

# PANDEMIC BONDS AS A NON-STANDARD MEASURE OF THE EUROPEAN CENTRAL BANK MONETARY POLICY

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## ABSTRACT

The health crisis caused by the COVID-19 has, in addition to human lives, left far-reaching consequences for companies and the financial sector. Faced with a sudden lack of liquidity in the financial and real sectors, central banks in developed countries started purchasing various segments of assets. To this end, the European Central Bank (ECB) started purchasing securities only to calm the consequences of the pandemic crisis (Pandemic emergency purchase programme, PEPP). Since the initial purchase announcement worth 750 billion euros, the ECB offered a purchase worth as much as 1,850 billion euros under the program. The aim of the paper is to analyze the PEPP measures taken by the ECB to check whether they provided the necessary support to the banking sector in its smooth lending to the economy and citizens during the pandemic. In order to avoid a negative impact on monetary trends, in late March 2022, the ECB suspended the further purchase of securities under the PEPP, with the obligation to reinvest the due amount of the collected debt by the end of 2024.

**Keywords:** non-standard measures, central bank, pandemic bonds, ECB

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## INTRODUCTION

Similar to the global COVID-19 pandemic, the bond pandemic spread in world finance as a lifesaving financial instrument to ensure the liquidity of the financial and real sectors, as well as to prevent massive losses. Accordingly, the paper deals with specific forms of asset purchase as part of non-standard measures under the central bank's monetary policy, when standard instruments do not produce effects. Although this practice was sporadic in the beginning (the purchase of some assets by the Japanese central bank in 2001), after the global financial crisis of 2007/08 it became more pronounced. Thus, non-standard monetary policy measures received the right of "citizenship" within the neoliberal concept of central bank independence. The neoliberal concept proved to be effective when there is a conjuncture in the most developed economies, where the costs of solving crises in countries whose capital markets have a strong potential for development, the so-called emerging markets, are not relevant for world economic and financial centers, i.e. for the world economy as a whole. The moment a crisis reaches global, i.e. pandemic, proportions, that is when the neoliberal doctrine shows all its impotence. As many times in history and as with everything, the big ones do not admit their mistakes. The same is true with the neoliberal doctrine. The problem is not in it, but in its incomplete and partial implementation, showing its dysfunctions. This is why non-standard monetary policy measures were introduced, to ensure the effectiveness of standard measures even in times of global crises or pandemic. Bearing in mind the intellectual and theoretical correctness, the question arises as to whether the neoliberal concept would survive? The answer is yes as long as the world's financial centers of power accept it. The importance of that concept in theory and practice might strengthen upon getting another feature, i.e. a high degree of instrumental adaptability, despite the destruction of its basic value premises.

Bearing in mind the previous theoretical and methodological interpretation, this text will deal with the role and importance of pandemic bonds as a non-standard monetary policy measure during the COVID-19 pandemic. Despite the recent announcement of the end of the pandemic, the long-term effects of the measures taken remain controversial. Accordingly, the paper will address its subject in three parts. The first two parts will focus on the specifics of the ECB's asset purchase program in the context of its policy to mitigate the consequences of the global financial crisis and the COVID-19 pandemic. The following part will give an analysis of the monetary effects of pandemic bond purchase, in order to see the possible negative effects of the measures taken. The final part will point to concluding considerations and further directions for the use of asset purchase program as an instrument of the central banks' monetary policy, indicating to its possible use as a preventive, rather than a post-crisis mechanism.

## BOND PURCHASE PROGRAMS AS A CRISIS MANAGEMENT MEASURE OF THE EUROPEAN CENTRAL BANK

The 2007 global financial crisis left far-reaching negative consequences for the American economy, contributing to a recession that lasted until mid-2009. One of the main causes was excessive exposure of banks to credit risk, given that the vast majority of home loans were approved with a very low down payment (from 0%-3%). The general drop in real estate prices throughout the country, which followed the increase in the interest rate on federal funds, after the FED's five-year policy of low interest rates before the outbreak of the crisis, also played its part. In order to reduce credit risk, banks took advantage of diversification and issued mortgage-backed securities (MBS) based on mortgage loans from various parts of the country. The emergence of the crisis in the USA and countries such as Iceland and Ireland that accepted risky lending practice faced further complications with the public debt crisis in certain European countries. The debt crisis, which primarily affected Greece, Italy, Spain and Portugal, due to their high budget deficits caused by excessive spending and insufficient tax revenues, spread to other Eurozone countries. What led to a global crisis was the connection of these two almost simultaneous phenomena, given that European banks kept their funds in problematic American banks. The fact that the events in the USA required the rescue of these banks in order to prevent a complete collapse of the financial market significantly increased the countries' budget deficits, and the investors' demand to increase interest rates made further crediting of budget deficits difficult.

