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# Assessment of Poland's fiscal position in the European Union in the face of crisis conditions

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**Abstract**

Crisis conditions in the 21st century also reached the European Union countries, including Poland, and were reflected in the nominal and real economy. In particular, what suffered most was the fiscal condition of individual countries. To support the state of the economy, the economic authorities often took extraordinary, unconventional actions, which unfortunately resulted and still result in a deterioration of the state of public finances. It is therefore worth referring to this research and empirical problem from the perspective of the current and ongoing economic crisis.

**Keywords**

- fiscal position
- budget deficit
- public debt
- crisis conditions
- European Union

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## Introduction

The 21st century has brought many unexpected phenomena to the global economy, including those originating from the non-economic sphere. In the first decade, a crisis emerged in the banking and financial sphere. At the turn of the second and third decades, another crisis occurred in the medical sphere. In the third decade, yet another crisis arose in the military sphere. The common feature

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of all these types of crises is the fact that they undergo transformation – firstly, objective, and secondly, subjective/spatial. No matter where a crisis originates, over time it has consequences in the socio-economic sphere and constitutes a challenge to the economic policy of state authorities. A crisis also has no geographical boundaries, because with globalisation it spreads on an international scale to most countries around the world.

Crisis conditions in the 21st century also reached the European Union countries, including Poland, and were reflected in the nominal and real economy. In particular, what suffered most was the fiscal condition of individual countries. To support the state of the economy, the economic authorities often took extraordinary, unconventional actions, which unfortunately resulted and still result in a deterioration of the state of public finances. It is therefore worth referring to this research and empirical problem from the perspective of the current and ongoing economic crisis. In this context, the basic aim of the study is to assess the fiscal situation of Poland, especially the level of budget deficit and public debt, against the background of the European Union in the face of crisis conditions in the 21st century. The three crises mentioned above have been taken into account. The research is based on the analysis of data, mainly regarding various measures of the deficit and debt of the public finance sector. In the empirical sphere, a ranking of the EU countries has been made and Poland's place in the ranking has been assessed.

The study consists of two main parts. The first part (point 1) is mainly theoretical and partly methodological in nature. It contains considerations on the essence of contemporary fiscal policy. It depicts how crisis conditions constitute challenges for fiscal authorities, in particular with regard to redistributive stabilisation policy. The second part (points 2 and 3) is mainly empirical in nature. It analyses data on Poland's fiscal situation compared to the EU. In the initial phase of the study, aggregated data and a broader period of 2000–2022 are taken into account (point 2). However, in the next phase of the study (point 3), three crises are directly referred to and individual EU member states are taken into account separately.

The article takes into account the author's theoretical knowledge based on many years of scientific experience, including various studies, conducted both by the author himself as well as other researchers. In turn, statistical data comes mainly from the Eurostat website, as well as the Central Statistical Office and the National Bank of Poland.

## 1. Theoretical and methodological foundations of fiscal phenomena in crisis conditions

The essence of fiscal policy is appropriate intervention in the market (economy) using the main tool, i.e. the budget, including income and expenditure. This intervention takes place in the context of the implementation of appropriate socio-economic functions and goals, both at the central and local government levels (Mortimer-Lee, 2001). The scale of interference depends on the degree of market defects (see micro- and macroeconomic defects of the market), as well as the accepted (formally or informally theory of social justice) (König, 2001). Therefore, there is no universal answer to the question whether a more liberal approach (less active redistributive fiscal policy) or a more social approach (more active redistributive fiscal policy) is better in conducting fiscal policy. One can logically accept a different degree of fiscal interventionism in time and geographical space, as long as it is adapted to the given conditions resulting from the current state of the economy and the efficiency of the market.

In conditions of economic stability, micro- and macroeconomic market defects are relatively small, and therefore fiscal intervention should be smaller. Its measure may be a lower rate of income redistribution, both on the income and expenditure sides (see the methodological notes on measuring the degree of fiscal policy activity below). In such conditions, a desirable phenomenon is a reduction of the budget deficit, or even its balance or surplus. Therefore, the prolonged state of relative economic stability will ultimately result in a reduction of the debt of the public finance sector, or at least its ratio to GDP. Looking from a long-term perspective, in the world's economic history, periods of economic stability favoured the domination of liberal, laissez-faire theories in economics, including A. Smith, D. Ricardo and later M. Friedman (Friedman et al., 2002).

