




# The impact of the COVID-19 crisis on the fiscal positions in the euro area countries

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## Abstract

**Motivation:** The selection of the topic stems from the threat of a debt crisis in the euro area, as a result of the COVID-19 pandemic. The main research hypothesis has been formulated as follows: the COVID-19 pandemic has caused a significant deterioration of the fiscal situation in all euro area countries, which has led to a debt crisis within the zone.

**Aim:** The main purpose of the article is to analyze and assess the impact of the COVID-19 crisis on the fiscal positions of the euro area countries, primarily from the perspective of the fiscal rules included in the Maastricht Treaty and the Stability and Growth Pact.

**Results:** The COVID-19 pandemic led to a sharp economic collapse in the eurozone in 2020. Consequently, fiscal rules were suspended, allowing the member countries to undertake significant fiscal interventions to mitigate the effects of the crisis. The pandemic thus forced the authorities in these countries to employ Keynesian methods to sustain the economy. As a result of the severe recession and the temporary emergency measures taken, public finances in the member states suffered significantly. The huge increase in the public debt ratios of some of these countries did not trigger a new debt crisis, however. The new system of economic governance, which enabled the establishment and use of innovative stabilization instruments at supranational level, proved to be of great support here. The main research hypothesis has not been therefore entirely confirmed. The mutually reinforcing effects of the eurozone's fiscal policy and monetary policy were crucial for mitigating the effects of the COVID-19 crisis in its countries and supporting the economic recovery thereof in 2021–2022. The rapid development of the crisis has revealed the diffi-



culties in the application of fiscal policy assessment indicators. Changes in the surveillance should lead to improved regulatory clarity and reduced regulatory complexity.

*Keywords:* euro area; fiscal supervision; Coronavirus crisis  
*JEL:* E62; F45; H5; H6

## 1. Introduction

The outbreak of the COVID-19 pandemic triggered an extraordinary global public health crisis. As a consequence, global economic activity, including in the euro area (EA), saw a sharp decline in 2020. The EA member countries were forced to take appropriate anti-crisis measures. First and foremost, they had to face the threat to the health of their citizens, support businesses and the employed, as well as provide general support to their economies (European Commission, 2021d, p. 10). It should be noted that the scale of the fiscal action taken in the member countries in response to the pandemic varied. The speed of this response and the extent of support from individual governments in these countries, however, proved their increased capacity for coordinated action in response to the resulting crisis. These actions were possible owing to, *inter alia*, the activation of the general escape clause contained in the reformed Stability and Growth Pact (the SGP) (ECB, 2021, p. 17).

As a result of the severe recession and extraordinary fiscal policy actions, public finances in the Economic and Monetary Union<sup>1</sup> (EMU) countries have suffered significantly. Fiscal divergences between these countries have also increased. Budget deficit and public debt ratios rose sharply in all member states, with the nominal deficit in the euro area as a whole increasing by 6.4 pp in 2020, *i.e.* to 7% of GDP, and the total debt ratio by as much as 13.3 pp, *i.e.* to 99% of GDP (European Commission, 2021b, p. 5; 2022e, pp. 183, 186). The risk arose that this increase could trigger a new debt crisis in the eurozone, especially since the economies in its high-risk peripheral countries were hit much harder by the COVID-19 crisis than the economies of the low-risk countries (De Grauwe, 2022, p. 274).

Accordingly, the main research hypothesis of the article has been defined as follows: the COVID-19 pandemic has caused a significant deterioration of the fiscal situation in all euro area countries, which has led to a debt crisis within the zone. The article is divided into six parts, with the first part constituting the introduction, the second entailing a description of the research methods used, and the sixth presenting the main conclusions derived from the research. The third part, in turn, entails a review of the literature on theories of economic stabilization via fiscal tools. This enabled assessment of the legitimacy of the fiscal interventions taken by the eurozone countries as a result of the economic crisis caused by the COVID-19 pandemic. The fourth part outlines the fiscal rules aimed at enforcing fiscal discipline in these countries and indicates the legal

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<sup>1</sup> Economic and Monetary Union is the formal name of the euro area.

basis on which the above rules were suspended as a result of the crisis. The fifth, empirical, part, divided into three paragraphs, analyzes and evaluates the impact of the COVID-19 crisis on the fiscal positions of the eurozone countries, which is the main purpose of the article. This part involved the use of data derived from the European Commission's autumn forecast, published in November 2022. This data enabled analysis of the budget deficit and public debt ratios in the EA countries, from the perspective of the reference values contained in the Maastricht Treaty<sup>2</sup> (MT) and detailed by the provisions of the Stability and Growth Pact, as well as identification of the main factors, including the magnitude of the temporary emergency measures taken by the member countries as a result of the pandemic, which affected the size of their fiscal positions in 2020–2022. The fifth part ends with proposed detailed changes simplifying fiscal supervision in the euro area.

## 2. Methods

Implementation of the main article objective employed the method of study and critical analysis of the literature on theories of economic stabilization via fiscal tools. This enabled assessment of the legitimacy of the fiscal interventions undertaken by the euro area countries following the COVID-19 crisis. Another method used entailed analysis of the legal regulations, i.e. the fiscal rules aimed at disciplining the fiscal policy in the member states, at supranational level. This made allowed for identification of the legal basis that enabling temporary deviation from these rules, as a result of the crisis.

The objective macroeconomic situation, understood here as a significant decline in real GDP dynamics, due to the COVID-19 pandemic, should be considered one of the main reasons for the occurrence of very high fiscal imbalances in the EA countries in 2020. The link between the GDP ratio and the level of budget deficit is indisputable, if only through the mechanism of fiscal automatic economic stabilizers (see e.g. Tomkiewicz, 2011, p. 99). As such, analysis of the data on the real GDP index dynamics in the member states, including the indicators determining the fiscal situation in these countries was employed. The situation was analyzed from the perspective of the criteria contained in the Maastricht Treaty. As already mentioned, the Treaty was supplemented with the *Protocol on the Excessive Deficit Procedure*, which included reference values characterizing the fiscal imbalances in the euro area countries as excessive, i.e. a budget deficit ratio exceeding 3% of GDP and a public debt ratio exceeding 60% of GDP. Owing to this analysis, it was possible to indicate which member states exceeded these values during the pandemic period. Additional analysis was carried out of the rate of temporary emergency measures directly affecting

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<sup>2</sup> Also known as the Treaty of Lisbon, a city where it was signed in 2007. The Treaty reiterated the provisions on the fiscal policy conduct in the Economic and Monetary Union. It entered into force at the end of 2009.

the deficit and debt ratios in these countries, which were undertaken to limit the effects of COVID-19.

To assess the short-term impact of the discretionary fiscal policy on the economies of the EA countries, defined as national fiscal support, which has been an effective response to the economic crisis caused by the COVID-19 pandemic, the index of change in primary balance was used in comparison with its pre-crisis level of 2019. This indicator includes discretionary fiscal policy measures and automatic economic stabilizers (see Licchetta et al., 2022, p. 12). It should be remembered, however, that under normal economic conditions, the change in structural balance indicator is used to measure the amount of fiscal support in the euro area countries. This indicator plays a key role in the assessment of the fiscal policy in the countries of the zone. Given the exceptional circumstances caused by the pandemic, the significant transfers from the European Union budget and the great uncertainty regarding the size of the output gap, this indicator is not considered appropriate for assessing the size of domestic fiscal support, however (European Commission, 2021a, pp. 14–15).

### 3. Economy stabilization via fiscal tools: theoretical overview

Economic stabilization by state governments stirs up a lot of controversy. When developed economies experience recession or deep downturns, the discussion regarding the effectiveness of fiscal tools in economic growth stimulation revives anew (Żabiński, 2020, p. 67). The manner in which states counteract the causes of fluctuations, the choice of individual stabilization policy instruments, as well as the impact thereof on the causal and temporal series making up the cyclical process, are interpreted variably. The interpretation depends on the theoretical concept adopted (Barczyk & Lubiński, 2009, p. 33). Numerous paths and concepts of stabilization policy implementation can be found in contemporary literature<sup>3</sup>, the most dominant of which are presented in the following overview.