The world economy would have gone deeper into recession if most countries had not provided fiscal and monetary incentives in 2008. and 2009. The late 2008. and 2009. incentives mitigated the consequences of the global economic crisis, stopping a deeper decline in economic activity [14]. With this in mind, and considering that during the global financial crisis, the largest investment bank Lehman Brothers Inc. went bankrupt, the FED and the ECB began to change the existing monetary policy instruments. So, apart from changes in the structure, the measures taken also affected the central bank's balance sheet [10, p. 68]. The central banks of developed countries first started implementing an expansive monetary policy to ensure adequate system liquidity. The ECB and the FED, after several cuts, brought their reference interest rates almost to zero, the so-called zero bound. When interest rates reached zero level, the necessary liquidity was no longer possible through the interest rate channel. The central banks of the world's leading economies started conducting their anti-crisis policies by applying the so-called non-standard monetary policy measures.

The rigid model of the neoliberal central bank independence concept was relativized by the introduction of this new policy measures. This changed the instrument of the central bank and made it an anti-crisis mechanism, regardless of the nature of the crisis. The focus here is not on the inefficiency of the neoliberal concept, but on adjusting its constitutive elements for application in practice. Non-standard measures were first implemented through the adaptation of conventional monetary policy measures to crisis conditions, which mainly meant extending the term of the arrangement, easing the collateral policy and expanding the list of arrangement beneficiaries. This extended the central bank's credit support, which was normally reserved for banks only. Now it included some non-banking financial institutions and financial markets, which are critical for financial stability [13].

In this regard, the largest central banks started mass purchase of private and public sector bonds, trying to ensure the necessary liquidity by influencing the balance sheet volume and structure [9]. The pioneer in the application of this instrument was the central bank of Japan back in 2001, using terms such as "quantitative relief" or "quantitative easing" to refer to this type of measure. FED also applied these measures and used the term "credit easing" for these measures, thus purchasing not only government bonds and state mortgage securities, but also direct or indirect commercial papers [7]. Then, the European Central Bank used the term "enhanced credit support" for these measures. Regardless of terminological deviations, in all three cases the ultimate goal of the interventions is to increase the banks' balance sheets. Under its non-standard monetary policy measures, ECB envisaged a wider asset purchase program (APP) and included bonds issued by public entities, corporate sector, as well as covered bonds and asset-backed securities, i.e. bonds issued on the basis of collateralized loans, such as mortgage loans, car loans or credit cards [1]; [3].

The coronavirus pandemic that followed in 2019. caused not only a health crisis, but also a financial crisis, which required immediate measures [10]. In the context of the aforementioned non-standard measures, ECB introduced a special asset purchase program to mitigate the consequences of the pandemic crisis (Pandemic Emergency Purchase Programme, PEPP). In the next segment of the paper, its specifics, as well as the scope and structure of purchased bonds under this program will be presented, including the monetary effects of the measures taken.

## **PANDEMIC BONDS: YIELD VERSUS LIQUIDITY FORM OF ASSETS**

The idea of creating a pandemic fund came from the World Bank, which in response to the Ebola epidemic in Africa, issued bonds on 28 June 2017. to provide dedicated funds and support the poorest countries in the fight against the pandemic (Pandemic Emergency Financing Facility, PEF). Two classes of bonds were issued: Class A, with an interest rate of 6m USD LIBOR + 6.50% and Class B, with an interest rate of 6m USD LIBOR + 11.10%. These bonds were planned to raise more than 500 million dollars to help the poorest developing countries facing the pandemic of viruses covered by the specific class of bonds: Flu and Coronavirus covered by Class A and Filovirus, Coronavirus, Lassa Fever, Rift Valley Fever and Crimean Congo Hemorrhagic Fever, covered by class B [12]. The bonds were issued as part of the "Capital at Risk" program of the International Bank for Reconstruction and Development (IBRD), given that investors bear the risk of losing part or all of their investment in the bond if an epidemic triggers payment to the countries covered by the Pandemic Fund. As this implied the loss of the right to return the principal, the interest rate on pandemic bonds was set at a high level (from 8% to 11%), which