In conditions of economic instability, micro- and macroeconomic market defects are relatively greater, and therefore fiscal intervention should be more active. Its measure may be the growing rate of income redistribution. An extreme situation requiring extraordinary fiscal intervention is a crisis, understood not as one of the phases of the "normal" business cycle, but as an extraordinary breakdown of the economy, manifested, among others, by a decrease in GDP. The economic history of the world, including modern times, shows that the sources of economic crises do not have to be strictly economic in nature, but also military, health, political or social. In such conditions, an increase in the budget deficit is a common phenomenon. A prolonged state of economic instability and/or crisis will result in an increase in the debt of the public finance sector, including its ratio to GDP. Looking from a long-term perspective, in the economic history of the world, periods of economic stability favoured the dominance of social and interventionist theories in economics, such as J. M. Keynes.

From a theoretical point of view, fiscal policy should be flexible in relation to the conditions. Its level of activity (a more social versus liberal attitude) should depend on the state of the economy and the related scope of market defects. Exemplary, countercyclical, stabilising fiscal policy, implemented through an appropriate scale of redistribution, should contribute to achieving the goal of stable and lasting economic growth and social well-being (Süppel, 2003). In practice, however, such a model/exemplary image of economic policy is distorted by political and electoral factors. While expansionary policy is politically justified, restrictive policy is undesirable for the economic authorities seeking re-election. The redistributive policy becomes asymmetric (too expansive), resulting (as a side effect of taking care of macroeconomic goals) in a poor fiscal situation, including the long-term perspective.

Additionally, it should be noted that in the 21st century, in the face of crisis conditions, we often deal with this type of attitude in economic policy. The fiscal authorities must pursue an anti-crisis, active, unconventional budget policy to mitigate the occurrence of micro- and macroeconomic market defects, which became evident, among others, during the banking and financial crisis of the first decade, as well as the COVID-19 pandemic and the military crisis at the turn of the second and third decades of this century. However, these actions should be carried out skilfully and take into account fiscal side effects in the long term. It is recommended that when relatively stable economic conditions occur, there should be a return to anti-cyclical, more restrictive fiscal policy, including limiting the dynamics of the increase in the debt of the public finance sector. The policy cannot be permanently one-directional because it will make the economy "fragile" and susceptible to crisis situations, especially in the face of limited potential opportunities to conduct an expansive anti-crisis policy based on an increase in the deficit and public debt. During "better times", fiscal authorities should build a "protective cushion" in the event of worse economic conditions, including crises (Możdżeń & Zygmuntowski, 2022).

The above remarks show that measures of fiscal activity may include revenues, expenses and budget balance, as well as public debt. For the purposes of international comparisons, it seems better to take into account relative measures of the indicated values in relation to GDP (in %). In this way, we can compare countries of different sizes and with different currencies (Giżyński, 2013).

Bearing in mind that fiscal policy can be conducted at various territorial and geographical levels, both the central government (c.g.) and local government (l.g.) levels should be taken into account when assessing the country's fiscal situation. It is worth analysing the aggregate redistribution of income in relation to the overall public finances (general government, g.g.) (Sokołowski, 2003).

Such briefly presented methodological remarks have been used in the empirical part of the study to assess the fiscal situation in Poland against the background of the European Union in the 21st century, in particular in relation to crisis situations. Three "epicentres" of crises are included in this work, dated by the author to:

- 2009 – the financial crisis,
- 2020 – the COVID-19 pandemic,
- 2022 – the military crisis.

The research took into account mainly the Eurostat data and additionally data from the Central Statistical Office and the National Bank of Poland. The data was imported into the study in June 2023. The study methodology also included a ranking for the EU countries according to the indicated evaluation criteria.