Keynes (1936) has provided the theoretical basis for state interventionism (Owsiak, 2017, p. 74). According to the so-called Keynesian theory of economics, fiscal policy primarily serves macroeconomic stabilization (Wildow-

<sup>3</sup> Contemporary Western economic thought distinguishes between main currents. These currents of thought are referred to differently in the United States and in Western Europe, which causes difficulties in adequate definition thereof. In the States, the first current, referred to as conservatism, derives from neoclassicists and so-called liberals, while the second, referred to as liberal, was developed by J.M. Keynes. In Europe the two currents are referred to as neoclassicism and neo-Keynesianism. Anti-syntheses of these currents, i.e. neo-institutionalism — a critical anti-synthesis, especially of neoclassicism, and neo-liberalism — a critical anti-synthesis of Keynesianism mainly, can be distinguished as well. It should be noted that rapprochement has been observed in the two currents on many important issues. Despite this, no clear dividing line can be drawn between the different schools of thought. Classification of the economists' names into given currents, i.e. streams and schools of thought, poses difficulties (Stachowiak & Stachowiak, 2015, p. 44).

icz-Szumarska, 2021, p. 118). With the Great Depression (1929–1933), state non-involvement in the economy was challenged and rejected definitively. It was concluded at the time that the spontaneous market mechanism leads to crises, while the course of the processes in the economy is cyclical. It was therefore necessary to interfere with the mechanism, which required state intervention. The widespread nature of the negative phenomena during the Great Depression forced a revision of the views expressed by classical economics representatives (e.g. A. Smith) regarding the state neutrality towards economy. It also strengthened the theses put forward by German financiers (e.g. A. Wagner) about the imperative of assuming certain responsibilities towards the citizens on the part of the state (Owsiak, 2017, p. 74).

According to Keynes, the fiscal policy tools used should be counter-cyclical in nature, meaning, they should work against the direction of the economic cycle. In other words, when economies are in recession, governments are advised to increase spending or reduce the tax burden. This is because such actions have positive impact on total consumer spending and, as a result, increase aggregate demand, real income and employment levels. When economies are overheating and a threat of inflation emerges, in turn, governments should seek to reduce spending and increase taxes. The amount of fiscal intervention depends on the size of the recession, while the effectiveness of this intervention depends on the size of the fiscal multiplier<sup>4</sup>, i.e. the cumulative production output resulting from the increase in government spending, which is supposed to limit the effects of the crisis. What is more, according to Keynes' theory, when an economy is in crisis, changes in real output amplify the multiplier effects, which translates into an even greater increase in national income. Although an expansionary fiscal policy results in a budget deficit and public debt, these phenomena are not viewed negatively under the conditions of unemployment in the economy and when the value of savings is higher than investments (Wildowicz-Szumarska, 2021, pp. 118–119; see also Makin, 2018, pp. 7–10). Keynes' theory has been developed by many economists, e.g. A.H. Hansen, A. Lerner, J.M. Buchanan or J.A. Schumpeter (for more, see Owsiak, 2017, pp. 76–82), hence they are often referred to as neo-Keynesians. Their views are reflected in the Neo-Keynesian<sup>5</sup> model, a brief description of which, with an emphasis on the effects of expansionary fiscal policy, is presented in Table 1.

In the 1970s, the effectiveness of state interventionism, through the use of fiscal policy tools, decreased significantly. At the time, stagnation emerged

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<sup>4</sup> The essence of the public spending multiplier involves an increase in the monetary unit of public spending, accompanied by a faster increase in national income. Such a situation not only leads to a “recovery” of the expenses incurred, through an increase in tax revenues, but to an increase in total public income as well. This multiplier is thus an important tool for economy stimulation and business cycle fluctuation smoothing (Owsiak, 2017, p. 498).

<sup>5</sup> More information on the divergence between the Keynesian and neo-Keynesian approaches can be found in the work of e.g. Bludnik (2004, pp. 129–142).

in the economies of the leading Western countries, which meant, *inter alia*, minimal economic growth rate, rising unemployment and high inflation. Under such conditions, traditional methods of state interventionism no longer brought the effects desired (Owsiak, 2017, pp. 82–83). This was justified by the deep structural changes in these economies, as a result of the two “oil shocks” (see Schlosser, 2019, pp. 26–27). The economic difficulties of the capitalist countries became the basis for the downgrading of the Keynesian and neo-Keynesian theories. State authorities were accused of causing inflation by creating budget deficits, increasing public debt (Owsiak, 2017, pp. 82–83), and running loose monetary policy (Makin, 2018, p. 2).

Based on critical analyses of Keynesian economics and the use of the theoretical underpinnings of the classical theory of production, distribution, and, above all, economic growth, new assumptions and hypotheses were specified, which were to overcome the inadequacies of the Keynesian theory. These contributions gave rise to new descriptions of economic growth processes. They also contributed to the emergence of monetarism, among others (Barczyk & Lubiński, 2009, p. 42). Proponents of this doctrine (Owsiak, 2017, p. 83), which was viewed as a counter-revolution to Keynesianism (Moździerz, 2009, pp. 39–40), saw the regulation of money supply, mainly through such indirect instruments as interest rates, as a key issue in this regard. Keynesianism was subsequently discredited in the 1980s and 1990s by monetarist and new classical economists. This way the burden of state intervention in the economy was shifted from fiscal instruments to monetary instruments (Makin, 2018, p. 2; Owsiak, 2017, p. 83).

M. Friedman, considered the founder of contemporary monetarism, formulated dissenting views, compared to Keynes, on the effectiveness of a stabilizing fiscal policy (e.g. Friedman & Heller, 1969). According to Friedman and his supporters, the economy is inherently stable. Its potential instability stems from fluctuations in the money supply, which usually arise as a result of monetary authorities’ intervention. In other words, the most common source of economy crises lies in the decline in the quantity of money and the number of loans. Periods of boom and inflation, in turn, are associated with excessive increases in money supply. For this reason, proponents of monetarism conclude that only monetary policy decisions can support the economy, since only this policy has the natural capacity for self-regulation. Any attempts to reduce the demand shocks through countercyclical fiscal policy is considered by monetarists to be ineffective, in contrast (Wildowicz-Szumarska, 2021, pp. 118–119). Friedman disagreed with Keynes’ view that a budget deficit can have a stimulative effect on the economy. He believed that the positive effect of the deficit on spending, if any, is offset by the negative effect of financing the deficit. The monetarist thus linked the ineffectiveness of fiscal policy in the short term to the threat of a crowding out effect<sup>6</sup> (for more, see Makin, 2018, pp. 31–44). The mone-

<sup>6</sup> The crowding out effect refers to a theory that the government, financing the budget spending from the budget deficit (treasury bonds), reduces the private sector’s borrow-

tarist theory is categorized as part of the neoclassical current (Moździerz, 2009, pp. 37, 41). A brief description of the effects of expansionary fiscal policy, from the perspective of the neoclassical model, is presented in Table 1.

Although the theory of monetarism significantly weakened the belief in the validity of active fiscal policy, its founders only negated the sense of using fiscal tools to regain economic equilibrium. This, however, was enough of a reasoning to give rise to the concept of a new fiscal conservatism, against this background. It pointed, *inter alia*, to the need for an absolutely balanced budget, except not during the business cycle, but in the fiscal year. It also called for a reduction in the scale of GDP redistribution, through such budget, which meant a return to the concept of a state budget limited to the minimum. The idea was to reduce budget expenditures, both those supporting the economy as well as the social outlays (Próchnicki, 2012, pp. 175–176).

The tenets of the new fiscal conservatism, along with the monetarist approach to the economy, are not just purely theoretical concepts (Owsiak, 2017, p. 84). The crisis of Keynesian economics led to a return to the tenets of neoclassical economics (Owsiak, 2016, p. 125) and related doctrines. The neoclassical current encompasses, in addition to monetarism, supply-side economics (for more, see Moździerz, 2009, pp. 37–38), *inter alia*. In the 1980s, the recommendations arising from these theories were applied quite intensively by the governments of various Western countries, including Great Britain and the United States (Owsiak, 2017, p. 84), which was expressed in specific economic policies known as Thatcherism and Reaganomics. The main recommendations in these types of policies included such measures as tax and public spending cuts, for example, or reduction of the state fiscal tools, in favor of monetary tools (Owsiak, 2016, pp. 125–126). The application of these tools, however, did not yield the expected results (for more, see Owsiak, 2017, pp. 84–87).