somewhat compensated the investor risk. In the period of low and then negative interest rates, such bonds issuance was extremely attractive for investors. Hence the dilemma of considering pandemic bonds as a yield versus liquidity form of assets. The eligible countries got funds from the Pandemic Fund in cases where the epidemic reached predetermined infection levels, as per the World Health Organization (WHO) data. As the COVID-19 met these criteria, so PEF allocated 195.84 million dollars for the world's poorest countries affected by this virus. The pandemic fund was officially closed on 30 April 2021.

Along with the World Bank actions, the ECB, as part of non-standard monetary policy measures, in March 2020, launched a temporary securities purchase program in the private and public sector (PEPP) in the amount of 750 billion euros, to suppress negative effects on the central bank's transmission mechanism due to the coronavirus consequences. Soon after, the program was increased, first by 600 billion euros, and then by 500 billion euros, which guaranteed asset purchase in the total amount of 1,850 billion euros [2]. PEPP provided for the purchase of securities beyond those provided for by the standard APP, namely: Greek government bonds, commercial paper with a remaining maturity of at least 28 days, public sector securities with a remaining maturity of 70 days up to a maximum of 30 years. For the purchase of public sector securities under the PEPP, the share of national central banks' capital in the ECB's total capital was used as the allocation key. From the very beginning, the pandemic fund had a liquidity motive for its formation. The following text presents the volume and structure of purchased bonds under the pandemic program, as well as the impact of these activities on the size of the ECB's balance sheet.

## MONETARY EFFECTS OF PANDEMIC BONDS

The purchase of public and private sector bonds under the existing purchase programs was aimed at securing the liquidity of the banking sector and preventing a possible financial crisis. The outbreak of the coronavirus pandemic indirectly exposed banks, considering that the economy and citizens was the first to be hit. For these reasons, the ECB introduced a special asset purchase program during the pandemic. The following figures (Figures 1-3) show the asset purchase program and certain specifics in relation to previous purchase programs.