## 2. Outline of Poland's fiscal situation in 2000–2022

The assessment of Poland's fiscal situation in the face of crisis conditions has been made against the background of data for a broader period. Due to the availability of statistical data, the starting date is the year 2000 and the end date is 2022. First of all, it is worth referring to absolute fiscal measures. In this way, it is possible to analyse the dynamics of changes in the fiscal situation. Figures 1 and 2 present data on the value of the deficit and debt of the entire public finance sec-

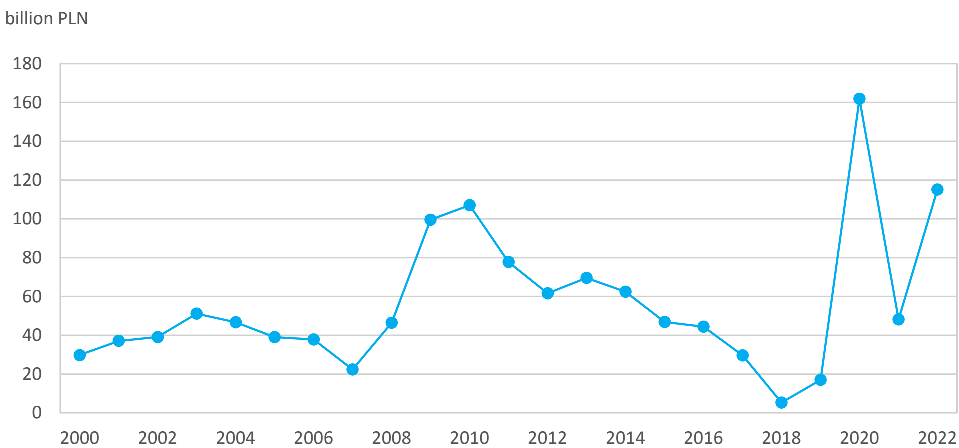


**Figure 1. Budget deficit value of public finance sector in Poland in 2000–2022**

Source: based on: (Eurostat, 2023a).

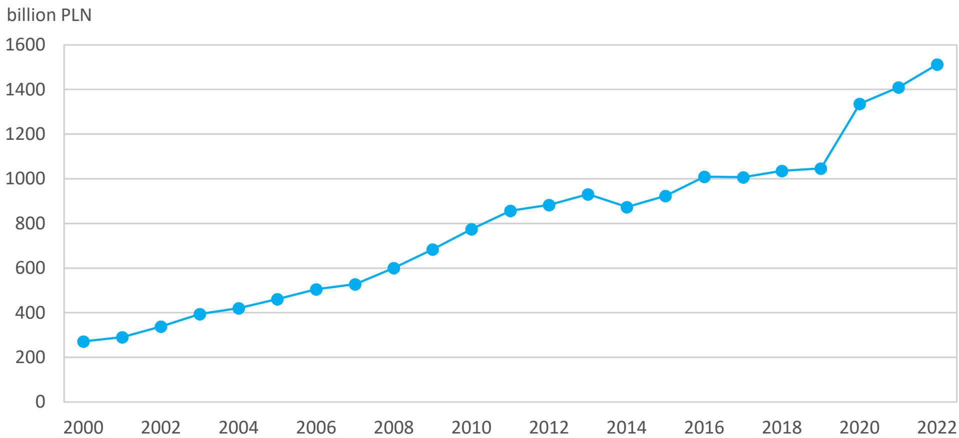


**Figure 2. Debt value of public finance sector in Poland in 2000–2022**

Source: based on: (Eurostat, 2023a).

tor for Poland for the period indicated above in the national currency (Polish zloty, in billions).

Even the basic data allow us to notice several important stages in the fiscal policy in Poland in the 21st century. We may observe a mild downward trend in the budget deficit after Poland's accession to the EU, which was disturbed by the global financial crisis. The deficit increased for three consecutive years starting from 2007. We may then observe a second, more significant downward trend in the deficit, which, in turn, was disturbed by the crisis related to the COVID-19 pandemic. While the deficit increased slightly in 2019, the following year saw its record increase in the 21st century. The year 2021 can be described as a post-COVID-19 "thaw", which, however, was "brutally" (also in the literal sense of the word) disturbed by Russia's invasion of Ukraine and the ensuing war. Currently, the war is the main cause of pressure to deteriorate the fiscal situation in the crisis conditions in Poland.

The dynamics of changes in the budget deficit is reflected in the values of public debt. We may observe its growth every year, except for 2014, when it decreased slightly in absolute terms compared to the previous year. Some debt stabilisation between the financial crisis and the COVID-19 pandemic should be assessed positively. At that time, its growth dynamics was relatively low.