The Keynesian theory and monetarist theory can be intermediated by the view of Barro (1974), an American economist, who presented a formalized version of the Ricardian equivalence derived from the English economist D. Ricardo, *i.e.* Barro–Ricardo equivalence (Piotrowska-Marczak, 2011, p. 60; Rosati, 2017, pp. 282, 287), also called the Ricardian equivalence theorem, and referred to in the literature as the hypothesis of budget deficit and public debt neutrality (Moździerz, 2009, p. 27). Barro (1974) argued that deficit can be equated with deferred tax burdens. He additionally assumed that deficit does not affect (is neutral) the course of economic processes (Piotrowska-Marczak, 2011, p. 60). Under such conditions, fiscal policy becomes ineffective, since global demand remains unchanged (see Makin, 2018, p. 40). The public spending multiplier is therefore zero (see Table 1). Studies by, among others, Rosati (2017, pp. 282–287) show that the Ricardian effect occurs to a very limited extent and is not statistically significant. If it were, however, a full negative correlation between

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ing capacity (for investment). This, in turn, affects the long-term dynamics of economic growth (Próchnicki, 2012, p. 177).

public and private savings would occur, i.e. an increase in the budget deficit would be accompanied by an increase in private savings.

Clearly, there is a dispute among economists regarding the effectiveness of fiscal policy as an instrument stimulating economic growth. It should be remembered that the public spending multiplier is subject to many constraints and increased fiscal spending does not always yield the effect desired (see Table 1). While representatives of Keynesianism and Monetarism do agree, despite the different underlying reasons, on the issue of tax cuts as a desirable tool for stimulating the economy, they assert significantly different views on the effects of increased public spending (Rosati, 2017, pp. 288–289).

It is worth adding that the issue of public debt, involving the so-called mixed model with threshold effects (Table 1), plays an important role in the views of neoclassical economists, who bring attention to the fact that the value of debt increases when governments cover increased spending with new loans. They also argue that an increase in this ratio to a certain (threshold) level will not reduce current consumption, while fiscal policy decisions under these conditions lead to typical Keynesian effects. When a certain level (threshold) of government debt is exceeded, however, market players begin to make decisions in a Ricardian manner. This means a decrease in consumption, which consequently leads to a decrease in the rate of economic growth (see Sutherland, 1997, pp. 147–162). Under such conditions, expansionary fiscal policy yields mainly non-Keynesian effects, i.e. it does not accelerate economic growth and may even lead to a decline in demand (Rosati, 2017, pp. 289–290, 323).

The role of fiscal policy in the smoothing of cyclical fluctuations has evolved over time. When the European Monetary Union was starting to take hold in the late 1990s, many economists at the time would have agreed with the view that the business cycle should be stabilized by means of monetary policy instruments and automatic economic stabilizers mainly<sup>7</sup>. Those running the fiscal policy should, in turn, focus on redistributive measures and the long-term effectiveness thereof (see Blinder, 2006; Furman, 2016; Krugman, 2005). The strength and length of the economic and financial crisis that took place in the euro area at the end of the first decade of the 21st century, the risk of hysteresis<sup>8</sup> effects or the near-zero interest rate policies, however, have caused both academics (e.g. Christiano et al., 2011; DeLong & Summers, 2012) and policy-makers to take a renewed interest in the use of discretionary fiscal policy tools (Caprioli et al., 2017, p. 5).

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<sup>7</sup> Automatic economic stabilizers are elements of the budget system. They act independently to increase or decrease demand alongside the changes in the economy, in accordance with the rules of taxation and budget spending, including income taxes, VAT or social transfers (Mucha-Leszko & Kąkol, 2010, p. 87).

<sup>8</sup> The word “hysteresis”, derived from Greek, translates as “lagging behind”. In economic science, “hysteresis” is mainly associated with the issues of unemployment. Here it means that unemployment will continue at the level formed under the influence of certain (external) factors even when they come to an end (Arendt, 2006, p. 26).



The importance of fiscal policy in stabilizing the economy cannot be questioned. Nevertheless, it should be remembered that the effectiveness of this policy depends on the short-term value of the fiscal multiplier (see Table 1). Researchers have estimated multipliers using different econometric techniques with quite mixed results, with most yielding positive effects in the short run (Makin, 2018, p. 9). The multiplier value determines the strength of changes in the main economic quantities, i.e. consumption, investment, employment or GDP, under the fiscal policy instruments used. Its value, in turn, depends on the structural and cyclical characteristics of a given economy (for more, see Herda, 2017, pp. 38–39). Cyclical factors, which are temporary in nature, affect the size of the multipliers, the level of which is much higher during economic downturns versus booms. Moreover, the multipliers can take on higher values when interest rates are close to zero and there are no conditions for an expansionary monetary policy (Cavallo et al., 2018, p. 16). Countercyclical fiscal policy is then more effective (Bonam et. al., 2022, pp. 149–185). This was the case in the euro area at the outset of the COVID-19 crisis, *inter alia*, which enforced the launch of fiscal interventions in the member countries (Wildowicz-Szumarska, 2021, p. 120). The interventions themselves should meet a number of conditions, though. They should, above all, be undertaken on time, of sufficient magnitude, long-lasting, diversified, contingent, globally coordinated, and non-threatening to fiscal stability (see Mackiewicz, 2010, pp. 44–45). If these conditions are not taken into account, the fiscal measures taken may be ineffective. What is more, they can cause numerous negative side effects, which would undermine the sense of the intervention taken (see Mackiewicz, 2010, p. 44). It is worth remembering that with the creation of the EA, its member countries gave up the tools of national monetary and exchange rate policy. These tools served, among other things, as a response to specific shocks to these countries' economies. Fiscal interventions thus became the only tool available for macroeconomic stabilization at national level (Gootjes & de Haan, 2022, p. 1). Due to the symmetric nature of the COVID-19 shock and limited fiscal space in several EA countries, a fiscal response at the supranational level was desirable as well (for more, see e.g. van den Noord & Codogno, 2020).

#### 4. Fiscal discipline in the euro area vs economic stabilization

Before discussing the impact of the COVID-19 crisis on the fiscal positions in the euro area countries, it is worth referring to fiscal restrictions, i.e. the fiscal rules which these countries are subject to. The temporary suspension of the fiscal rules in effect at supranational level is part of the crisis management measures.

With the creation of the European Monetary Union in 1999, restrictions were imposed on its member countries, in the form of fiscal rules. These measures concerned limits on budget deficits and public debt and were mainly intended to protect the common euro currency against the risk of the member countries' pursuit of overly expansive fiscal policies, under the conditions

of budgetary self-reliance (Rosati, 2017, p. 297). The originators of the union were aware of the fact that a common currency must be supported by stronger fiscal discipline in its member countries, in order to be strong and credible (Giżyński, 2013, p. 46). The fiscal rules have been included in the 1992 Maastricht Treaty and the 1997 Stability and Growth Pact. The Treaty set out, inter alia, the conditions, or convergence criteria, for joining the monetary union (Ferreiro & Serrano, 2021, p. 216). These criteria reflected the tenets of fiscal conservatism (Owsiak, 2017, p. 87), and included the ban on excessive budget deficits. The *Protocol on the Excessive Deficit Procedure* included in the MT set benchmarks characterizing fiscal imbalance as excessive, i.e. a budget deficit exceeding 3% of GDP and public debt exceeding 60% of GDP. While the deficit and debt rules were underpinned by theoretical justification (see e.g. Giżyński & Wierzba, 2015, pp. 14–15), the reference values were set arbitrarily (Ferreiro & Serrano, 2021, p. 216).

The convergence criteria have been supplemented by the provisions of the SGP, which are most relevant from the perspective of fiscal discipline in the euro area. They constitute an operational development and detailing of the relevant Treaty provisions. In other words, the SGP entails a set of fiscal rules, including the procedures to ensure the enforcement thereof in the member countries. So far, the SGP was reformed three times — in 2005, 2011 (the “Six-Pack”) and 2013 (the “Two-Pack”). The first reform had flexibilized and loosened the fiscal rigor (Giżyński, 2019, pp. 23–24), while the next two tightened it (see Owsiak, 2017, p. 87).

