CHAPTER 12

ECONOMIC AND FISCAL EFFECTS OF COVID-19 PANDEMIC: AN EVALUATION OF SELECTED COUNTRIES

Oytun Mecik, Ercan Bahtiyar and Mustafa Karabacak

ABSTRACT

Purpose: *COVID-19 pandemic is among the most important events of the 21st Century. Its global character and the multi-dimensional fallouts it has on communities worldwide further increase the importance of the pandemic. During the period of more than one year since the declaration of the pandemic, the communities failed to provide a lasting solution other than the face masks, social distance, and hygiene. Failure to fight the pandemic with considerable success subsequently raised the topic of revising the policymakers' previous predictions at the start of the pandemic based on incomplete information. So, the calendar put forward for the pandemic went forward day by day, and the authorities who failed to adopt a prudent approach were obliged to pay increasingly higher costs for their mistakes. In the chapter, the financial and economic effects of the pandemic in selected countries are examined. While examining the policies followed in these countries, in terms of fiscal stimulus packages and monetary expansion packages, it is aimed to shed light on the pandemic experience in the Turkish economy and to develop policy recommendations. Thus the persistence of the pandemic pushes all countries to update their current policies and seek new methods. This chapter aims to examine developed and emerging economies in the covid-19 era that have implemented policies to struggle with the pandemic and whose policy framework can be accessed.*

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Methodology: *To do this we carried out a literature review of the Economic and Fiscal Effects of COVID-19 Pandemic during 2020 and early 2021.*
Findings: *Countries like the United States, United Kingdom, and Germany are believed to have taken strong measures to minimize the damages on the economy due to the pandemic, while other countries like Russia, India, and Brazil are deemed to have mounded new policies within the framework of their internal dynamics. One should also note that, in addition to the individual efforts of each European country, the European Union has also played a decisive role in the policies of its member states for crisis management institutionally.*

Keywords: COVID-19 Pandemic; economic effects; fiscal effects; Turkish economy; policy implications; macroeconomics

1. INTRODUCTION

COVID-19 pandemic has taken its place in history as one of the most important events of the twenty-first century. It has no doubt become an agenda item that closely concerns all communities without exception across the whole world in recent years. Aside from the pandemic's becoming a health crisis from social life, its most peculiar character is becoming a milestone in the mid of the ongoing transition policies in the world from technology to economy, from education to healthcare, and from culture to culture migration. This is because several novelties developed worldwide before were very quickly applied in a setting created by the pandemic, while some other products, services, and customs that have become obsolete as they neared the end of their useful lives failed to complete the subject transitions.

The pandemic which caused a significant contraction in the global economy and posed many challenges for the governments worldwide, increased the gap between those in the best positions and those in the worst positions. The disparities grew to such an extent in this process that having access to the vaccine, income, education, basic needs, freedoms has started to be perceived as a privilege for all individuals in the society. Meanwhile, the understanding of social state and interventionist policies, which came to the fore during the global financial crisis but rapidly moved away on a global scale after the crisis, took their place on the agenda as an inevitable reality with the pandemic.

All countries across the world are also exposed to the financial and economic fallouts of the pandemic and its difficulties. That is why almost all countries are required to draft policies aimed at fighting the multidimensional effects of the pandemic. These policies, which are put into practice during the pandemic, reveal the government's management skills, just like the boat captain in a rough sea.

The financial and economic effects of the COVID-19 pandemic in selected countries have been studied in this chapter. The present study examines the policies of these countries from the viewpoint of their fiscal stimulus packages and monetary expansion packages as it aims at shedding light on the pandemic experience in the Turkish economy and formulating policy recommendations. This will enable deductions for policies that the policy-makers need to formulate on health and economic spheres directly concerning social life.

2. POLICIES TO FIGHT THE FINANCIAL AND ECONOMIC EFFECTS OF THE PANDEMIC

The world economy entered 2020 in a setting where the news of the new coronavirus that newly emerged in China in December 2019 was spreading each day despite so frequent outbreaks that were witnessed in the world history since the transition to the agricultural society and domestication of animals, absence of a pandemic experience that affected almost all of the world population (Varlık, 2020: 15) prevented the policymakers to instantly grasp the subject and take required measures as well as the economical actors to shape their future expectations. It took almost 3 months even for the World Health Organization to declare COVID-19 as a pandemic, and when it finally did, COVID-19 cases had spread to almost all countries across the world including Turkey.

Health policies were the first to come to mind at the initial phase following the declaration of the pandemic, while the discipline of 'public health' not much familiar for the societies and which is not among the well-known branches of modern medicine was remembered again (Kayı, 2020, p. 97). Producing solutions to an epidemic that concerns the general public in clinical branches means starting the race from several laps behind. In this period, a 'science committee' was established in Turkey, as in many other countries, by observing the fact that health policies should not be stuck in between the bureaucratic mechanisms and that these policies should sit on a scientific pillar. However, including only specialised academicians from clinical branches, and mainly 'infectious diseases' branches, to the constitution of these boards at the initial phase caused the board's recommendations to prove ineffective for the prevention of the pandemic. Therefore, it was impossible to accurately design the social policies of the pandemic even in the health context. Subsequently, the scope of the science board was expanded with the inclusion of the public health experts, and finally, a dysfunctional board was created with the name of 'social sciences board' as it failed to represent the disciplines related to society.

It can well be maintained that general tendencies such as the use of face masks, lockdown, social distance, and similar applications prior to the immunisation, in particular, are similar to one another in all countries across the world. However, with the start of the vaccination process, great differences started to emerge between countries, indicating that such cleavages may come about in the future. Aside from that, comparing the various social policy applications in Turkey with, for instance, Israel, the UK, and even with the post-Trump United States reveals dramatic differences. Although it is well-known that the pandemic would create high costs for countries and communities in various aspects, including mainly the healthcare efforts, policies pursued in this process would consequently determine the costs that countries will bear. Although developments on the subject of health are of primary importance, to speak from a purely financial and economic point of view, we can easily say that the negative effects of the pandemic on some countries were successfully mitigated thanks to the adoption of the right policies, while in some other countries these negative effects have become bigger due to the failure to impose the right policies.