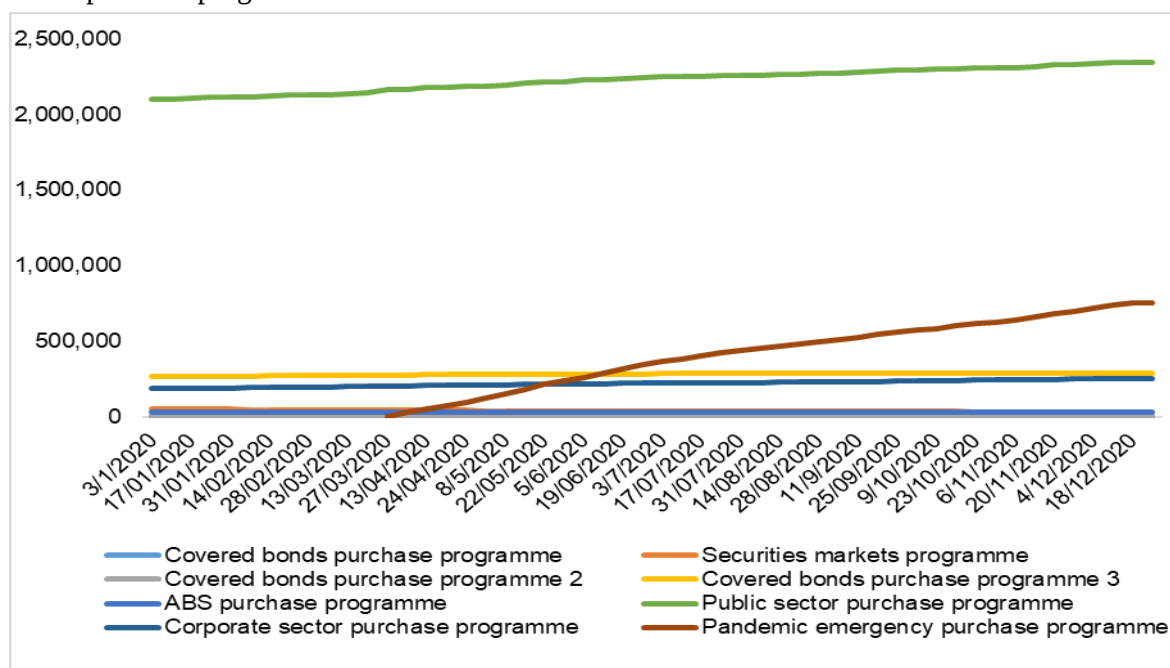


Figure 1. Asset purchase programs in 2020

Source: [5]

Figure 1 clearly shows the upward trend of asset purchase within PEPP. Such a trend remained in 2021, while the purchase programs under the APP remained unchanged (Figure 2).

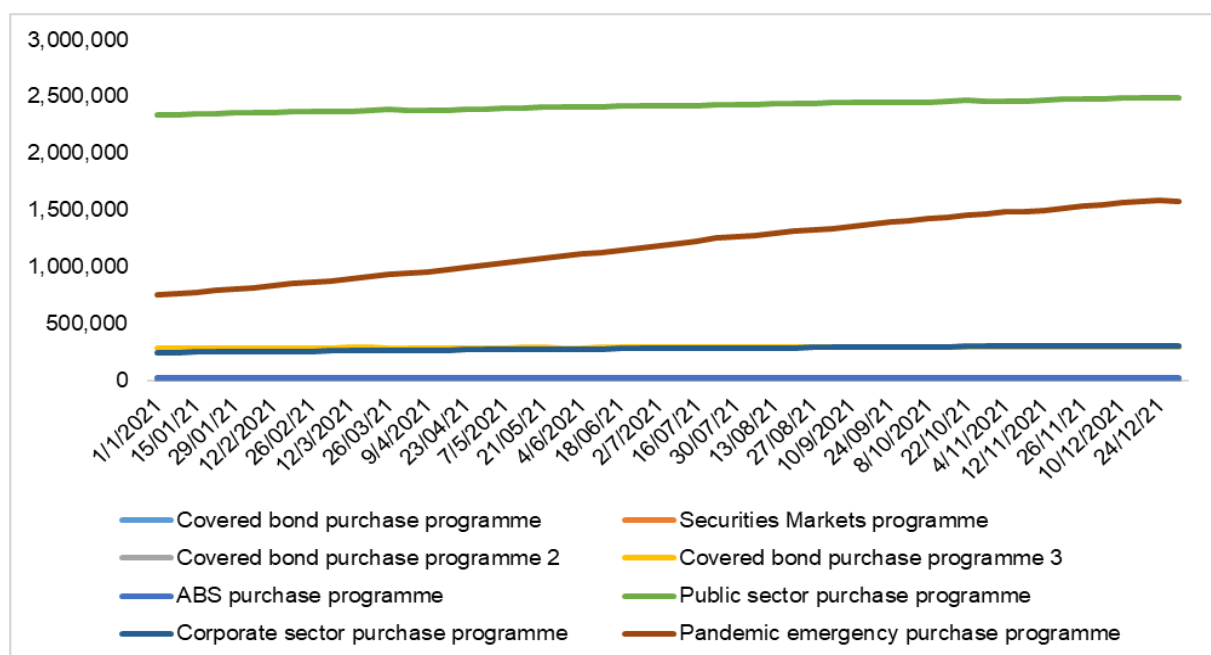


Figure 2. Asset purchase programs in 2021

Source: [5]

Based on analyses that confirmed the significant impact of the asset purchase program on inflationary pressures [4] and to avoid a negative impact on monetary trends, the ECB terminated this program in late March 2022 (Figure 3).