The “Six-Pack” provisions introduced several flexibility clauses, including a general escape clause, which allows greater budgetary flexibility in the EA countries, to help them cope with significant economic downturns. This flexibility is manifested, inter alia, through a temporary deviation from a given member country’s fiscal adjustment path. Under normal conditions, this adjustment is intended to allow the EA countries to achieve the country-specific medium-term objective (MTO) (European Commission, 2021d, p. 1). MTO represents a structural (general government) budget position, net of one-off, and other temporary measures. The lessons learned from the global financial crisis (2007–2009) prompted the EMU authorities to adopt flexibilizing provisions, in the event of a major crisis in the future (Ferreiro & Serrano, 2021, pp. 216–217). Recent literature also indicates that flexibility in fiscal rules is desirable, from the perspective of macroeconomic stabilization (Gootjes & de Haan, 2022, p. 4; Guerguil et al., 2017).

## 5. Analysis of fiscal positions in the euro area countries during the COVID-19 pandemic

### 5.1. Fiscal positions vs outbreak of the pandemic

By cause of the severe economic downturn, consequent to the COVID-19 pandemic, the representatives of the European Commission (EC) decided to activate, on March 20, 2020, the general escape clause included in the provisions of the modified Stability and Growth Pact. The clause allows the euro area countries to temporarily deviate from fiscal rules (European Commission, 2021d, p. 1). In July 2020, the Council of the European Union additionally recommended that member countries should use all necessary measures, in 2020–2021, to effectively combat the pandemic. These measures were also to ensure the functioning of the economies in these countries, in order to later support the recovery thereof (for more, see European Commission, 2021d, pp. 1–2; 2022h, p. 1). Due to the activation of the general escape clause, the fiscal recommendations took on a qualitative nature and did not include numerical budget requirements (European Commission, 2021a, p. 4).

In 2020, all euro area countries, i.e. Belgium (BE), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Austria (AT), Portugal (PT), Slovakia (SK), Slovenia (SI) and Finland (FI), far exceeded the Treaty reference budget deficit value of 3% of GDP (Table 2). The updated deficit ratio, calculated for the euro area as a whole, increased by as much as 6.4 pp, i.e. to 7.0% of GDP. The overshooting of the reference value was of an exceptional nature, however, as it resulted, as already emphasized, from the severe economic downturn. The real GDP in the euro area as a whole declined (European Commission, 2021d, p. 4) by 6.1% of GDP at the time (see Table 3). What is more, the reason for the sharp rise in the member countries' deficit ratios entailed the discretionary measures<sup>9</sup> undertaken by those countries, which primarily involved temporary emergency measures (see Table 4), to combat the COVID-19 pandemic. The discretionary measures taken, estimated at around 4% of GDP, added to the already significant automatic economic

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<sup>9</sup> Most of the 2020 discretionary measures, directly affecting the euro area countries' budgets, were based on additional spending (3.3% of GDP), known as temporary emergency measures. These amounts included the emergency measures for health care (0.7% of GDP). In addition to health spending, additional funds (2.6% of GDP) were allocated to, inter alia, compensate specific industries for the loss of income or reduced working hours schemes. Tax benefits were, meanwhile, estimated at an additional 0.5% of GDP (see European Commission, 2021c, pp. 5, 16). The extraordinary measures were effective in protecting jobs in the EA countries in 2020. Despite the economic slump at the time, the unemployment rate in the euro area as a whole rose slightly, by 0.4 pp, to 8% of GDP (European Commission, 2021c, p. 5; 2022e, p. 178).

stabilizers<sup>10</sup>, estimated at nearly 3% of GDP (European Commission, 2021d, pp. 4, 10). According to verified data, the national fiscal support in the euro area as a whole, including the discretionary fiscal policy actions and automatic stabilizers, measured by the change in the primary fiscal balance, amounted to 6.5% of GDP in 2020 (Table 4) (European Commission, 2021d, p. 10; 2022e, p. 184).

In addition to the direct fiscal stimulus, the governments in the euro area countries provided businesses and households with the so-called liquidity support measures<sup>11</sup>. These measures, if triggered, have direct impact on the budget, and consequently on these countries' deficit and debt. According to European Commission (2021c, pp. 4–6, 16) estimates, the euro area countries provided liquidity support of about 19.2% of GDP in 2020, mainly in the form of the available public guarantees, about ¼ of which were activated at the time. The substantial liquidity support measures prevented bankruptcies of many companies. The EC estimates that without these measures, not including the reduced working hours, or new loans, ¼ of EU companies would not have escaped liquidity difficulties by the end of 2020, after exhausting their capital buffers. Owing to the postponement of administrative decisions, the moratoria on loan repayment introduced, as well as the temporary relaxation of bankruptcy rules, fewer companies declared bankruptcy in 2020, compared to 2019 (European Commission, 2021c, pp. 5–6).

The COVID-19 pandemic forced the member countries' authorities to return to expansionary fiscal policy, that is, to use Keynesian methods of upholding the economy (Duff, 2022, p. 74). These methods, with near zero interest rates, which significantly reduce the possibility of European Central Bank's (ECB) intervention, took priority (see Wildowicz-Szumarska, 2021, p. 120). It is adding that member countries with a better fiscal position allocated more funds directly from the budget to mitigate the effects of the pandemic crisis. Countries with less favorable fiscal positions, especially those in southern Europe, in turn, used more liquidity support measures, which were not directly included in their budget balance (for more, see Wildowicz-Szumarska, 2021, p. 128). This has been confirmed by the International Monetary Fund (IMF, 2022) data presented.

According to the European Commission's (2021d, p. 10) estimates, the fiscal support and liquidity support measures implemented cushioned the combined decline in the member countries' economic activity by 4.5 pp in 2020. The mitigation of the decline in GDP via these measures was only possible owing to the early activation of the aforementioned general escape clause. It is intended, on the one side, allow the member countries to deviate from the fiscal rules applicable under normal economic conditions, and, on the other, allow the Euro-

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<sup>10</sup> The size of automatic stabilizers was calculated as a residual, obtained by adjusting the change in the primary balance for the estimated impact of the fiscal policy measures (European Commission, 2021c, p. 16).

<sup>11</sup> Liquidity support measures are contingent liabilities, which took the form of, inter alia, loans, asset purchases, debt assumption or guarantees (European Commission, 2021c, p. 4).

pean Commission and the Council of the European Union to apply the necessary fiscal policy coordination measures, under the provisions of the SGP (European Commission, 2021d, p. 1). Deactivation of the Clause is, in turn, to be based on an overall assessment of the state of economic recovery in the euro area. This assessment is to be made through a comparison of a quantitative indicator of the level of economic activity with its pre-crisis levels (for more, see European Commission, 2021c, pp. 7–8).

In the euro area as a whole the public debt ratio increased by as much as 13.3 pp, i.e. to 99% of GDP by the end of 2020. The ratio increase was due to the significant decline in nominal GDP and the large debt issuance to finance the unusually high deficits (European Commission, 2021d, p. 6). The public debt ratio then increased in all EA countries, while in eleven of these countries it exceeded the reference value of 60% of GDP (see Table 2). According to updated data, in ten member countries, namely Belgium, Greece, Spain, France, Italy, Cyprus, Austria, Portugal, Slovenia, and Finland, the ratio was above 60% of GDP as early as in 2019 (see Table 2).

The impact of the COVID-19 pandemic on individual euro area economies varied widely in 2020 (see Table 3). Despite these differences, the shock did not cause a new debt crisis in these countries. The new governance system, established after the 2010–2012 debt crisis, proved to be of great support, as it enabled the use of innovative stabilization instruments. Consequently, the risk of instability in the euro area, resulting from potential crises in the member countries' government bond markets, was significantly reduced. The innovative instruments which enabled such effect were both fiscal and monetary in nature (De Grauwe, 2022, p. 275).

One innovative fiscal stabilization tool is the Recovery and Resilience Facility (RRF) (Regulation (EU) 2021/241), which entered into force on February 19, 2021<sup>12</sup>. The funding from the Facility is expected to cover the period from February 2020, i.e. from the start of the pandemic, to December 31, 2026. Its application will draw on the experience of the European Commission and member states derived from other financial support programmes (European Commission, 2022f; Regulation (EU) 2021/241). The RRF will operate on two tracks, providing the member countries with support in the form of nonrepayable grant<sup>13</sup> to the tune of EUR 338 billion on one side, as well as with loans of up to EUR 386 billion on the other, complementarily to the approximately EUR 500 billion provided under other EU funds (European Commission, 2021b, p. 3; 2021c, p. 8). The launch of such a large support programme was made possible by the unprecedented use of debt issuance on a supranational level

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<sup>12</sup> By the end of 2021, four countries — Spain, France, Greece and Italy — had applied for payment from this programme. At the end of 2021, the first funds were disbursed to Spain in the amount of EUR 10 billion (European Commission, 2022g, pp. 8–9).