The fight against the pandemic includes health measures on the one hand and economic measures on the other. Countries are trying to combat the pandemic, which caused both supply and demand-side shocks, with fiscal stimulus packages and monetary expansion packages while carrying out health practices including vaccines and treatment methods within clinical processes and public health and filiation studies at preventing the epidemic. Thus, nearly 10 years after the global financial crisis, there was a period when Keynesian solutions came to the fore again, and the words of economists regained their credibility. In this context, financial incentive packages and monetary expansion packages applied by selected countries to fight against the COVID-19 pandemic were examined under this title.

2.1. Fiscal Stimulus Packages

A series of financial aid packages with varying content and scope according to the countries have been announced under the measures taken against the COVID-19 pandemic to mitigate the difficulties faced by both the people and the employers including the tax postponing, bank guarantees, increase in the healthcare budget rent allowances, unemployment, and disability allowances. Starting from early 2020 when the fallouts from the pandemic were started to be felt, a major area the governments worldwide have focussed on the effect of the pandemic on the economy. Providing direct financial support both for enterprises and citizens through economic and social incentives without causing any increase in the financial burden of the governments and including the measures and incentives to protect the financial stability among the fiscal stimulus measures have become quite an important subject.

There are many methods for the incentive applications which can be described as direct support for the development of the country's economy. So, it is possible to see in a short time the positive results in the area where it is applied (Bahtiyar, 2019, p. 49). However, in the general sense of the word, these applications are used for the solution of two major problems in the economy. These are market deficiencies and public sector deficiencies. From the viewpoint of the pandemic, this situation may be interpreted as a major exogenous shock that can lead to market failure due to its effects on aggregate supply and aggregate demand and to the government's failure due to the growing costs on the budget and social security system (Koç & Yardımcıoğlu, 2020, p. 129).

Pandemic forced all countries to face the reality that they should take action to support the economy. Strong policy reply both on the national level and in the European context is said to have mitigated the effect of the subject crisis on the social and economic structure. However, public debt and budget deficits have increased quickly following the financial supports provided to the segments in need. Communiques of the European Commission (EC) provide guidance on coordination of the financial policies to be applied accordingly (EC, 2021a). The needed limitations under the 'Temporary Framework for State Aid Measures to Support the Economy in The Current COVID-19 Outbreak' have been laid down as updated by the EC in accordance with the laws and regulations of the European Union (EU) where the effects of the pandemic were considerably felt.

Member states were required to adopt a proper regulation within the framework of the fiscal aid law, which was developed for the fight of the members with these effects (EC, 2021b).

The preventive and incentive packages created within the framework of the margins laid down by the EC are put into practice in certain common areas in all member countries. The measures adopted by the EU within this framework have been categorised according to criteria other than (i) spending measures and (ii) tax measures, measures related to public guarantees, and the measures for providing financial support. Income and corporate tax payments were delayed in all the member states. There are also countries that delayed the payment of other types of taxes. On the other hand, aside from delaying the payments, almost all of the member states introduced options to the taxpayers to pay their taxes in instalments, though in different terms. Besides, they also offered provisional tax exemptions in some types of taxes for industries including mainly the ones directly influenced by the pandemic. Aside from the stimulus and prevention packages, following specific practices have been adopted in some countries in general (EC, 2021c):

- Compensation of the employers who suffered losses in their turnover in given industries through payments of the grants to a certain extent.
- Offering tax exemption for the donations to the health institutions.
- Reducing the penalties resulting from the late payment of the taxes, cancelling the penalties, or waiving the already imposed penalties.
- Contributing to or suspending the payment of the social security obligations in many industries.
- Introducing tax holiday for small-sized enterprises.

One of the major resources categorising the financial incentives provided on the subject is the IMF report summing up the practices and basic financial measures adopted in various countries to eliminate the effects of the pandemic. By categorising the measures and types of financial incentives with varying effects on public finance in the short term and thereafter startling from January 2020, the report gives information about the industries where the measures and types of financial incentives were implemented. Although these measures vary according to the specific conditions of each country, the sums of spending were shown as their ratio to the GDP of the relevant country. This allows for comparisons between economies (IMF, 2021).

The United States signed an economic stimulus package worth 1.9 trillion US dollars (USD) in January 2021 which accounts for 25.5% of the country's national income. The stimulus packages include direct cash support, housing, food and health benefits, as well as certain tax deductions. US Stimulus Plan, which was enacted in 2021, provides for the payment of USD 1,400 to each person as approved to possess the required conditions under the name of the economic support payment. Under the plan, which was announced as a Bill with an extensive scope on 3 January 2021, the economy was divided into segments, and required regulations have been drafted for both execution and supervision of the measures provided by the Bill. Sub-heading G of the said Law, supporting the economic security, provides that the intentions of the law would be realised by

offering direct payments and delaying or deducting the payment of the fines and taxes for the actors of the economy (US Congress, 2021). Coronavirus Aid, Relief, and Economic Security Act (CARES Act) which was introduced in March 2020 stipulates that each US citizen that conforms with the relevant conditions be paid USD 1,200 to support the American families and workers in the first stage of the process, while the first steps for easing some tax obligations were also taken under this Act (US Department of Treasury, 2021). In addition, while the United States has created an important fund for these incentive packages, it is seen that it has decided to end its contribution to the financing of the World Health Organization on the grounds that it failed to manage the epidemic crisis (Selen, 2020, p. 210).