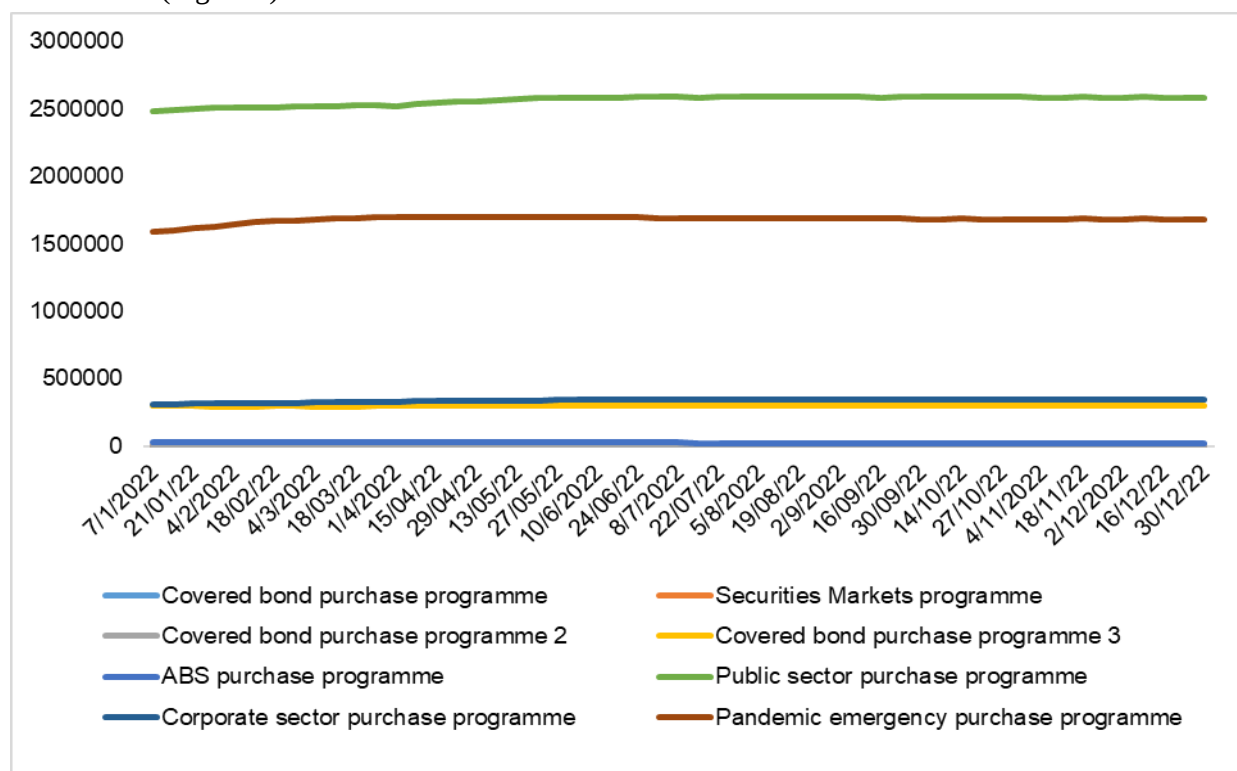


Figure 3. Asset purchase programs in 2022

Source: [5]

Based on the growing volume of asset purchases under PEPP, we analyzed the structure of assets that were the subject of purchase in the observed period: public sector bonds, corporate bonds, commercial paper and covered bonds (Figure 4).