<sup>13</sup> Expenditures financed by RRF grants are offset by revenues of the same amount, thus they are not directly shown in the budget balances of the member countries, unlike expenditures financed by loans sourced by this Fund (see European Commission, 2021a, p. 11).

(European Commission, 2021c, pp. 8–9). In other words, it was the first issuance in the form of Eurobonds. The event marked a significant advance toward the creation of a fiscal union, under which the euro area central authorities can decide on the issuance of debt covered by common guarantees from the member countries. The first issuance of Eurobonds is considered to have improved the outlook for the future of the eurozone. Through this issuance, the EA authorities signaled that the continued existence of the zone could be accompanied by further decisions leading to the creation of a fiscal union within it. It is asserted that this prospect prevented the occurrence of a debt crisis, as a result of the COVID-19 pandemic, in the euro area countries (De Grauwe, 2022, pp. 275–276). In view of that, the main research hypothesis has not been entirely confirmed.

If the absorption of the RRF fund's resources is successful, the additional spending will generate a large fiscal impulse in the EA countries in the coming years (European Commission, 2021c, p. 9). Importantly, this impulse will not translate into higher budget deficit and public debt ratios in those countries (European Commission, 2021c, p. 12). It must be emphasized that the RRF funds are meant to serve the economies most affected by the pandemic, as well as reduce the risk of diverging economic and social conditions in the euro area (European Commission, 2021c, p. 8).

The debt crisis in the member countries is believed to have been averted as a result of the European Central Bank's actions, in addition to the euro area authorities' decision to issue Eurobonds (De Grauwe, 2022, p. 275). As early as in March 2020, the Bank launched a monetary stabilization tool in the form of a temporary pandemic emergency purchase programme (PEPP) (ECB, 2022b). The ECB's new programme involved the purchase of the securities issued by the private and public sectors. Its value was increased twice, to eventually reach EUR 1.850 billion in December 2020 (ECB, 2022b). The innovation of the PEPP manifested itself in the Central Bank's non-imposition of conditions on the purchase of the member states' government bonds. This was a significant change in the Bank's policy, following the negative experience in the introduction of a similar programme in 2012. The launch of the PEPP resulted in a rapid decline in the spreads between the 10-year government bonds issued by the euro area countries, particularly Greece and Italy, and the 10-year bonds issued by the German government. By the end of 2020, these spreads were even smaller, compared to those observed at the end of 2019 (De Grauwe, 2022, pp. 274–275). It ought to be remembered that German government bonds are considered risk-free, and any deviations constitute the best measure of the eurozone's level of volatility (De Grauwe, 2022, p. 273).

## 5.2. Fiscal positions vs recovery from the pandemic

Owing to the strong political support, the faster vaccine implementation, and the gradual lifting of the pandemic restrictions, a decisive resumption of real

growth in the euro area economy transpired in the spring of 2021 (European Commission, 2021b, p. 4). This growth was, however, disrupted in the second half of 2021, when a new coronavirus variant, omicron, emerged. The new variant forced the EA countries to reinstate movement restrictions and put renewed strains on their health systems. The morbidity and quarantines, as well as the duty of care for minors resulting from the reintroduction of distance learning, caused labor shortage. The prolonged supply disruptions, combined with strong demand, pushed the commodity and energy prices up. All these adverse factors dampened the eurozone's real GDP growth momentum in the last quarter of 2021 (European Commission, 2022c, p. 2). Despite this weakening, the 2021 economic growth for the zone as a whole was 5.3% of GDP, compared to 2020 (see Table 3), which at the time translated into, *inter alia*, a decline in its overall budget deficit ratio by nearly 2 pp, *i.e.* to 5.1% of GDP (Table 2). In addition to the economic revival, the decline primarily resulted from the mobilization of an already substantial amount of discretionary support<sup>14</sup>, to counter the effects of the crisis. Favorable developments on the fiscal revenue side emerged in the member states as well (European Commission, 2022h, p. 12). According to EC data, the fiscal support from the euro area countries' funds, measured by the cumulative annual change in the primary balance, was 11.1% of GDP in 2020 and 2021, compared to 2019, while in 2021 alone, it was 4.6% of GDP (Table 4). Indications are that the firm implementation of additional fiscal measures by the EA countries has largely contributed to the 2021 improvement of the economic conditions in these countries (European Commission, 2021c, pp. 4–5; 2022h, p. 11; Yang et al., 2022).

The development of vaccines, the coordinated vaccine distribution, and the launch of a mass vaccination campaign in all member countries at the end of 2020 was, nevertheless, a landmark event in the fight against the epidemic, enabling economies to reopen in 2021 (European Commission, 2021b, pp. 4, 7; 2021c, p. 2). The only EA countries which did not observe a decrease in the budget deficit ratio in 2021 were Latvia and Slovakia, as these countries maintained significant support measures for their economies that year (see Table 4) (European Commission, 2022h, p. 12). Despite the 2021 deficit ratio decline in most of the member states, the Treaty reference value for this indicator (3% GDP) was exceeded by 11 of these countries, namely: Belgium, Germany, Greece, Spain, France, Italy, Latvia, Malta, Austria, Slovenia and Slovakia (see Table 2).

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<sup>14</sup> In 2021, most of the discretionary measures directly affecting the euro area countries' budgets were based, as in 2020, on additional spending (2.9% of GDP), which included extraordinary measures for health care (0.4% of GDP) and other expenditures (2.1% of GDP) intended, *inter alia*, to compensate specific industries. On the revenue side of the budget, in turn, support was estimated at 0.3% of GDP (for more, see European Commission, 2021c, p. 16). According to updated data, temporary emergency measures in the euro area as a whole amounted to 3.3% of GDP in 2021 (Table 4) (European Commission, 2022d, p. 46).

The economic revival and reduction in the total deficit ratio translated into the decline in the overall 2021 debt ratio in the euro area (ECB, 2022a, p. 18; European Commission, 2022h, p. 12) (see Tables 2 & 3). The ratio at the time decreased by 1.9 pp, i.e. to 97.1% of GDP. The reference value of 60% of GDP was exceeded by 12 countries, namely Belgium, Germany, Greece, Spain, France, Italy, Cyprus, Austria, Portugal, Slovenia, Slovakia and Finland. A decline in the public debt ratio, compared to 2020, was observed in these countries, excluding Germany and Slovakia, where the latter exceeded the reference value only in 2021. A slight increase in the debt ratio, despite the non-exceedance of the 60% of GDP threshold, also occurred in Latvia and Malta that year (for more, see Table 2). It should be underlined that the member states with high public debt ratios, i.e. Greece, Spain, Italy and Portugal, were most affected by the economic crisis caused by the COVID-19 pandemic, as these countries saw a sharp increase in these ratios (see Table 2) following the crisis (European Commission, 2021b, p. 5). It is estimated that high debt ratios can persist in those countries over the next decade and even remain above pre-pandemic levels. What is more, these ratios could rise further, if COVID-19-related public guarantees are used or the ECB raises the interest rates (European Commission, 2021b, p. 5).

In 2021, the ECB's measures also contributed to maintaining favorable financing conditions in all sectors of the economy, including the EA countries' public sector (European Commission, 2021b, p. 8). Owing to this support, a more effective transmission of fiscal stimulus to the entire euro area economy was possible. At the same time, the expansionary fiscal policy supported the transmission of the ECB's monetary policy. This strong complementarity between monetary policy and fiscal policy accommodated parallel operation of both types of policies and effectively mitigated the economic damage caused by the pandemic (European Commission, 2021a, p. 15).

The ECB's actions, among other things, prevented the stress in the member countries' government bond markets in 2021. In fact, interest rates on these bonds were subject to further convergence at the time. At the end of September 2021, the spreads were even smaller than before the outbreak of the COVID-19 pandemic (De Grauwe, 2022, p. 274). In December 2021, in turn, the ECB authorities decided to cease the Bank's net asset purchases under the PEPP as of the end of March 2022. The maturing capital portion of these assets is to be further reinvested, until the end of 2024 at the least (ECB, 2022b). It should be emphasized that the mutually reinforcing effects of the monetary policy and fiscal policy in the euro area have been crucial in mitigating the effects of the crisis and supporting the economic recovery in the euro area countries (European Commission, 2021b, p. 8).

