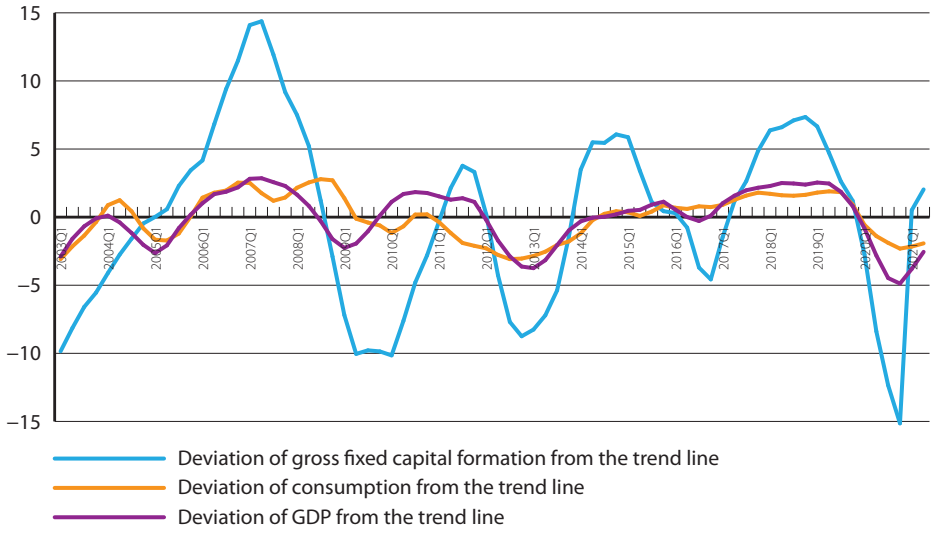
- indexes of the GDP dynamics, consumption, and gross fixed capital formation in constant prices on a quarterly basis (analogical period of the previous year = 100) — they show the process of economic growth and business fluctuations,
- quarterly data of registered unemployment rates, whose changes indicate disequilibrium in the labour market,
- indexes of the dynamics of prices of consumer goods and services on a quarterly basis (analogical period of the previous year = 100) — they show the extent to which the NBP inflation target was accomplished,
- public debt indexes in relation to the GDP on a quarterly basis — they show the indebtedness of Poland's economy[6].

The analysis of time series should be based on correctly prepared empirical data. Due to this fact, the source material broken down into quarters was decomposed. The TRAMO/SEATS procedure, recommended by the Eurostat, was applied to remove seasonal and random fluctuations from the initial series of data, i.e. indexes of dynamics in the GDP, consumption, gross expenditures, unemployment rates and inflation (Gomez & Maravall, 1996). Next, the direction of changes was determined for the series of GDP, consumption, expenditures and unemployment by means of trend line estimation. Then, deviations of the empirical values from their trend line were calculated for these time

[6] For this indicator, the analysis covered a period from the first quarter of 2003 to the first quarter of 2021 due to the unavailability of data for the second quarter of 2021 at the time the article was being written.

series. Deviations of the inflation index from the inflation target of 2.5%, set by the NBP, were estimated. For the public debt in relation to the GDP, its deviations from the EU public debt prudential threshold (i.e. 60%) were calculated. These calculations were used to assess the stabilisation processes in the areas of economic growth (Figure 1), labour market and inflation (Figure 2), and indebtedness (Figure 3).

Figure 1. Deviations of the indexes of the GDP, consumption, and gross fixed capital formation from the estimated trend line in Poland between the first quarter of 2003 and the second quarter of 2021