Meanwhile, UK spared 16.3% of its national income for fighting the pandemic and its effects. Under the income support applications, many people who lost their jobs were paid some certain money. Germany, on the other hand, announced three separate fiscal stimulus packages with a value of 346 billion euros since the beginning of the pandemic. This represents 11% of Germany's national income. Introducing tax deductions, lowering the value added tax rate to promote consumption, and offering cash support to the people are among the measures taken to support the people economically (IMF, 2021). To prevent the liquidity bottleneck and re-arrange the capital structure of the Economical Stability Fund which was established by Germany to respond the pandemic; broad-scale cash support measures which are expected to reach 600 billion euro in total were prepared, 400 billion euro worth of liquidity guarantees were offered for corporate obligations, and 100 billion euro worth of measures to fortify the equity capital were the first packages identified in the process (Deloitte, 2020, p. 8) (Table 1).

It is seen that Russia spares only 4.3% of its national income for financial incentives. State subsidies and tax postponement for the worst affected industries by the pandemic are among the financial incentives used for this purpose. According to the said report, we see that India spent 3.3% of its national income on financial incentives. India provided aids in cash and aids in kind to some of its disadvantageous segments as well as tax deductions for the newly founded enterprises and incentives for foreign companies and opened credit support facilities to small enterprises. In Turkey, mainly cash support was provided to the employees of the industries affected by the process as well as the poor, while basic needs support and credit facilities were offered as part of the social support (BBC, 2021; IMF, 2021).

A stimulus package was announced by the Turkish government in March 2020 to help the citizens and businesses cope with the crisis, including a mixture of

Table 1. Financial Support Per Given Countries and Its Share Within GDP.

	EU	USA	Germany	India	Brazil	UK	Russia	Turkey
Additional spending and forgone revenue (Billion USD)	488	5,328	419	90	126	440	63	14
% GDP	3.8	25.5	11	3.3	8.8	16.2	4.3	1.9
Liquidity guarantees (Billion USD)	873	510	1,057	138	88	437	22	67
% GDP	6.8	2.4	27.8	5.1	6.2	16.1	1.5	9.4

Source: Adopted from IMF (2021).

financial support, credit support, and employment measures. The measures were aimed at implementing the policies needed to maintain the continuity of the business, while they also targeted providing credit access to the economic actors. The package provides at the initial stage that the government should – apart from delaying the payments – adopt policies like deduction in some tax rates and offering direct income support to the citizens suffering temporary job loss or with lower income levels (White&Case, 2020).

The lockdown measures taken throughout the country during the pandemic paved the way for a considerable number of problems for most of the countries. That is why the EC started legal works for establishing monetary rescue tools and a multiyear EU budget covering the years from 2021 to 2027 for the purpose of compensating the damages inflicted on the economy and the ensuing consequences of the pandemic (Deloitte, 2020, pp. 4–5). From a global perspective, direct budget support in terms of the financial measures up to the period including the first quarter of 2021 stood at USD 9.930 trillion. This amounts to 9.2% of the global GDP. However, one should bear in mind that a significant portion of this figure was provided in G20 countries (IMF, 2021).

Following figures prepared based on the IMF report published quarterly also clearly show the preference of each country from the viewpoint of the financial measures and the type of the incentives or the method adopted by the relevant country. Accordingly, one can easily maintain that the group of countries comprising mostly of the developed countries like the United States, New Zealand, Singapore, Australia, UK, and Germany have been more generous compared with other countries in terms of the additional spending and waived income to compensate the losses inflicted in their economies. The total sum of the spending and waived income is calculated to account for more than 15% of the national income of the said countries as of the end of March 2021 (Fig. 1).

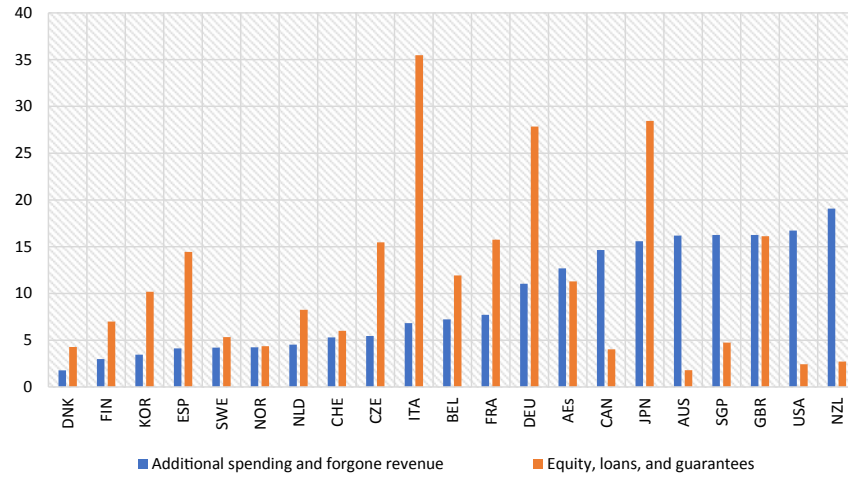


Fig. 1. Discretionary Fiscal Response to the COVID-19 Crisis in Selected Economies (1) (% of GDP). *Source*: Adopted from IMF (2021).