Continuing the fiscal assessment of Poland, the ratio of the examined values (deficit and debt) to GDP (as a measure of the "economic size" of the country) should be used, especially in the context of the European Union. At this point in the study, we will also utilise aggregated data for the entire EU, and not just individual member states. Figures 3 and 4 show the percentage ratio of the deficit and debt of the public finance sector to GDP in Poland and the EU in the years 2000–2022.

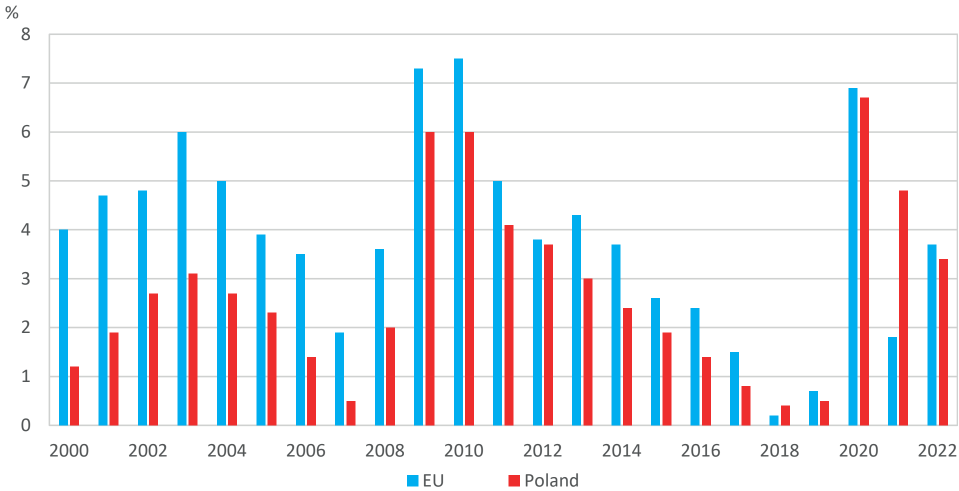


**Figure 3. Ratio of public finance sector budget deficit to GDP in Poland and the European Union in 2000–2022**

Source: based on: (Eurostat, 2023a).

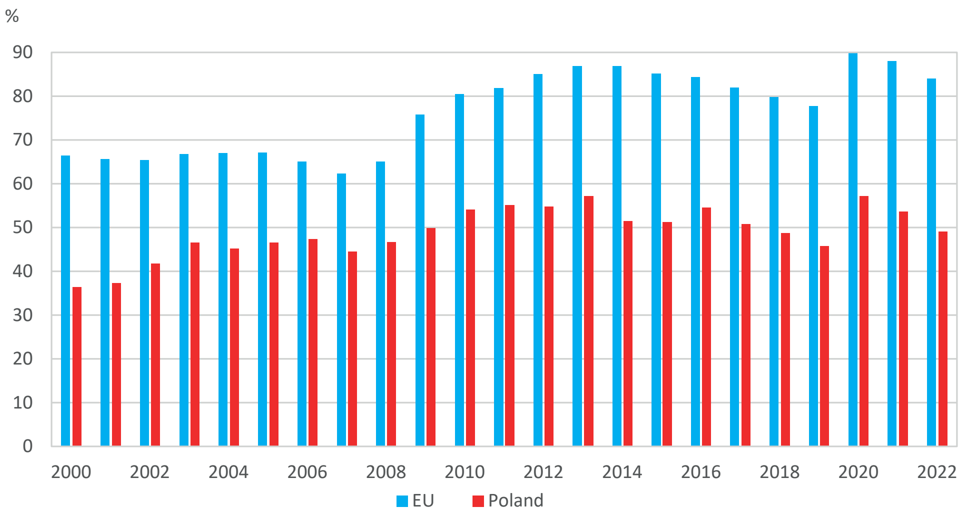


**Figure 4. Ratio of public finance sector debt to GDP in Poland and the European Union in 2000–2022**

Source: based on: (Eurostat, 2023a).