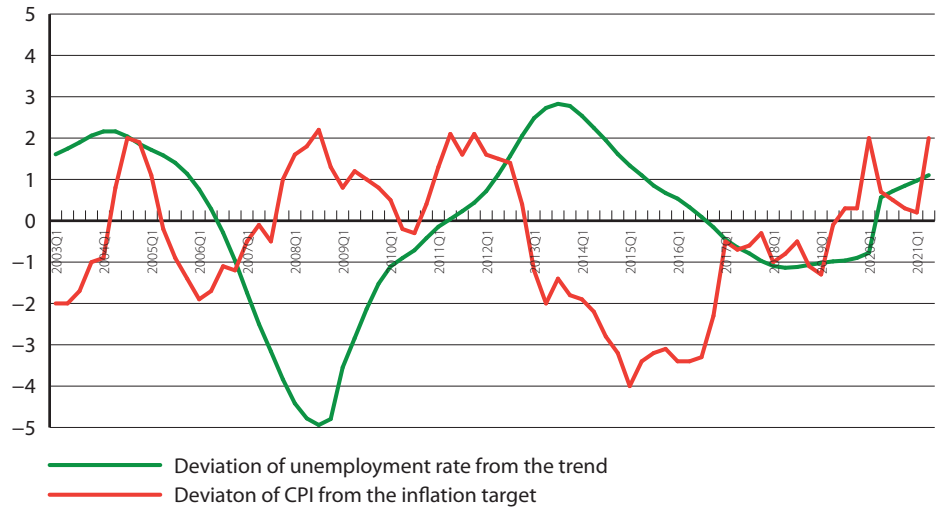


Source: Authors' calculations (the GRETL program) based on data from the Central Statistical Office (GUS).

The analysis of Figure 1 showed that during the period under study the economic growth in Poland was progressing in a relatively stable manner. Although the graph shows fluctuations in the deviations, their increases or decreases were within a certain fluctuation band, i.e. they were neither violent nor stifled. However, during the coronavirus pandemic there was a noticeable downturn. The consumption and investments decreased, too, but the latter declined much more. The data proved that the assistance programmes offered by the government did not sufficiently support the investment activity, but they mostly maintained the consumer demand in Poland's economy. However, this tendency changed in the first six months of 2021. Deviations in all of the three indexes increased, with the highest growth in gross capital formation. This may have been caused by entrepreneurs' optimism, who saw a smaller number of COVID-19 infections and deaths, as well as by optimistic prognoses that the third wave of the coronavirus pandemic in the economy would soon come to an end. However, it is always necessary to think whether such expectations are justified and how long they can be maintained.

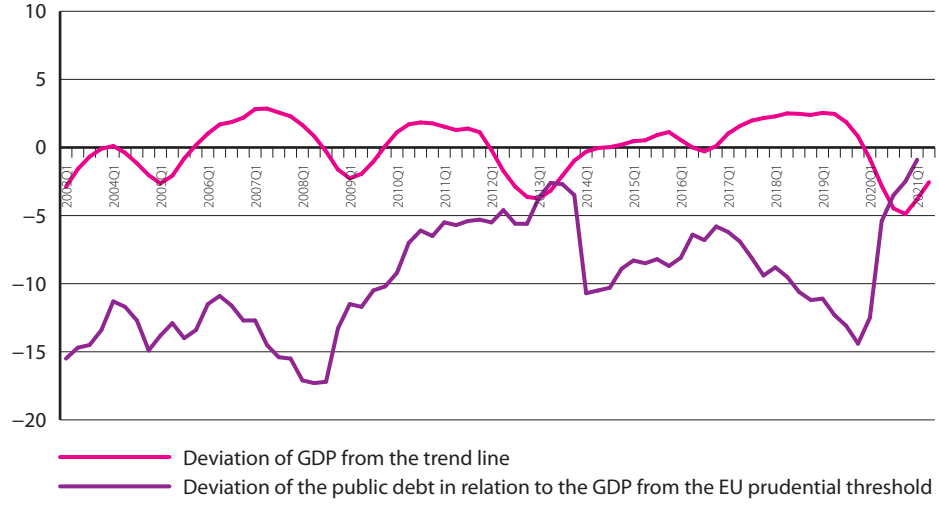
Near the end of the second quarter of 2021 there were increasing fears concerning the time, force, and duration of the fourth wave of COVID-19.