As for Figs. 2 and 3, we can see from that the ratio of the figures in the first two segments of the countries' applications to their national incomes is very low. In general, many countries have tapped both methods by making additional spending and providing liquidity support through various credit facilities or guarantees. In many countries including mainly Brazil and India, there are no significant differences between the two methods in terms of the ratio of the sum of the two methods to the national income, while what we see in Turkey is that the sum of

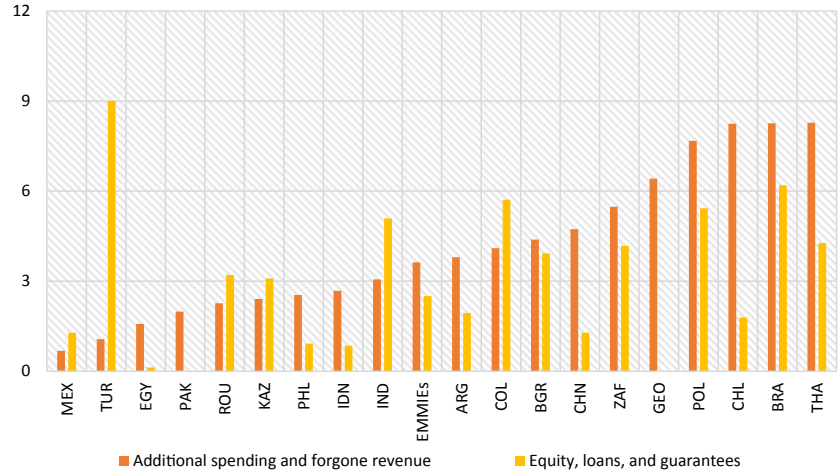


Fig. 2. Discretionary Fiscal Response to the COVID-19 Crisis in Selected Economies (2) (% of GDP). *Source*: Adopted from IMF (2021).

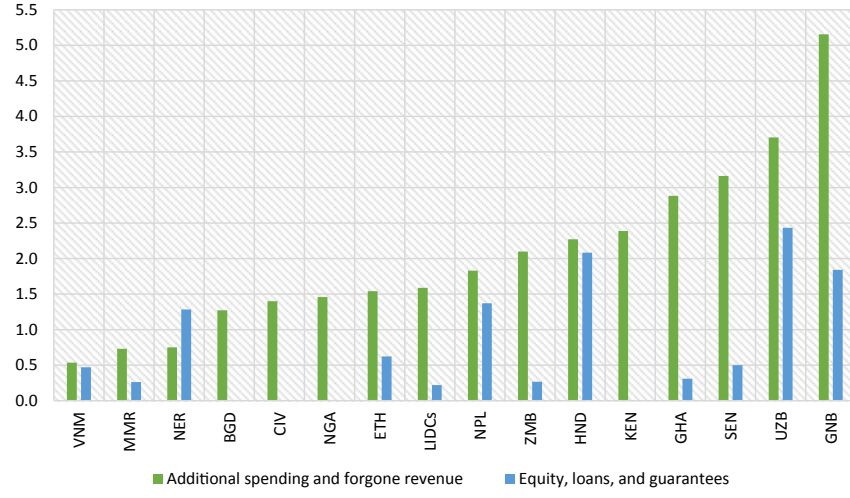


Fig. 3. Discretionary Fiscal Response to the COVID-19 Crisis in Selected Economies (3) (% of GDP). *Source*: Adopted from IMF (2021).

the measures as liquidity provided is quite below the sum of the additional spending made by the government.

2.2. Monetary Expansion Packages

While governments announce huge fiscal stimulus packages as part of the fight against the crisis created by the COVID-19 pandemic, central banks are providing new liquidity facilities with lots of zeros to sustain the economy. Countries are trying to protect public health via quarantine measures on the one hand and struggling to support economic activities as much as possible on the other (SETA, 2020, p. 53). However, the monetary policy's role, purposes, and tools during the pandemic crisis are, albeit not entirely new, quite distant from what has been perceived to this day, because, unlike previous crises, the current one did not emerge as a result of financial instabilities. It is entirely external and global in the real sense, not in the description, as opposed to the 2008 crisis (Borio, 2020, pp. 181–182).

Governments reacted with massive financial packages during this period, which is quite different from the previous turmoil, rapidly increasing public deficits and debts. In this period, which was quite different from previous crises, governments reacted with large financial packages, while public deficits and debts increased rapidly. The huge financing gap which emerged in a period of moderate inflation and near-zero interest rates in most countries, led some economists to think that there would be no harm in financing these deficits by the central bank through various methods (helicopter money and others) (Cukierman, 2021, p. 2).

However, during the pandemic, central banks in many developed economies led by G4 countries and emerging market economies preferred quantitative easing, which relies on asset purchases in large quantities and became an important policy tool during the 2008 crisis (Hartley & Rebucci, 2020, p. 2).

The main target of the monetary policy to be implemented is liquidity supply due to being the lender of last resort. Traditionally, liquidity is supplied through the banking system by purchasing securities owned by banks. By-passing the banks and purchasing securities issued by the private sector is also possible. Liquidity can be supplied to the public sector as well through the purchase of government bonds. Liquidity can even be supplied directly to non-commercial private entities through a method called 'helicopter money' from Friedman's (1969) supposition. The second pillar of the monetary policy is to take steps that will increase risk appetite in the markets and enlarge credit supply by relaxing macroprudential measures (Bonatti, Fracasso, & Tamborini, 2020, pp. 13–14).

The Turkish economy, which has a growth model dependent on international capital flows and is driven by the construction industry, was drifting into a foreign currency crisis even before the pandemic, in 2018, beginning with the Fed move in 2013 to end its monetary expansion and consequent political turmoil. International capital flows showed a negative trend for Turkey due to the impact of the crisis (Orhangazi, 2020, pp. 199, 210–211). 2019 was influenced by high inflation

carrying over from 2018. In the last quarter of 2019, when Turkey was beginning to contain the inflation, The Central Bank of the Republic of Turkey (CBRT) successively cut interest rates to revive the economy. Despite these initiatives, a sufficiently optimistic outlook could not be established (Eryuzlu, 2020, p. 11).