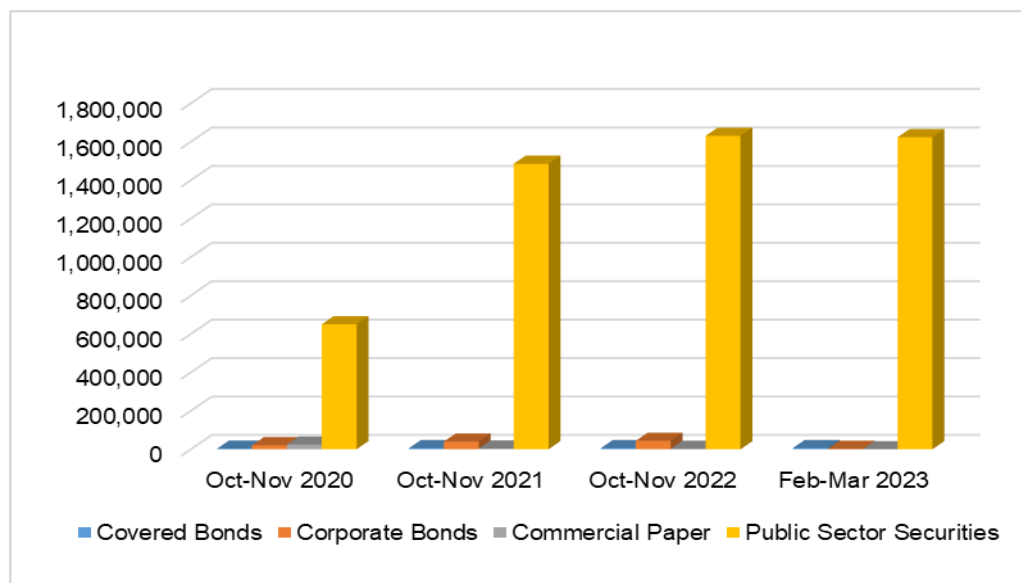


Figure 4. Asset purchase programs within the PEPP viewed by asset type  
Source: [5]

Apart from the insignificant share of the corporate bond purchase program, Figure 4 shows the growing and dominant share of the public sector bond purchase program, pointing to the connection between the state and central banks [8]. In this way, the ECB became a significant owner of public sector bonds. As, in proportion to the share in capital, a part of the bonds is allocated to national central banks, for the last year we analyzed the share of individual national central banks in the purchase programs of these securities (Figure 5).

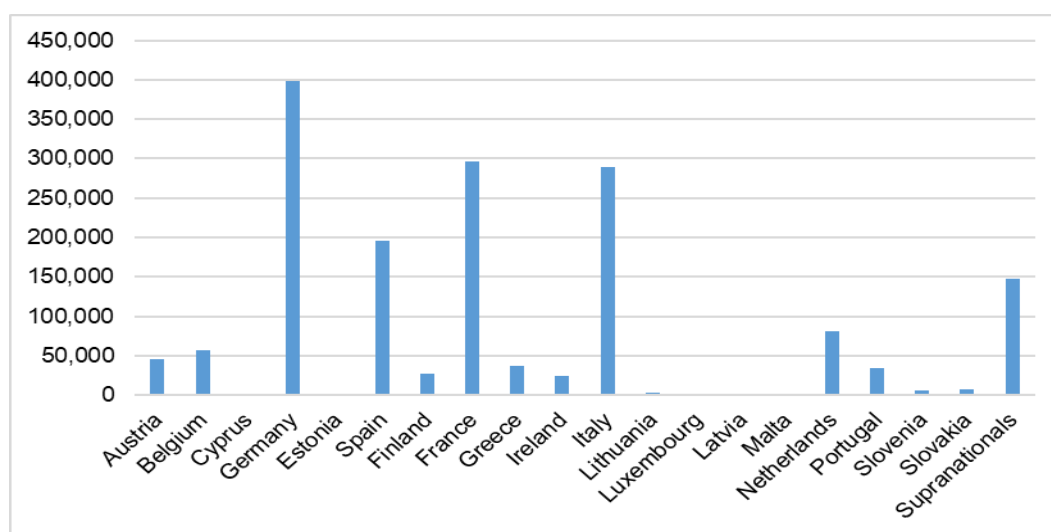


Figure 5. Public sector securities purchase programs  
Source: [5]

The purchase of public sector bonds follows the defined rule on the secondary market, in order not to directly affect the irrational increase in government spending and the member states' public debt. When it comes to the total projected volume of public sector bonds from banks, public sector bonds of Germany, France, Italy and Spain record the largest state key.

As a consequence of the measures taken, the ECB's balance sheet assets significantly increased, the volume and structure of which are shown in Figure 6.