The data presented in this work confirm previous observations about a certain cyclicality of the fiscal situation, in particular about the impact of crisis conditions on the fiscal sphere in Poland and the entire EU in 2009, 2020 and 2022. Looking at both charts, Poland's fiscal situation against the EU background may already be positively assessed at this stage. As regards public debt (Figure 4), the situation is extremely clear. Its ratio to GDP is much lower in Poland in each year under analysis than the average for the entire EU. Additionally, in Poland this measure did not exceed the recommended EU limit of 60% in any year under analysis (including the threshold for accession to the euro area). For the EU, in turn, it exceeded this limit in every year under analysis.

The situation is similar when it comes to the deficit to GDP ratio. In this case, however, the differences between the values for Poland and the average values for the EU are not so large, and in 2018 and 2021 the relationship was reverse. Considering the deficit to GDP ratio, it can be seen that the COVID-19 crisis was most severe in Poland, and the financial crisis was most severe in the EU in general.

Additionally, it should be noted that for the entire research period starting from 2000, the recommended EU limit of 3% of the deficit to GDP ratio was exceeded many times, especially in the face of crisis conditions. On the one hand, it is a manifestation of the poor economic and fiscal situation in these years, and on the other hand, it is a manifestation of the response of the fiscal authorities to economic problems. The final assessment will be possible in the longer term, in conditions of economic stability. We will then see whether the effects of the expansive, anti-crisis fiscal policy will be long-term and whether they will be compensated during good economic times.

## 3. Fiscal ranking of Poland against the background of the European Union based on selected criteria

At the next stage of the fiscal assessment of Poland in the face of crisis conditions, a ranking of the EU countries was made based on appropriate criteria (see points 3.1–3.2). The three previously indicated "epicentres" of crises were taken into account, i.e. financial, health and military, and the place of Poland was indicated against this background. The main results of the study are presented in Tables 1 and 2. To better illustrate the ranking, each point is accompanied by a map showing the geographical distribution of countries, taking into account the criterion under analysis for the current period. It should also be noted that the ranking presented in this study is not considered in detail for all countries included in it. In fact, this will be the subject of separate research conducted by the author. In this work, the attention is focused on Poland and its place in the ranking.

## 3.1. Budget balance

The first ranking criterion is the ratio of the budget balance (usually the deficit) to GDP. Figure 5 shows the current situation in the EU for the appropriate ranges of values of the indicator used (see Legend). The darker the colour, the better the budget situation is. Several countries are currently recording budget surpluses: Denmark, Cyprus, Ireland, Sweden, Croatia and Luxembourg. At the other extreme are the countries with the highest deficit – above 5%: Italy, Hungary, Romania and Malta.

Poland is one of the countries with a higher deficit in relation to GDP. These data are confirmed in the last column of Table 1, where Poland ranks 19th among