The CBRT's first response to the COVID-19 crisis was to cut its reference interest rate by 100 basis points, lowering the one-week repo rate from 10.75% to 9.75%, open additional three-month repo auctions, reduce the compulsory reserve requirement ratio to 5% for foreign currency reserves, announce that it would extend 60 billion Turkish liras of funds in rediscount credits and that it would meet banks' all liquidity demands. Furthermore, liquidity was provided to the unemployment fund in return for bonds it holds (TÜRMOB, 2020, p. 56). However, despite the expansion in liquidity facilities and the cut in the policy rate, some privately owned banks, particularly foreign ones, were seen shying away from lending to the non-financial industry during this period. To encourage lending by banks, the Banking Regulation and Supervision Agency (BRSA) altered the calculation method of asset ratio and applied a new regulatory ratio which was repealed at the end of 2020 to encourage banks to support the economy. BRSA tightened the maximum usage period of individual car loans and credit card instalment plans for purchases of certain types of goods in December. But it was observed that private banks turned to secure client bases that do not need extra funding and the government's domestic borrowing bonds and bills to circumvent this new regulation. These developments once again highlighted the importance of having a well-developed capital market for related institutions of the economy led by the CBRT to be able to supply funding to the non-financial industry directly. A financial sector that is based mostly on the banking industry has fallen short of responding to Turkey's needs for quite some time (IMF, 2020; SETA, 2020, p. 60).

It can be said that banks' lack of appetite for lending, their failure to fund the non-financial industry, and perhaps entrepreneurs' and investors' reluctance to invest during this period has in a way pushed the CBRT to follow a different strategy. The central bank moved to pursue monetary expansion, particularly employing open market operations from the moment the COVID-19 pandemic broke out. Thus, a dramatic increase was recorded in the CBRT's security assets during this period. The total amount of securities held by the CBRT jumped 463% in the second quarter of 2020, compared with the same quarter of 2019, as shown in the left column of Fig. 4.

Even though the Central Bank cannot directly buy domestic borrowing bonds and bills (GDS) issued by the government from the Treasury, there is no limitation on its purchases of these papers from the secondary market (banks), according to the related law. The reason the Central Bank is allowed to buy GDS on the secondary market is not to fund the Treasury, but to acquire the instruments that it can use in open market operations it will carry out to regulate liquidity. But the Central Bank raised its securities portfolio quickly during this time, going quite beyond its goal concerning open market operations (Eğilmez, 2020).

Money in circulation shown in the right column of Fig. 4 indicate a movement parallel to the picture in the left column. A growth similar to the dramatic

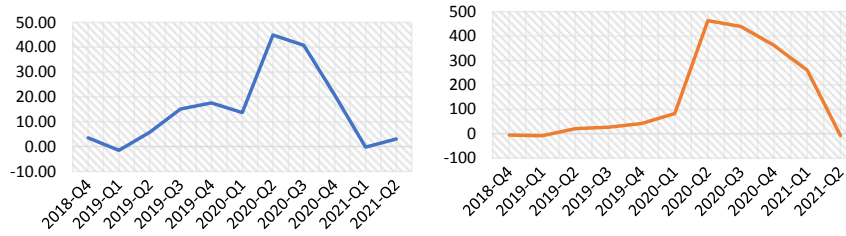


Fig. 4. Annual Percentage Change in Money in Circulation (Left Panel) and CBRT's Security Assets (Right Panel) in Turkey. *Source*: Prepared by authors using CBRT data. Retrieved from https://evds2.tcmb.gov.tr/index.php?/evds/serieMarket

increase in the securities portfolio was recorded in money in circulation in the second quarter of 2020, CBRT raised money in circulation by 45% during this period, compared with the same period a year earlier. Besides, it must be noted that money in circulation dropped by 1.57% in the first quarter of 2019 from a year ago.

Eğilmez (2020) says that the increase in the securities portfolio, which exceeds the goal of open market operations may be proof of the CBRT's efforts to indirectly fund the treasury. Indeed, the CBRT funds banks by buying government-issued domestic borrowing papers from them, and the banks which are already reluctant to lend and receive a serious level of funding as an incentive, again turn to buy domestic debt from the treasury. This means that in reality, the CBRT funds the treasury by printing money (seigniorage financing), as Cukierman (2021) predicted. But this type of funding is not direct and open as it was in the practice of short-term cash advances, which was repealed in 2001, instead it is carried out through an indirect way which is not so apparent at first glance.

It can be said that measures taken as part of monetary policy are aimed at sustaining the markets. However, masses who were negatively affected by the crisis were not directly targeted in this case. The measures taken by the Central Bank were tried to be supported through the banking industry, with public banks announcing a financial support package for businesses. This package which was aimed at small- and medium-sized enterprises, particularly included debt rescheduling, extending long-term loans with certain limits, support loans for cheque payments and restructuring facilities for certain industries. In addition, the Credit Guarantee Fund's limit was doubled, and enterprises' problems regarding collaterals were tried to be resolved. Financial support for inventories was also provided to relieve exporters (TÜRMOB, 2020, p. 57).

It was observed that the policies implemented led to a depreciation of more than 40% in the Turkish lira since the beginning of 2020. Although it can be argued that a competitive lira supports exporters by lowering their production costs, a weaker lira nevertheless threatens financial stability. Meanwhile, lira depreciation created a 1.5 percentage point upward pressure on the general level of prices and the currency's losses since the beginning of 2021 are predicted to have an impact of plus 5 percentage points on inflation by the end of the year. Even though the expected policy reaction from the CBRT was to raise interest

rates to reduce inflationist pressures, the bank chose to keep the rates low and use its reserves to tackle the lira depreciation. This preference of the CBRT intensified the economy's vulnerability against foreign exchange rate shocks. The lira lost 33.2% and 43% of its value against the dollar and the euro, respectively, in the year from October 2019 to October 2020 (Çakmaklı, Demiralp, Yeşiltaş, & Yıldırım, 2021, p. 10; Eroğlu, 2020, p.222).

Central banks in developed economies acted to overcome liquidity shortages and market freezes experienced in the early months of the pandemic by carrying out untargeted credit operations. The Federal Reserve, Bank of Canada, and Bank of Japan increased the amount and extended the maturities of repurchase agreements that were offered. The Fed also announced credit programmes targeting certain segments of financial markets. For example, the Fed extended loans to depository institutions in exchange for assets purchased from these funds and supplied loans to primary dealers against investment-grade debt to prevent funding difficulties for money market investment funds. It also reactivated the Term Asset-Backed Securities Loan Facility, which was first established in late 2008 to support the issuance of asset-backed securities (Cantu, Cavallino, De Fiore, & Yetman, 2021, p. 11) (Table 2).