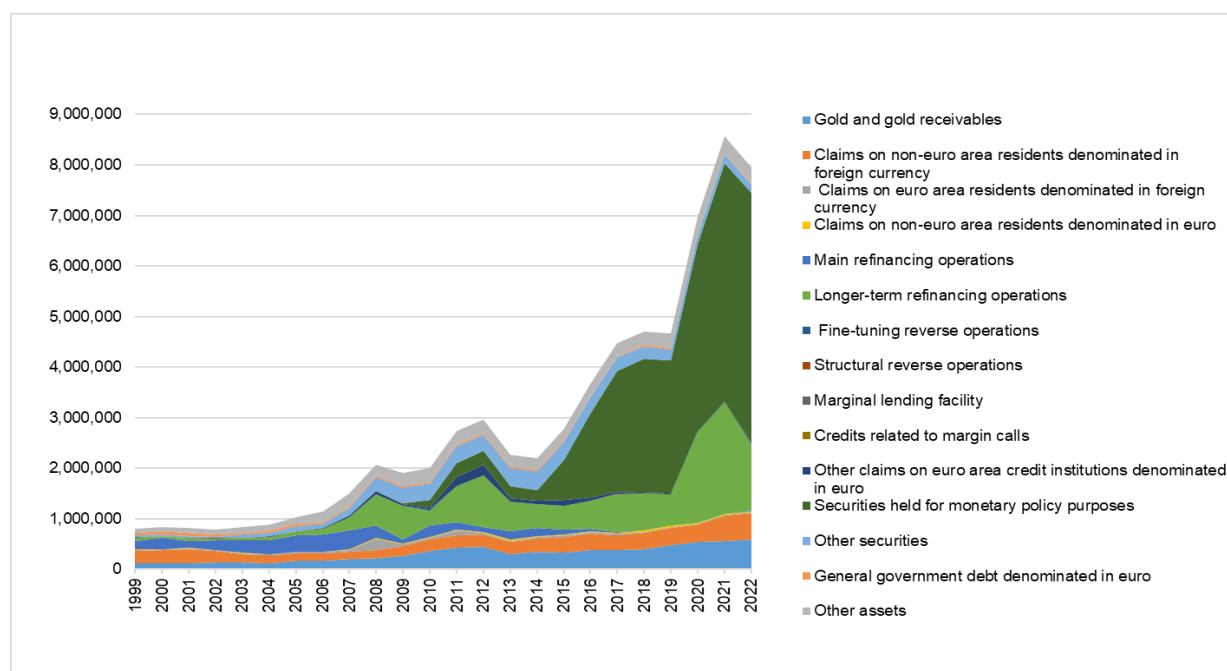


Figure 6. Government securities purchase programs

Source: [6]

The analysis has shown that quantitative easing increased the ECB balance sheet due to the impossibility of influencing economic trends through the interest rate mechanism. The period soon after the COVID-19 pandemic declaration brought a new increase in the balance sheet, almost double compared to the pre-COVID period. The structure of the ECB balance sheet shows that the increase in assets was to the greatest extent caused by longer-term refinancing, in particular by bonds purchased for the implementation of monetary policy. With this, pandemic bonds and their purchase program in ECB significantly helped liquidity management during the coronavirus pandemic.

## CONCLUSION

The coronavirus pandemic caused not only a health crisis, but also a financial crisis, which required a timely monetary policy response. Taught by the experience from the period of the global financial crisis, the European Central Bank, due to the inability to act through the interest rate channel, ensured liquidity by increasing the asset purchase program. The limitations of the existing programs necessitated the introduction of a special program for the purchase of public and private sector bonds in order to ensure the necessary liquidity of the financial sector under the COVID-19 conditions. This significantly increased the volume of the ECB's balance sheet assets.

The structure of the ECB's balance sheet shows the dominant share of longer-term refinancing, which increased the liquidity of the financial and economic system. In this process, the largest number of asset purchase transactions were made using government bonds. In order to avoid the monetization of the national debt, transactions were carried out only on the secondary market, and a part of the funds was redistributed by the ECB to national central banks. Although the pandemic was ended and the decision was made to suspend further bond purchases, the question about the long-term negative effects of the measures taken remains, reflected in the increased risk of possible inflationary shocks and hyperinflation due to the expansion of the central bank's balance sheet. Despite the end of the global financial crisis and the COVID-19 pandemic, the war between Russia and Ukraine and resulting geopolitical divisions create a new environment which will probably pose the need for a new adjustment of monetary policy instruments and central bank's actions.

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