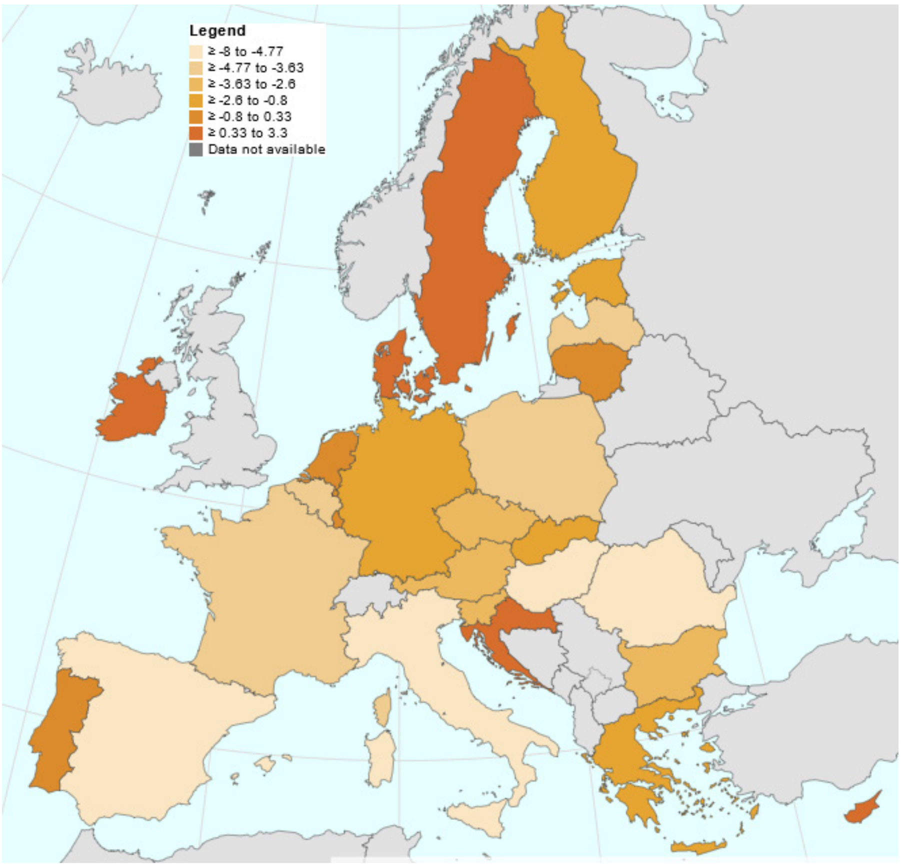


**Figure 5. Map of the European Union – ratio of public finance sector budget deficit to GDP in 2022**

Source: based on: (Eurostat, 2023b).

the EU countries in 2022. It is therefore among the countries that are strongly affected by the military crisis. Poland was in the same place in the 2009 ranking. However, it was three places higher in the case of the COVID-19 crisis in 2020.

Unfortunately, maintaining a relatively good situation in the macroeconomic sphere of the real economy (e.g. relatively high GDP dynamics and low unemploy-

**Table 1. Ranking of EU countries according to the ratio of public finance sector budget deficit to GDP in crisis conditions**

| Country | 2009 – financial crisis | 2020 – health crisis | 2022 – military crisis |
|---|---|---|---|
| Austria | 12 | 20 | 17 |
| Belgium | 13 | 21 | 20 |
| Bulgaria | 8 | 5 | 15 |
| Croatia | 17 | 17 | 5 |
| Cyprus | 15 | 13 | 2 |
| Czech Republic | 14 | 12 | 18 |
| Denmark | 5 | 1 | 1 |
| Estonia | 3 | 10 | 10 |
| Finland | 4 | 11 | 11 |
| France | 18 | 22 | 22 |
| Greece | 27 | 26 | 13 |
| Spain | 25 | 27 | 23 |
| Netherlands | 11 | 4 | 7 |
| Ireland | 26 | 8 | 3 |
| Lithuania | 21 | 15 | 9 |
| Luxemburg | 1 | 3 | 6 |
| Latvia | 22 | 7 | 21 |
| Malta | 6 | 24 | 24 |
| Germany | 7 | 6 | 14 |
| **Poland** | **19** | **16** | **19** |
| Portugal | 24 | 14 | 8 |
| Romania | 23 | 23 | 26 |
| Slovakia | 20 | 9 | 12 |
| Slovenia | 16 | 19 | 16 |
| Sweden | 2 | 2 | 4 |
| Hungary | 9 | 18 | 25 |
| Italy | 10 | 25 | 27 |

Source: based on: (Eurostat, 2023b).

ment rate) results in a not very good current situation in the nominal sphere, including the fiscal sphere examined here, and, more recently, also the monetary sphere. Therefore, a classic theoretical interchangeability between nominal and real variables may be noticed here.

## 3.2. Public debt

The second ranking criterion is the size of public debt in relation to GDP. Figure 6 shows the current situation in the EU for the appropriate ranges of values of the indicator used (see Legend). The darker the colour, the worse the debt situation is.