Table 2. Quantitative Expansions During COVID-19.

Country	Central Bank	Country Date #	Date	Size	Type of Asset Purchase
Developed Markets					
USA	Federal Reserve	1	16/3/2020	700 Billion USD	Sovereign and MBS
USA	Federal Reserve	2	23/3/2020	Unlimited	Sovereign, MBS, and Corporate Bonds
UK	Bank of England	1	19/3/2020	200 Billion GBP	Sovereign and Corporate Bonds
Europe	European Central Bank	1	18/3/2020	750 Billion EUR	Sovereign
Japan	Bank of Japan	1	26/4/2020	Unlimited JGBs, 20 trillion yen incorporates	Sovereign and Corporate Bonds
Canada	Bank of Canada	1	27/3/2020	3.5 Billion CAD per week	Sovereign
Australia	Reserve Bank of Australia	1	19/3/2020	Unlimited	Sovereign
New Zealand	Reserve Bank of New Zealand	1	23/3/2020	30 Billion NZD	Sovereign
Sweden	Riksbank	1	16/3/2020	300 Billion SEK	Sovereign
Emerging Markets					
Israel	Bank of Israel	1	23/3/2020	50 Billion ILS	Sovereign
Korea	Bank of Korea	1	25/3/2020	Unlimited repos for three months	Repos
Colombia	Banco de la Republica	1	24/3/2020	12 Trillion COP	Sovereign
South Africa	South Africa Reserve Bank	1	25/3/2020	Unspecified amount	Sovereign

(Continued)

Table 2. (Continued)

Country	Central Bank	Country Date #	Date	Size	Type of Asset Purchase
Poland	Narodowy Bank Polski	1	17/3/2020	Unspecified amount	Sovereign
Poland	Narodowy Bank Polski	2	8/4/2020	Unspecified amount	Sovereign and State-guaranteed Bonds
Romania	Banca Nationalâ a României	1	20/3/2020	Unspecified amount	Repos and Local Government Bonds
Hungary	Magyar Nemzeti Bank	1	24/3/2020	Considering resuming its mortgage bond asset purchases	Sovereign and MBS
Hungary	Magyar Nemzeti Bank	2	28/4/2020	1 Trillion HUF in govt and 300 billion HUF in mortgage bonds	Sovereign and MBS
Croatia	Hrvatska narodna banka	1	3/2020	Unspecified amount	Sovereign
Philippines	Bangko Sentral ng Pilipinas	1	24/3/2020	300 Billion PHP	Sovereign
Mexico	Banco de Mexico	1	4/2020	100 Billion MXN	Sovereign and Corporate Bonds
Turkey	CBRT	1	31/3/2020	Unspecified amount	Sovereign
India	Reserve Bank of India	1	20/3/2020	400 Billion INR	Sovereign
Indonesia	Bank Indonesia	1	1/4/2020	Unspecified amount	Sovereign

Source: Adopted from Hartley and Rebucci (2020).

Whereas, in Europe, the European Central Bank did not make a new rate cut as it had already lowered interest rates to zero on a large scale. Also because it was pursuing an expansionary policy at the time, rate cuts in the EU were confined to some countries' partial reductions outside the Eurozone (Elgin & Yalaman, 2020, p. 385). The European Central Bank's interventions began with Asset Purchase Programs (APP). It decided that the purchases would start with an initial monthly amount of €20 billion and reach €120 billion by the end of 2020. Subsequently, it announced the Pandemic Emergency Purchase Programme (PEPP), which was initially planned to total €750 billion but was later enlarged to reach €1.85 trillion by the end of 2022. Purchases within the PEPP are seen to have reached €1.02 trillion as of April 2021 (Rakic, 2021, pp. 2–3).

The ECB's response to the pandemic started with the €120 billion APP and continued with other packages that followed suit. As part of the Targeted Longer-Term Refinancing Operations, which was prepared to support the real economy, the interest rate was lowered to −0.5% and maturities of existing loans were effectively changed through bridging liquidity operations offered to the banks until the end of June 2021. Later, an additional €750 billion Pandemic Emergency Longer-Term Refinancing Operations was established. Non-financial commercial papers were also included within the scope of the Corporate Sector Purchase Programme (Cantu et al., 2021, p.11; ECB, 2020). The increase in the ECB's money in circulation during this period can be seen in the Fig. 5.

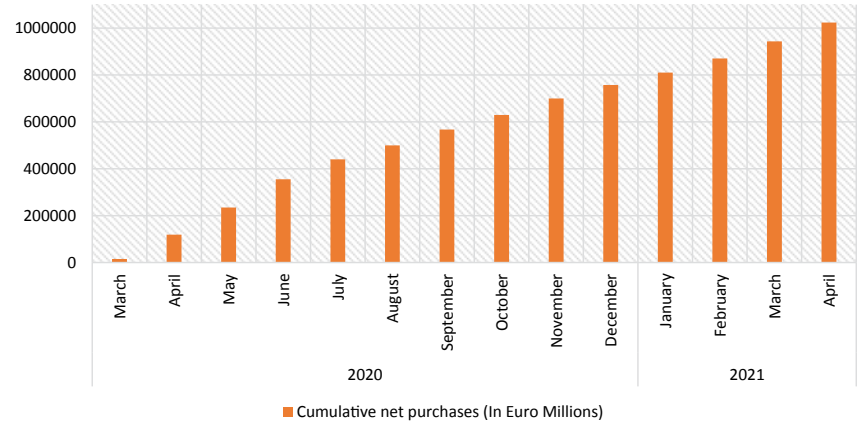


Fig. 5. History of Monthly Net Purchase under PEPP. *Source*: Adopted from Rakic (2021).