As of early 2022, the COVID-19 pandemic was still exerting significant impact on the member countries' economic and fiscal situation. These conditions, together with Russia's invasion of Ukraine, limited the possibility of determining the detailed path of fiscal adjustment in these countries. As such, the European



Commission did not propose in the first half of 2022 to initiate new Excessive Deficit Procedures. At the same time, further monitoring of the deficit and debt ratios' evolution in the EA countries was announced (European Commission, 2022h, p. 3). The Commission concluded at the time that the conditions for maintaining the general escape clause in 2023 and its deactivation starting 2024 had been met (European Commission, 2022h, p. 1). After the first half of 2022, it turned out that consumers enthusiastically resumed spending, especially on services, following the easing of the COVID-19 restrictions. According to the EC's autumn 2022 forecast, the strong fiscal stimulus of 2021 and the high economic growth of the first half of 2022 are expected to translate into a 3.2% real GDP increase in the euro area as a whole in 2022 (European Commission, 2022b, p. 1). The indicator is thus expected to surpass its pre-pandemic level of 2019 by over 2 pp (Table 3). Moreover, the strong nominal GDP growth in the first three quarters of 2022, as well as the gradual withdrawal of the fiscal emergency measures introduced due to the COVID-19 pandemic that year (see Table 4), will cause the budget deficit in the member countries to fall further (European Commission, 2022b, p. 1). The deficit is projected to reach 3.5% of GDP for the euro area as a whole at the end of 2022 (Table 2). Analyzing the individual fiscal situation of the EA countries in 2022, excessive deficit is expected to occur in 10 of these countries. The deficit ratios in all EA countries are estimated to exceed the pre-pandemic levels of 2019 at the end of 2022. (see Table 2), for these ratios are still to be affected by the temporary emergency measures taken in the wake of the COVID-19 pandemic crisis (European Commission, 2022d, p. 1). Full withdrawal of these measures is expected in 2023. In 2022, they were still estimated for the eurozone as a whole at 0.9% of GDP (Table 4) (European Commission, 2022d, p. 9). Consequently, domestic fiscal support in the zone, measured by the change in the primary budget balance, is expected to fall to 2.9% of GDP<sup>15</sup> (Table 4) (European Commission, 2021a, p. 14; 2021c, p. 5; 2022c, p. 1; 2022e, p. 184). The debt ratio for the EA as a whole, in turn, is projected to decline by 3.5 pp, i.e. to 93.6% of GDP. The same member countries, with the exception of Slovakia, are also projected to record public debt ratios above 60% of GDP in 2022, compared to 2021 (see Table 2).

Most of the temporary emergency measures are to be phased out in 2022. In fact, member countries are shifting their focus to measures perpetuating recovery support. These measures can take the form of public investment, capital transfers, current spending or tax cuts. An increasing proportion of this support will be financed by EMU funds, particularly RRF grants. They are expected to support the economic recovery in the amount of 0.5% of eurozone's GDP in 2022. Some emergency measures may be extended if the pandemic situation worsens, however (European Commission, 2021a, p. 10).

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<sup>15</sup> It should be noted that in 2022, the member countries' budget deficit ratio was also affected by new support measures mitigating the effects of high energy prices in these countries (European Commission, 2022b, p. 1).

### 5.3. Challenges in fiscal policy surveillance

The economic crisis caused by the COVID-19 pandemic has further highlighted the challenges regarding the fiscal policy coordination system in the euro area, which pertain to the following issues:

- as a result of the crisis, the debt ratios in the EA countries have increased significantly, which poses the challenge of bringing these ratios down to reasonable levels in a gradual, sustainable and growth-friendly manner;
- in the coming years, member countries should maintain high public investment to ensure sustainable and inclusive economic growth (for more, see European Commission, 2022a), emphasizing the challenge in terms of good structure and quality of the public finances in these countries;
- counter-cyclical discretionary fiscal policy, combined with temporary fiscal support tools at supranational level, has proved very effective in mitigating the effects of the crisis, highlighting the challenge of both creating fiscal space in the member countries during economic prosperity and using that space, should a downturn (crisis) occur;
- the rapid development of the crisis has highlighted the difficulties both in using the indicators to assess the member countries' fiscal policies as well as in developing rules which take all possible scenarios into account (European Commission, 2021b, p. 9).

As mentioned already, the unique nature of the crisis led to the decision, at the EMU level, to temporarily suspend the SGP provisions. The crisis has only exacerbated the existing deficiencies in these provisions. As a result, the current fiscal rules are unlikely to be adapted to the new public finance situation in the euro area countries (Pinheiro de Matos & Sanchez Soliva, 2021). It is therefore legitimate to resume the discussion<sup>16</sup> on a supranational-level fiscal surveillance reform. Under current conditions, an adjustment of fiscal rules within the current surveillance system seems to be a promising solution. Changes should primarily lead to an improvement in the transparency of the fiscal rules and a reduction in the complexity thereof.

One specific change worth considering entails replacement of the structural deficit indicator, characterized by many shortcomings<sup>17</sup>, with an expenditure-based rule. Its main advantages include: a) the ease of adjusting its level to individual macroeconomic conditions, mainly to the amount of public debt, in each euro area country, and b) the increased transparency and predictability of the European fiscal framework (Pinheiro de Matos & Sanchez Soliva, 2021).

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<sup>16</sup> In October 2021, the debate on the Eurozone's fiscal policy governance framework was resumed, with the aim to build a broad consensus on the way forward before 2023 (European Commission, 2022c, p. 2).

<sup>17</sup> Structural deficit is an estimated variable, not an observable one. It is determined from the perspective of potential GDP. The indicator is calculated using different methods, which results in differences between its figures published for the same country by different institutions, i.e. the IMF, the EC or the OECD (Pinheiro de Matos & Sanchez Soliva, 2021).

The new rule would be based on putting a ceiling on the growth rate of primary expenditures, adjusted by net of discretionary revenue measures, to enable achievement of debt target in each EA country. A reformed and simplified fiscal surveillance system would thus be based on a single debt rule specific to each euro area country, as well as on a single operational rule, in the form of a net expenditure ratio allowing determination of fiscal adjustment in a given country (Benalal et al., 2022, p. 5).

## 6. Conclusion

The COVID-19 pandemic triggered an extraordinary global health crisis. As a result, economic activity in the euro area fell sharply in 2020, with the GDP index falling by as much as 6.1%. The pandemic thus forced a return to expansionary fiscal policy on the member countries' authorities, i.e. the use of Keynesian methods of supporting the economy. Most of the response incentives taken, known as temporary emergency measures, were based on additional spending. In 2020, these measures accounted for 3.3% of the GDP of the euro-zone as a whole, including extraordinary outlays for health care, as well as compensation for specific industries affected by loss of income or reduced working hours schemes. This was made possible by the activation of the general escape clause included in the modified Stability and Growth Pact (SGP for short). Its deactivation is to take place based on an overall assessment of the state of the eurozone's economic recovery, but not before 2024.

Due to the severe recession and the temporary emergency measures taken, the eurozone countries' public finances suffered substantially in 2020. The budget deficit ratio for the euro area as a whole rose this year by 6.4 pp, i.e. to 7.0% of GDP, compared to 2019, while the debt ratio rose by as much as 13.3 pp, i.e. to 99.0% of GDP. The deficit benchmark at the end of 2020 was exceeded by all member countries, while the debt benchmark — by eleven of these countries. The huge increase in public debt ratios in parts of the eurozone, however, did not trigger a new debt crisis in the euro area, even though the economies of its peripheral countries were hit much harder by the COVID-19 pandemic than those of low-risk countries. The new system of economic governance at supranational level, established after the debt crisis of 2010–2012, proved to be of great aid here, as it enabled the use of innovative stabilization instruments. These instruments were of both fiscal, i.e. the Recovery and Resilience Facility (RRF for short), and monetary, i.e. the temporary pandemic emergency purchase programme (PEPP for short) nature. The RRF went into effect in February 2021, while the PEPP — as early as March 2020. The RRF funding was to provide financial support in the form of grants and loans to the euro area countries. The launch of this programme enabled by an unprecedented debt issuance at the supranational level. The PEPP innovativeness was manifested through the European Central Bank's non-imposition of conditions on the purchase of member states' government bonds. This resulted in a rapid fall in the spreads

between the 10-year government bonds of eurozone countries, particularly Greece and Italy, and the 10-year bonds issued by the German government. The above decisions, and the joint issuance of debt especially, have most probably prevented a COVID-19 pandemic-resultant debt crisis in the euro area countries. In view of that, the main research hypothesis has not been entirely confirmed. The mutually reinforcing impact of the eurozone monetary policy and fiscal policy was crucial for mitigating the crisis effects, as well as for supporting the 2021 economic recovery in the eurozone countries. The ECB's measures at the time contributed to maintaining favorable financing conditions in all sectors of the member states' economies. At the end of 2021, a decision was made to end the net asset purchases under the PEPP in March 2022. RRF funding, in turn, is expected to last until the end of 2026.