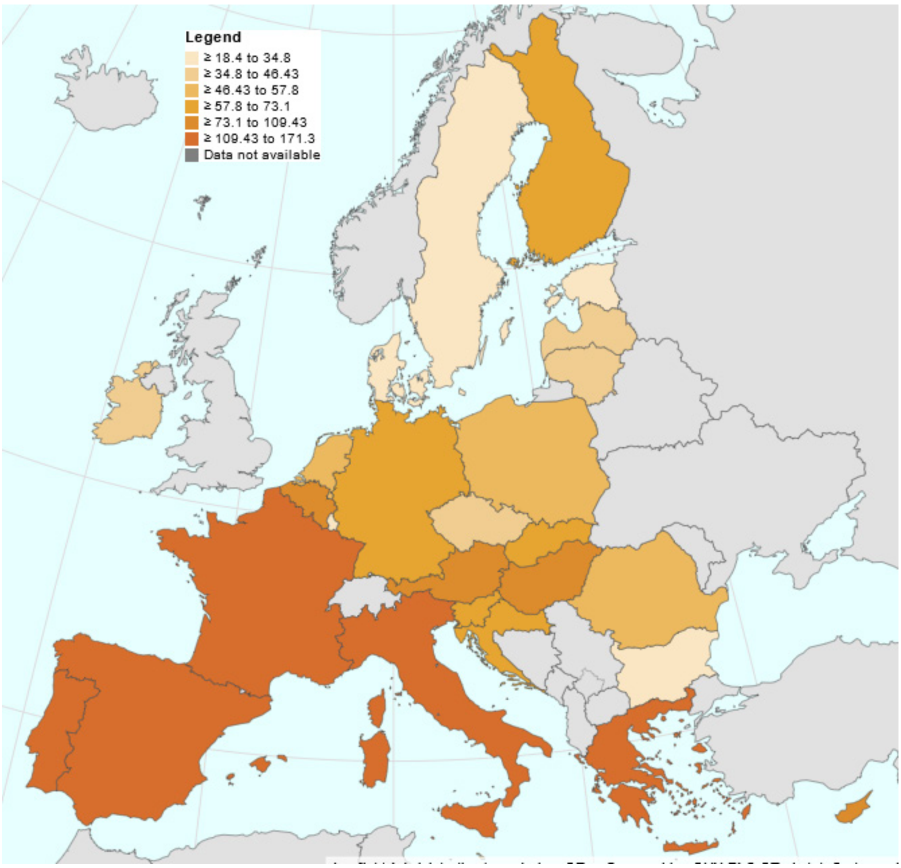


**Figure 6. Map of the European Union – ratio of public finance sector debt to GDP in 2022**

Source: (Eurostat 2023b).

**Table 2. Ranking of EU countries according to the ratio of public finance sector debt to GDP in crisis conditions**

| Country | 2009 – financial crisis | 2020 – health crisis | 2022 – military crisis |
|---|---|---|---|
| Austria | 22 | 19 | 20 |
| Belgium | 25 | 21 | 22 |
| Bulgaria | 2 | 2 | 2 |
| Croatia | 13 | 20 | 16 |
| Cyprus | 16 | 22 | 21 |
| Czech Republic | 6 | 4 | 8 |
| Denmark | 10 | 7 | 4 |
| Estonia | 1 | 1 | 1 |
| Finland | 12 | 16 | 18 |
| France | 23 | 23 | 23 |
| Greece | 27 | 27 | 27 |
| Spain | 15 | 24 | 24 |
| Netherlands | 17 | 11 | 12 |
| Ireland | 18 | 13 | 9 |
| Lithuania | 5 | 8 | 6 |
| Luxemburg | 3 | 3 | 3 |
| Latvia | 9 | 6 | 7 |
| Malta | 19 | 10 | 13 |
| Germany | 20 | 15 | 15 |
| **Poland** | **14** | **12** | **11** |
| Portugal | 24 | 25 | 25 |
| Romania | 4 | 9 | 10 |
| Slovakia | 8 | 14 | 14 |
| Slovenia | 7 | 18 | 17 |
| Sweden | 11 | 5 | 5 |
| Hungary | 21 | 17 | 19 |
| Italy | 26 | 26 | 26 |

Source: own calculations based on (Eurostat 2023b).

Several countries with debt above 100% of GDP deserve a particularly negative assessment in this respect. They are mostly located in southern Europe: Greece, Italy, Portugal, Spain, as well as France and Belgium.

Poland ranks slightly higher in this ranking compared to the previous one. Currently, it is one of the countries with lower debt in relation to GDP. Moreover, the ranking of the EU countries improved in the face of subsequent "epicentres" of crises. However, we still have to wait for the final assessment in this respect. Public debt is a cumulative amount that reflects, with some delay, budget deficits from subsequent periods. In particular, we still have to wait for the fiscal consequences of the military crisis, according to Table 2.