Fig. 6 shows how the money in circulation rose while the ECB continued its purchases under PEPP and APP during the course of COVID-19. The sharp increase in money in circulation, as shown in the figure, follows a trend that is parallel to the one recorded in Turkey.

During this period, The Bank of England and Bank of Canada, activated their Contingent Term Repo Facilities in 2014 and 2015, respectively, for the first time since their establishments, and they extended the maturities of credit operations via repo facilities with maturities of up to two years (Cantu et al., 2021, p. 11).

In the United States, inflation slowed considerably due to the impact of the COVID-19 pandemic, remaining under the 2% target. While the importance of inflation data was magnified after the Fed unveiled its new monetary policy strategy in August 2020, it was announced that the US central bank would target average inflation of 2%. But because of the pandemic, inflation followed a slower

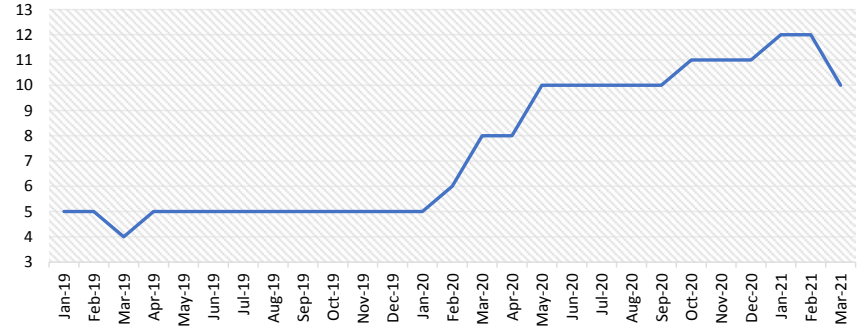


Fig. 6. ECB's Money in Circulation (Annual, % Change). *Source*: Prepared by authors using ECB data. Retrieved from https://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=117.BSI.M.U2.N.V.L10.X.1.U2.2300.Z01.E

trend, remaining quite below the Fed's target. The annual inflation rate, which was 2.3% in February 2020 before the pandemic, dropped to 1.5% in March, 0.3% in April, and 0.1% in May. After the measures to fight the pandemic were relaxed, businesses started to reopen and the economy began a gradual normalisation in June, the annual inflation rate staged an upward trend, rising to 0.6% in June, 1% in July, 1.3% in August, 1.4% in September, and 1.2% in October and November. The Fed forecasted an inflation rate of 1.2% for 2020, 1.8% for 2021, 1.9% for 2022 and 2% for 2023 (TOBB, 2021).

As for its monetary policy actions, the Fed activated old and new policy tools to sustain the functioning of financial markets, cut interest rates to zero, and started an unlimited monetary expansion. It made a surprise rate cut on 3 March amid growing worries, lowering its policy interest rate by 50 basis points to the range of 1–1.25%. It announced a second emergency rate cut on 15 March, reducing the policy rate from the range of 1–1.25% to the range of 0–0.25% and started a monetary expansion of 700 billion dollars. To provide liquidity guarantees for the dollar and ensure the supply of dollar liquidity on a global scale, the Fed established swap lines with 14 major central banks of the world and lastly extended these lines to September 2021 The bank also announced a series of measures, including unlimited asset purchases to support the economy on 23 March and unveiled credit programmes to provide up to $2.3 trillion in loans on 9 April. The Fed's Federal Open Market Committee emphasised after its last meeting of 2020 that the path of the economy will depend significantly on the course of the virus, adding that the health crisis will continue to weigh on economic activity, employment and inflation in the near term and pose considerable risks to the economic outlook over the medium term. The bank also signalled that its asset purchases will continue, and there won't be changes in interest rates until 2023.

3. TURKISH ECONOMY'S PANDEMIC EXPERIENCE AND POLICY SUGGESTIONS

Turkey was also faced with the question of prioritising health or economy over the course of the pandemic, just like all countries were. Even though developments in the field of health are of primary importance, the evolution of the pandemic into a situation where the wheels of the economy turn sluggishly pushes policy-makers into a difficult dichotomy.

Turkey is not only a country that prioritises economic developments and thus cannot preserve the balance between health and economy during the pandemic, but one that has already lost its ability to fight the pandemic in the economic sense even before it broke out because of the relatively poor performance in its general macroeconomic outlook. Thus, the Turkish economy displays an outlook with accelerating inflation accompanied by a sharp rise in unemployment during the pandemic, even according to officially released figures, although the country's official statistics are a subject of high controversy. On the other hand, the lack of decisively and steadily implemented health policies has led to unnecessary prolonging and recurring pandemic conditions which require social isolation.

This situation multiplies the projected cost of the pandemic and the total amount of financing needed (Demiralp, 2020, p. 203).

The biggest and constant shortcoming in support packages announced for the Turkish economy since day 1 is the lack of a serious resource transfer to those who lost their jobs or income. It is not possible to get the wheels of the economy running again without providing comprehensive support. The overall enlargement of the announced packages as well as their expansion to provide resource transfers to those who cannot go to work, have to take unpaid leave, and have lost their jobs may be recommended. Proposing solutions only for registered activities in a country like Turkey where the informal economy is relatively widespread, means to completely disregard the dramatic picture in the informal area on an issue that affects and concerns the whole of society. Therefore, solutions that include those working in informal areas should be put on the agenda (Demiralp, 2020, p. 197). Moving forward, the living conditions of these segments, which constitute the vulnerable segment of the society will deteriorate in all respects, and their debt ratios will climb (Tekeli, 2020, p. 85). It will come as no surprise if this situation leads to avalanche-like consequences in other social areas. The increase in the share of jobs needed to fight the pandemic among professions has also negatively affected the wages of the people working in these jobs when compared to the pre-pandemic period. These segments which comprise a significant part of the labour market should be included in income support measures during and after the fight against the pandemic (Meçik & Aytun, 2020, p. 22).