The development of vaccines, and the start of vaccination in all member countries in late 2020, was a breakthrough event in the fight against the epidemic, which enabled economies to reopen in 2021. GDP growth for the eurozone as a whole was 5.3% for entire 2021, compared to 2020. This growth then translated into, inter alia, a decrease in the zone's overall budget deficit ratio by nearly 2 pp, i.e., to 5.1% of GDP. The referential value of this indicator was then exceeded by 11 member states, which was 8 less compared to 2020. In addition to the economic recovery, the decline in the deficit ratio resulted from the already substantial amount of discretionary support mobilized to counter the effects of the crisis. In 2021, euro area countries implemented temporary emergency measures again at 3.3% of GDP. The economic recovery and reduction in the total deficit ratio then translated into a 1.9 pp drop in the overall debt ratio in the euro area as a whole, to 97.1% of GDP. The ratio exceeded 60% of GDP in 12 countries, which is one more than in 2020. The strong fiscal stimulus of 2021 and the high economic growth of the first half of 2022, in turn, are expected to translate into an increase in real GDP in the eurozone as a whole, by 3.2% of GDP in 2022. The indicator is thus expected to surpass its pre-pandemic level by more than 2 pp. The economic recovery is also to be supported by European funds, particularly by the RRF subsidies. The economic situation and the gradual phasing out of the temporary emergency measures, the size of which is expected to drop to 0.9% of GDP in 2022, with a complete phasing out in 2023, will cause the budget deficit ratios in the member countries to fall further. They are projected, nevertheless, to be still higher than the pre-pandemic levels. At the end of 2022, the deficit reference value is expected to be exceeded by 10 of these countries. The deficit for the euro area as a whole is then expected to reach 3.5% of GDP. The debt ratio in these countries, in contrast, is to decline by 3.5 pp, i.e. to 93.6% of GDP. 11 member states, which is one less than at the end of 2021, are expected to exceed debt reference value.

The effects of the COVID-19 pandemic economic crisis have been felt the most by the eurozone countries with high debt ratios, namely Greece, Spain, Italy and Portugal. These countries indeed saw a sharp increase in these ratios, as a result of the crisis. This raises the challenge of bringing these indi-

cators down to reasonable levels in a gradual, sustainable and growth-friendly manner. The rapid development of the COVID-19 crisis has additionally highlighted the difficulties in the application of the fiscal-policy-assessing indicators in these countries and has exacerbated the existing deficiencies in the provisions of the SGP. Changes in the fiscal surveillance of the eurozone should primarily lead to the improvement of the transparency of fiscal rules and reduction of the complexity thereof. Simplified surveillance could be based on a single indebtedness rule, specific to each country in the union, and a single operational rule, in the form of a net spending ratio, enabling determination of fiscal adjustment in a that country.

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## Appendix

**Table 1.**  
**Effects of expansionary fiscal policy in selected macroeconomic models**

| Model                        | Main assumptions   | Mechanism   | Multiplier | Effects  |
|------------------------------|--|---|------------|--|
| neo-Keynesian                | short term, rigid prices, flexible supply  | increased demand increases production and employment  | $M > 0$    | fiscal policy is effective (Keynesian effects)                         |
| neoclassical                 | effects dependent on the type of fiscal expansion (spending increases or tax cuts)           | increase in public spending lowers private spending (crowding out effect) and potential GDP | $M \leq 0$ | fiscal policy is ineffective (non-Keynesian or anti-Keynesian effects) |
|                              |  | tax cuts increase potential GDP level   | $M > 0$    | fiscal policy is effective (Keynesian effects)                         |
| Ricardian equivalence        | intertemporal budget constraint, rational expectations                                       | private spending is “crowded out” by public spending  | $M = 0$    | fiscal policy is ineffective (non-Keynesian effects)                   |
| mixed with threshold effects | short period, fixed prices, flexible supply, private spending dependent on the level of debt | when debt is below threshold, production and employment increase                            | $M > 0$    | fiscal policy is effective (Keynesian effects)                         |
|                              |  | when debt exceeds the threshold, private spending falls                                     | $M \leq 0$ | fiscal policy is ineffective (non-Keynesian or anti-Keynesian effects) |

Source: Own preparation based on Rosati (2017, p. 290).

**Table 2.**  
**2019–2022 budget deficit (–) or surplus (+) and public debt in euro area countries, in % of GDP**

| State or organization | Budget deficit (–) or surplus (+) |       |      |                   | Public debt |       |       |                   |
|-----------------------|-----------------------------------|-------|------|-------------------|-------------|-------|-------|-------------------|
|                       | 2019                              | 2020  | 2021 | 2022 <sup>1</sup> | 2019        | 2020  | 2021  | 2022 <sup>1</sup> |
| BE                    | –1.9                              | –9.0  | –5.6 | –5.2              | 97.6        | 112.0 | 109.2 | 106.2             |
| DE                    | 1.5                               | –4.3  | –3.7 | –2.3              | 58.9        | 68.0  | 68.6  | 67.4              |
| EE                    | 0.1                               | –5.5  | –2.4 | –2.3              | 8.5         | 18.5  | 17.6  | 18.7              |
| IE                    | 0.5                               | –5.0  | –1.7 | 0.2               | 57.0        | 58.4  | 55.4  | 44.7              |
| EL                    | 1.1                               | –9.9  | –7.5 | –4.1              | 180.6       | 206.3 | 194.5 | 171.1             |
| ES                    | –3.1                              | –10.1 | –6.9 | –4.6              | 98.2        | 120.4 | 118.3 | 114.0             |
| FR                    | –3.1                              | –9.0  | –6.5 | –5.0              | 97.4        | 115.0 | 112.8 | 111.7             |
| IT                    | –1.5                              | –9.5  | –7.2 | –5.1              | 134.1       | 154.9 | 150.3 | 144.6             |
| CY                    | 1.3                               | –5.8  | –1.7 | 1.1               | 90.4        | 113.5 | 101.0 | 89.6              |
| LV                    | –0.6                              | –4.3  | –7.0 | –7.1              | 36.5        | 42.0  | 43.6  | 42.4              |
| LT                    | 0.5                               | –7.0  | –1.0 | –1.9              | 35.8        | 46.3  | 43.7  | 38.0              |
| LU                    | 2.2                               | –3.4  | 0.8  | –0.1              | 22.4        | 24.5  | 24.5  | 24.3              |
| MT                    | 0.6                               | –9.4  | –7.8 | –6.0              | 40.7        | 53.3  | 56.3  | 57.4              |
| NL                    | 1.8                               | –3.7  | –2.6 | –1.1              | 48.5        | 54.7  | 52.4  | 50.3              |
| AT                    | 0.6                               | –8.0  | –5.9 | –3.4              | 70.6        | 82.9  | 82.3  | 78.5              |
| PT                    | 0.1                               | –5.8  | –2.9 | –1.9              | 116.6       | 134.9 | 125.5 | 115.9             |
| SK                    | –1.2                              | –5.4  | –5.5 | –4.2              | 48.0        | 58.9  | 62.2  | 59.6              |
| SI                    | 0.6                               | –7.7  | –4.7 | –3.6              | 65.4        | 79.6  | 74.5  | 69.9              |



| State or organization | Budget deficit (–) or surplus (+) |      |      |                   | Public debt |      |      |                   |
|-----------------------|-----------------------------------|------|------|-------------------|-------------|------|------|-------------------|
|                       | 2019                              | 2020 | 2021 | 2022 <sup>1</sup> | 2019        | 2020 | 2021 | 2022 <sup>1</sup> |
| FI                    | –0.9                              | –5.5 | –2.7 | –1.4              | 64.9        | 74.8 | 72.4 | 70.7              |
| EA <sup>2</sup>       | –0.6                              | –7.0 | –5.1 | –3.5              | 85.7        | 99.0 | 97.1 | 93.6              |

Notes:

<sup>1</sup> European Economic Forecast, Autumn 2022.