Figure 2. Deviation of the unemployment rate from the trend and deviation of the CPI from the inflation target in Poland between the first quarter of 2003 and the second quarter of 2021



Source: Authors' calculations (the GRETL program) based on data from the Central Statistical Office (GUS)

Figure 3. Deviation of the GDP index from the trend line and deviation of the public debt in relation to the GDP from the EU prudential threshold in Poland between the first quarter of 2003 and the first quarter of 2021



Source: Authors' calculations (the GRETL program) based on data from the Central Statistical Office (GUS) and Eurostat

Figure 2 shows progressive stabilisation of the labour market. Fluctuations in employment rates seemed to be stifled, i.e. they were decreasing. As results from the data on the labour market, there were not large imbalances during the pandemic. This may have been caused by the fact that the support the government provided with the anti-crisis shields was conditional, i.e. it was obligatory to maintain the current level of employment. This fact was confirmed by the results of the report provided by the SGH Warsaw School of Economics and the Economic Forum (2022). Its authors indicated the relative effectiveness of the economic policy, which between 2020 and 2021 secured employment in Poland and other countries of Central and Eastern Europe (Bulgaria, Croatia, the Czech Republic, Estonia, Lithuania, Latvia, Romania, Slovakia, Slovenia, and Hungary)[7]. As regards inflation, the graph shows alternating periods of deviation beyond the allowed fluctuation band approved by the NBP. The NBP set the inflation target at 2.5%, with a possible deviation of 1%. This means that the target was achieved if the inflation ranged between 1.5% and 3.5%. The graph shows price index deviations from the level of 2.5%. If the graph was a straight line, at the 0 level, or if the deviations were ± 1 p.p., this would indicate that the target set by the NBP was accomplished. However, there were alternating periods of stronger deviations beyond the permissible limit. Nevertheless, the amplitude of these deviations was not very high. This means that throughout the whole period under analysis, including the initial period of the pandemic, the inflation level was not higher than that of creeping inflation, which is relatively safe for economic stability. Nonetheless, some economists expressed their concerns due to the relatively high dynamics of prices, while the central bank decided to maintain interest rates at a low level. Simultaneously, the Polish government declared to continue this expansionary policy and supported the economy with the money from both the national and the EU budget. Unfortunately, recent data seem to confirm those concerns because since the beginning of 2021 prices have been growing at a noticeably higher rate[8]. Despite this noticeable growth of prices, the NBP (at the time this article was being written, i.e. in September 2021) did not raise interest rates to restrain the possible further growth of prices. They argued that the main cause of inflation in Poland was the growing prices of energy, which could not be influenced by the policy of the central bank. This graph seems to confirm the conclusions resulting from the course of the short-term Phillips curve, i.e. that an expansionary monetary policy may help the labour market at the expense of moderately higher inflation in the economy. The question when the 'short' term will come to an end remains unanswered. It is also uncertain whether the prolonged maintenance of too

[7] For more information on the assessment of the macroeconomic situation of Poland against other EU member-states, see: (Gorynia & Polowczyk, 2022).

[8] These concerns were also expressed in the report provided by the SGH Warsaw School of Economics and the Economic Forum (2022, p. 22). At the time Poland was among the EU member-states with the highest growth of prices.

expansionary monetary and fiscal policies will not result in stepping or even galloping rather than moderately high inflation, which would have an unfavourable impact on the labour market.

The results of some studies showed that the strongly expansionary fiscal policy of the governments of individual countries could be blamed for the rising inflation during the pandemic. By contrast, since the beginning of the financial and economic crisis the governments of other countries with developed economies have been implementing a soft monetary policy, which did not interfere with the achievement of their inflation targets. Only the exceptionally strong fiscal stimulus during the pandemic caused price spikes (Banerjee et al., 2022; The Economist, 2021).

The last graph helps to assess the indebtedness in Poland's economy, which increased due to the need to combat the consequences of the COVID-19 pandemic. As can be seen, there were deviations of the indebtedness index from the EU prudential threshold, which is equal to 60% of the GDP. If the graph was a straight line at the 0 level, the indebtedness would be equal to 60% of the GDP. Its swings above the 0 level would indicate higher indebtedness than the obligatory 60% threshold, whereas swings below the 0 level would indicate fulfilment of the EU requirements concerning the level of indebtedness. As can be seen, throughout the whole period under analysis Poland did not exceed the 60% threshold of debt in relation to the GDP. In order to facilitate interpretation, the course of the public debt was presented against the course of GDP deviations from the trend line. As can be seen, the positive GDP deviations from the trend, i.e. the periods of accelerated growth, were accompanied by a decrease in indebtedness and vice versa. This tendency was particularly distinct during the period of struggle with the consequences of the global financial and economic crisis (the indebtedness started to increase in the second half of 2008) and during the struggle with COVID-19 (a marked growth of indebtedness at the end of 2019). However, during the latter crisis the indebtedness grew higher, i.e. it was closer to the prudential threshold, than during the former one[9].