Separating quantitative expansion from monetisation which leads to inflation is inevitable for creating a successful monetary policy alternative for the Turkish economy. However, it is quite difficult to make this separation in countries where price stability is not fully established and central bank credibility is weak (Demiralp, 2020, p. 201). The Turkish economy not being so fortunate this time as it was during the global financial crisis and facing a once-in-a-century pandemic, amid relatively adverse macroeconomic dynamics, public sector budget deficit is relatively high and fixed capital investment performance is declining, also renders possible policy actions against this crisis quite ineffective (Voyvoda & Yeldan, 2020, p. 209). Perhaps the most important characteristic of Turkey in the course of the pandemic is that the cost of the fight against the pandemic is mainly borne on the banking sector because budgetary flexibilities cannot be exercised sufficiently, limiting the resources provided through fiscal policy. Despite the growing income inequality reflected on the society, such an implementation can meet the financing needs of producing segments in the short term, however, it will jeopardise the durability of the finance industry (Günçavdı, 2020, p. 287).

It is quite difficult to achieve a significant recovery performance in the economy with policy measures that are inadequate both in terms of quality and quantity to fight the pandemic in an environment of sharp economic contraction caused by the pandemic in the global economy. The worsening macroeconomic outlook in recent years presents a structure of accelerating capital outflows, current account surplus once again turning into deficit, heavy pressures on foreign exchange rates, growing vulnerabilities in every area, rising budget deficits, a strong upward trend in inflation (which is expected to continue in light of producer prices),

high unemployment rates which are only partially reflected in official figures and environmental destruction continuing at a fast pace despite the harsh realities brought on humanity by the pandemic, all of which is accompanied by poverty (Aydoğuş, 2020, p.249). Although all of these are issues that need to be addressed through economic policies to be developed in Turkey, it is not possible to find solutions easily amid conditions of progressive deterioration in institutional structures (Çolak, 2020, p. 309).

4. CONCLUSION

The pandemic broke out at a time of accelerating transformations in the global economy and the inability of some countries to respond appropriately to these transformations due to their structural problems. Heavy debt burdens and trade wars waged by countries added to the unstable growth that has been going on in the world economy since the global financial crisis, creating a process that will be recorded in history books. While countries are trying to bear the unfavourable economic conditions and high costs of the pandemic from an economic perspective, inequalities in the social arena have gradually widened, and seeds that will set the ground for even greater inequalities in the future have been planted. These developments were met with a growing populism in the political arena. This in turn paves the way for non-scientific or post-truth methods of solution, besides the solutions written in books.

The global economy faces a significant contraction because of the pandemic, which also had various fiscal and economic impacts on countries. It must be known that in such an environment, it is not possible to apply vastly different methods to compensate for economic troubles induced by the pandemic, although the size and content of financial incentives provided in addition to the measures taken by each country are different. In this context, the economic level of a country is an important indicator, and appropriate measures should be implemented promptly. It is seen that many countries have resorted to similar measures when assessed according to their levels of development. However, when these measures and incentives are to be evaluated in terms of their success, it can be viewed in reports published by international institutions that through appropriate measures, some industries escaped lightly from the effects of the crisis particularly in the EU countries or developed economies, although the process continues. In addition, measures and incentives that are not aimed to directly compensate for the effects of the crisis render government expenditures made in this direction ineffective.

Unlike other crises, this one emerged as the result of an external impact outside the dynamics of the economy, forcing central banks to use unconventional methods. Hence it led central banks to turn to methods such as seigniorage financing, which can be considered adverse in terms of monetary policy. This crisis directly impacted the real economy and services industry, as opposed to shocks in previous crises, which were observed to generally affect the banking sector and other financial institutions first. Therefore, liquidity-providing policies followed by all central banks could not be implemented solely through the injection of liquidity

into the banking system as before and were expanded to facilitate the purchase of non-financial commercial assets, making liquidity transfer to households and companies easier. During this period, central banks injecting liquidity through methods normally considered a taboo due to their inflationary effects reminded the practice of 'helicopter money'. In this context, although developed economies and emerging market economies were seen pursuing similar policies, the results of these policies are seen to be quite different for the two groups. Because in the period prior to the pandemic, developed economies were in an environment of lower interest rates and moderate inflation while emerging market economies did not have the same conditions. The fact that the slowdown in production prompted by the pandemic was also met with shrinking demand, reduces the probability of inflationary pressures arising in economies. However, emerging market economies already being in an inflationist environment and their dependence on capital flows, when combined with their vulnerability to foreign exchange rate volatility, caused the implemented policies to create new predicaments in some economies instead of reducing the negative effects of the crisis. For example, expansionary policies pursued early in the crisis fuelled inflationary pressures, worsened foreign exchange rate volatility in Turkey, caused the lira to lose almost 40% of its value. As a result, the CBRT had to abandon its expansionary policies and make sharp upward adjustments in its interest rates.

Turkey, just like all countries, struggled to find an answer to the question of whether to prioritise health or the economy during the pandemic. The Turkish economy's pandemic experience has dragged policy-makers into a quite difficult decision-making process because of the negative macroeconomic outlook before the pandemic. This situation was combined with the confusion of policy-makers over whether to follow the guidance of science or politics, so nearly one year into the pandemic, the society's dissatisfaction increased sharply with regard to areas of both health and economics. It is understood that opportunities to fight the effects of the pandemic in the Turkish economy do not show any diversity amid existing macroeconomic conditions. Therefore, keeping the recommendations at a basic level, it can be said that income transfers should be the practices to be resorted to in the short term and rights-based practices prioritising social welfare and peace, such as basic income system and family insurance for the long term. Moreover, implementation of excessive incentives carried out within the framework of equity and credit support instead of direct additional expenditures or income waivers are likely to create a problematic result in terms of effectiveness in the long term.

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