<sup>2</sup> The euro area includes Croatia, which will become a member on January 1, 2023.

Source: Own preparation based on European Commission (2022e, pp. 183, 186).

**Table 3.**  
2019–2022 real GDP growth and primary deficit (–) or surplus (+) in euro area countries, in % of GDP

| State or organization | Real GDP growth |       |      |                   | Primary deficit (–) or surplus (+) |      |      |                   |
|-----------------------|-----------------|-------|------|-------------------|------------------------------------|------|------|-------------------|
|                       | 2019            | 2020  | 2021 | 2022 <sup>1</sup> | 2019                               | 2020 | 2021 | 2022 <sup>1</sup> |
| BE                    | 2.2             | –5.4  | 6.1  | 2.8               | 0.0                                | –7.0 | –3.9 | –3.7              |
| DE                    | 1.1             | –3.7  | 2.6  | 1.6               | 2.3                                | –3.7 | –3.2 | –1.7              |
| EE                    | 3.7             | –0.6  | 8.0  | –0.1              | 0.1                                | –5.4 | –2.4 | –2.2              |
| IE <sup>2</sup>       | 5.4             | 6.2   | 13.6 | 7.9               | 1.8                                | –4.0 | –0.9 | 0.9               |
| EL                    | 1.9             | –9.0  | 8.4  | 6.0               | 4.1                                | –6.9 | –5.0 | –1.6              |
| ES                    | 2.0             | –11.3 | 5.5  | 4.5               | –0.8                               | –7.9 | –4.7 | –2.4              |
| FR                    | 1.8             | –7.8  | 6.8  | 2.6               | –1.6                               | –7.7 | –5.1 | –3.2              |
| IT                    | 0.5             | –9.0  | 6.7  | 3.8               | 1.9                                | –6.0 | –3.7 | –1.1              |
| CY                    | 5.5             | –4.4  | 6.6  | 5.6               | 3.5                                | –3.7 | 0.1  | 2.6               |
| LV                    | 2.6             | –2.2  | 4.1  | 1.9               | 0.1                                | –3.7 | –6.5 | –6.6              |
| LT                    | 4.6             | 0.0   | 6.0  | 2.5               | 1.3                                | –6.4 | –0.5 | –1.6              |
| LU                    | 2.3             | –0.8  | 5.1  | 1.5               | 2.6                                | –3.2 | 1.0  | 0.1               |
| MT                    | 5.9             | –8.3  | 10.3 | 5.7               | 1.9                                | –8.1 | –6.6 | –4.9              |
| NL                    | 2.0             | –3.9  | 4.9  | 4.6               | 2.6                                | –3.0 | –2.0 | –0.5              |
| AT                    | 1.5             | –6.5  | 4.6  | 4.6               | 2.0                                | –6.7 | –4.8 | –2.3              |
| PT                    | 2.7             | –8.3  | 5.5  | 6.6               | 3.1                                | –2.9 | –0.5 | 0.2               |
| SK                    | 2.5             | –3.4  | 3.0  | 1.9               | 0.0                                | –4.2 | –4.4 | –3.2              |
| SI                    | 3.5             | –4.3  | 8.2  | 6.2               | 2.3                                | –6.1 | –3.4 | –2.5              |
| FI                    | 1.2             | –2.2  | 3.0  | 2.3               | –0.1                               | –4.8 | –2.2 | –0.8              |
| EA <sup>3</sup>       | 1.6             | –6.1  | 5.3  | 3.2               | 1.0                                | –5.5 | –3.6 | –1.9              |

Notes:

<sup>1</sup> European Economic Forecast, Autumn 2022.

<sup>2</sup> Although the COVID-19 pandemic crisis did affect Ireland’s economy in 2020, the country’s quarterly GDP index never fell below pre-pandemic levels. The increase in exports, generated by multinational corporations conducting operations in Ireland in the pharmaceutical and IT sectors is believed to have been the main reason for this (Licchetta et al., 2022, p. 7).

<sup>3</sup> The euro area includes Croatia, which will become a member on January 1, 2023.

Source: Own preparation based on European Commission (2022e, pp. 166, 184).



**Table 4.**  
**2020–2023 temporary emergency measures and national fiscal support in response to the COVID-19 pandemic, in % of GDP**

| State or organization | Temporary emergency measures |      |      |      | National fiscal support <sup>1</sup> |      |                   |
|-----------------------|------------------------------|------|------|------|--------------------------------------|------|-------------------|
|                       | 2020                         | 2021 | 2022 | 2023 | 2020                                 | 2021 | 2022 <sup>2</sup> |
| BE                    | 4.5                          | 3.0  | 0.5  | 0.0  | -7.0                                 | -3.9 | -3.7              |
| DE                    | 2.6                          | 4.2  | 1.4  | 0.0  | -6.0                                 | -5.5 | -4.0              |
| EE                    | 1.1                          | 1.4  | 0.0  | 0.0  | -5.5                                 | -2.5 | -2.3              |
| IE                    | 3.3                          | 2.5  | 0.5  | 0.0  | -5.8                                 | -2.7 | -0.9              |
| EL                    | 7.6                          | 7.2  | 1.8  | 0.0  | -11.0                                | -9.1 | -5.7              |
| ES                    | 3.2                          | 3.1  | 0.4  | 0.0  | -7.1                                 | -3.9 | -1.6              |
| FR                    | 3.3                          | 2.5  | 0.5  | 0.0  | -6.1                                 | -3.5 | -1.6              |
| IT                    | 4.4                          | 3.4  | 1.1  | 0.0  | -7.9                                 | -5.6 | -3.0              |
| CY                    | 3.5                          | 2.9  | 0.3  | 0.0  | -7.2                                 | -3.4 | -0.9              |
| LV                    | 2.7                          | 5.0  | 1.3  | 0.0  | -3.8                                 | -6.6 | -6.7              |
| LT                    | 3.9                          | 2.8  | 1.0  | 0.0  | -7.7                                 | -1.8 | -2.9              |
| LU                    | 2.3                          | 0.8  | 0.1  | 0.0  | -5.8                                 | -1.6 | -2.5              |
| MT                    | 6.0                          | 4.9  | 1.8  | 0.0  | -10.0                                | -8.5 | -6.8              |
| NL                    | 3.0                          | 2.2  | 0.6  | 0.0  | -5.6                                 | -4.6 | -3.1              |
| AT                    | 4.7                          | 4.4  | 1.0  | 0.0  | -8.7                                 | -6.8 | -4.3              |
| PT                    | 2.3                          | 2.2  | 0.9  | 0.0  | -6.0                                 | -3.6 | -2.9              |
| SK                    | 2.3                          | 3.5  | 1.0  | 0.0  | -4.2                                 | -4.4 | -3.2              |
| SI                    | 4.9                          | 4.1  | 0.8  | 0.0  | -8.4                                 | -5.7 | -4.8              |
| FI                    | 2.8                          | 1.7  | 0.2  | 0.0  | -4.7                                 | -2.1 | -0.7              |
| EA <sup>3</sup>       | 3.3                          | 3.3  | 0.9  | 0.0  | -6.5                                 | -4.6 | -2.9              |

Notes:

National fiscal support is estimated here as the change in primary fiscal balance, compared to its pre-crisis level in 2019 (see European Commission, 2022e, p. 184).

<sup>1</sup> With the announcement of the withdrawal of COVID-19 temporary emergency measures in 2022 and the implementation of new aid measures to mitigate the effects of the new energy crisis, the calculation of the change in primary balance for 2023 seems unjustified here.

<sup>2</sup> European Economic Forecast, Autumn 2022.

<sup>3</sup> The euro area includes Croatia, which will become a member on January 1, 2023.

Source: Own preparation based on European Commission (2022d, p. 46; 2022e, pp. 70, 184).