The increasing prices and indebtedness in Poland's economy combined with low interest rates seem to be particularly dangerous. The increased indebtedness of the Polish economy caused by combating the consequences of COVID-19 was nothing unique on the international arena. In consequence of the pandemic, fiscal assistance programmes launched by governments caused the global debt to increase by about 15 p.p. in relation to the global GDP between 2019 and 2021 (Banerjee et al., 2022). The high increase in debt raised the concern of some economists, who warned governments of a growing threat to the maintenance of price stability in the future (Summers, 2021). Others reassured them saying that if prices started to increase, the problem could be solved by changing the

[9] For a detailed analysis of the course of indebtedness in Poland during the COVID-19 pandemic see: (Jarosz, 2022).

monetary policy from expansionary to restrictive (Krugman, 2021). These consequences of the COVID-19 pandemic can be fully assessed only in the future, as the fight against its negative economic effects does not seem to have finished (Kołodko, 2021; Kowalski, 2021; Christl et al., 2021).

Conclusions

The stabilisation policy implemented in Poland's economy during the COVID-19 pandemic only partly converged with the actions taken during changes in the phases of the business cycle. The similarity is fragmentary because neither fiscal nor monetary tools directly influence the genesis of economic breakdown, which has exogenous nature. These actions only indirectly determine the sources of decline, as they focus on economic effects and measures to combat them.

The main aim of the stabilisation measures implemented during the economic breakdown was to maintain equilibrium in the labour market. They only indirectly focused on the fair distribution of GDP, i.e. guaranteeing income to consumers, especially those losing their jobs. The state authorities attempted to reduce the dynamics of decline in business activity, but they practically did not take any significant action to restrain the dynamics of inflation, maintain ecological balance, or appropriately develop international relations.

Poland's economy was dominated by fiscal tools related to the budget expenditure policy, whereas the taxation policy was much less significant. As a result, the budget deficit and public debt increased. Unfortunately, the expenditure policy mainly determines the dynamics of consumption, whereas capital expenditures are affected to a much lesser extent. The state bodies practically did not create conducive conditions to the private sector to increase investments by reducing economic, political, and social risks.

During the coronavirus pandemic monetary policy instruments seemed to be less important. The central bank strived to facilitate the lending activity of commercial banks by reducing interest rates, increasing the money supply in the market, and extending the credit guarantee system, but paid relatively less attention to the implementation of the anti-inflation policy. The stabilisation actions taken to support the economy in Poland were incomplete and delayed. The absolute values of the financial support were too low, especially when compared with the support provided in the other EU member-states. This fact was proved by numerous amendments to legal acts.

Braunerhjelm (2022) noted that a traditional stabilisation policy may indeed mitigate fluctuations in business activity, but above all it influences aggregate demand. However, according to the researcher, such measures are insufficient to mitigate the effects of the COVID-19 crisis, which affected both the demand and the supply. Moreover, when the pandemic broke out, the monetary policy in many countries was at or close to a li-

quidity trap. Thus, the burden of stabilisation was shifted to the fiscal policy, but the actions were taken in an ad hoc and often experimental manner.

It is difficult to unambiguously assess the stabilisation instruments applied in Poland during the pandemic. The occurrence of COVID-19 and the economic consequences of this disease should induce revision of the origins of factors destabilising the economic system. New macroeconomic stabilisation goals should be adopted, e.g. a broader approach to the nominal sphere and more flexible tools of the monetary and fiscal policies.

Some authors expressed the opinion that the stabilisation policy should include measures strengthening entrepreneurship, broadening knowledge, the development of companies and their innovativeness. Corporate taxes should be used to increase the resilience of enterprises to crises, increase investment and encourage start-ups. The state should provide support on condition that workers are committed to broaden their knowledge. If such actions are taken at the microeconomic level and supported by the macroeconomic stabilisation policy, they can more effectively level the fluctuations of the business cycle, increase the potential for long-term growth and facilitate the restructuring of the economy, which usually follows a crisis (Braunerhjelm 2022).

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