What is optimistic is the fact that the rather expansive anti-crisis fiscal policy of previous years is not yet reflected in the long-term fiscal measure. We can hope that countercyclical policy undertaken at the appropriate time, in post-crisis conditions, can alleviate the long-term effects of the 21st century crises. Additionally, Polish fiscal decision-makers have not yet "hit a wall" in the form of the possibility of greater fiscal expansion in the event of further crisis conditions.

## Conclusions

The 21st century has been marked by turmoil in many spheres of life. The global economy is experiencing crisis situations, the sources of which are often not only economic and financial but also military or health-related. Crisis conditions spill over into many aspects of citizens' lives, causing micro- and macroeconomic market defects, and at the same time forcing intervention in the field of economic policy. In particular, fiscal authorities are forced to take unconventional, often ad hoc and unplanned actions, the effects of which are difficult to predict, especially in the long term.

Three successive crises (financial, health and military) have left their mark on the fiscal situation of the European Union. It has manifested itself in an increase in the size of deficits and debts of the public finance sector. Yet, some countries seem to have managed better (e.g. Scandinavian countries such as Sweden and Denmark) and some worse (e.g. southern European countries including Greece, Italy, Spain and Portugal). Nonetheless, it is probably too early to assess the final effects of the crisis conditions, especially regarding the military crisis. Given the experience of recent years, it would be worth considering formulating an emergency plan in the event of subsequent crises, and additionally rationalising the post-crisis policy. It should be countercyclical, i.e. it should also include a restrictive variant during good economic times.

Poland is one of the countries which experience subsequent crises (primarily financial) relatively mildly from the point of view of the macroeconomic results, including those relating to the real economy. In 2009, it was the only country with positive dynamics of changes in real GDP, and since then it has also been characterised by a low unemployment rate, not recorded since the systemic transformation at the turn of the 1980s and 1990s. In fact, Poland recorded a decline in real GDP only in 2020, with the following years bringing GDP growth. It has been shown in this work that achieving good macroeconomic parameters has side effects in the nominal sphere, including the fiscal one. Expansive budget policy at both the central and local government levels leads to an increase in budget deficits and debt. However, as of today the situation seems to be under control, even thought it is difficult to assess the final, long-term effects of crises, including the ongoing military crisis. It is still advisable to rationalise fiscal policy through, among other things, increasing its flexibility and striving to make it more countercyclical and stabilising in nature (and not ad hoc and pro-election). Of course, changes in this area must be spread over time and take into account, among others, such problems as the rigidity of budget expenditures, the crowding out effect or the Laffer curve.

## References

Eurostat (2023a). *Government deficit/surplus, debt and associated data [GOV_10DD_EDPT1]*. https://ec.europa.eu/eurostat/databrowser/product/page/GOV_10DD_EDPT1

Eurostat (2023b). *Government revenue, expenditure and main aggregates.* https://ec.europa.eu/eurostat/databrowser/product/page/GOV_10A_MAIN

Friedman, B. L., Solow, R. M. & Taylor J. B. (2002). *Inflacja, bezrobocie a polityka monetarna*. CeDeWu.

Giżyński, J. (2013). *Polityka fiskalna w strefie euro.* CeDeWu.

König, R. (2001). Czy kryteria z Maastricht powinny zostać zmodyfikowane? *Bank i Kredyt*, 11–12, 117–125.

Mortimer-Lee, P. (2001). *Czy Euroland może funkcjonować przy jednej stopie procentowej?* In: P. Temperton (Ed.), *Euro. Wspólna waluta*. Wydawnictwo Felberg SJA.

Możdżeń, M., & Zygmuntowski, J. Z. (Eds.). (2022). *Polityka fiskalna dla regeneracji: reguły w finansach publicznych na czasy kryzysu*. Wydawnictwo Naukowe Scholar.

Sokołowski, J. (Ed.). (2003). *Polityka fiskalna, monetarna i inne formy polityki ekonomicznej (wybrane zagadnienia)*. Wydawnictwo Akademii Ekonomicznej im. Oskara Langego we Wrocławiu.

Süppel, R. (2003). *Comparing economic dynamics in the EU and CEE accession countries*. (EBC Working Paper, No. 267). Retrieved from https://www.econstor.eu/bitstream/10419/152701/1/ecbwp0267.pdf