

---

# **STABILIZATION ROLE OF THE MACROECONOMIC POLICY DURING THE COVID-19 CRISIS**

---

**Veniamin P. Todorov<sup>1</sup>**

*<sup>1</sup>University of Economics – Varna, Bulgaria*

**E-mail:** *1vntodorov@ue-varna.bg*

**Abstract:** The article presents an analysis of the role of macroeconomic stabilization policy during the economic crisis caused by the COVID-19 pandemic. The analysis covers both monetary and fiscal policy using data on macroeconomic activity, inflation, the severity of restrictive measures, the level of uncertainty, the degree of financial stress on the financial system, etc. It tests two hypotheses formulated as follows: Hypothesis one is that considering the specific characteristics of the COVID-19 exogenous shock, there was a need for a quick and decisive response by means of a macroeconomic stabilization policy. The second hypothesis asserts that expansionary macroeconomic policies played a key role for the recovery of the economies from the COVID-19 recession and their subsequent growth. Both hypotheses are confirmed.

**Keywords:** macroeconomic stabilization policy, monetary policy, fiscal policy, COVID-19 exogenous shock.

This article shall be **cited** as follows: **Todorov, V.** (2023). Stabilization Role of the Macroeconomic Policy during the Covid-19 Crisis.. *Economic Archive*, (3), pp. 63-78.

**URL:** [nsarhiv.uni-svishtov.bg](https://nsarhiv.uni-svishtov.bg)

**DOI:** <https://doi.org/10.58861/tae.ea-nsa.2023.3.05.en>

**JEL:** E32, E52, E62, E63.

\* \* \*

## **Introduction**

**T**he unexpected outbreak of the COVID-19 pandemic and the impact it had on macroeconomic activity and business cycle dynamics have raised many questions in terms of business cycle dynamics and the management of such crises. One of the main questions concerns the macroeconomic

policy and, more specifically, how the stabilizing role of monetary and fiscal policy should be considered during an exogenous shock.

The presented research analyses the role of macroeconomic stabilization policy during the economic crisis caused by the COVID-19 pandemic. The analysis covers both monetary and fiscal policy. Regarding the fiscal policy, the analysis was carried out using data from the European Central Bank (ECB), the Federal Reserve, the Central Bank of the United Kingdom, the Reserve Bank of Australia and the Canadian Reserve Bank.

Such a retrospective analysis can only be carried out after a certain period of time because we have to be able to review the specific situation and formulate a fly-on-the-wall assessment of what has happened. Presently (as of June 2023), the official end of the pandemic as a public health threat has already been declared. This was done by the World Health Organization on May 5, 2023, which provides a good horizon for a more general assessment of the role of macroeconomic stabilization policy.

The analysis aimed to test two hypotheses formulated as follows:

- **Hypothesis 1.** Considering the specific characteristics of the COVID-19 exogenous shock, there was a need for a quick and decisive response by means of a macroeconomic stabilization policy.

- **Hypothesis 2.** Expansionary macroeconomic policies played a key role for the recovery of the economies from the COVID-19 recession and their subsequent growth.

The analysis uses data on macroeconomic activity, inflation, the severity of restrictive measures, the level of uncertainty, the degree of financial stress for the financial system, etc. It covers a number of economies, including the United States, the Eurozone, Australia, Canada, the United Kingdom, etc. and is based on empirical research covering a wider range of countries.

## **1. Possible explanations regarding the stabilization of the economies after the COVID-19 exogenous shock**

After its unexpected onset, the exogenous shock of COVID-19 had a serious impact on macroeconomic activity and changed the direction of the business cycle. After a period of an economic boom, the economies of the Eurozone and the USA entered a period of recession in the first two quarters of 2020..

Changes in the short-term macroeconomic equilibrium led to a decline in real GDP. Eurostat's seasonally adjusted data on balanced production for the first quarter in the Euro area showed a decrease of 3.4% compared to the

previous quarter. In the second quarter it was rather more prominent and amounted to 11.5%.

At the same time, the seasonally adjusted data of the US Bureau of Economic Analysis provide insight into the processes in the US economy. There, the decline was 4.6% in the first quarter. For the next three months, equilibrium real GDP shrank by the extraordinary 29.9%, which was the largest decline for the US economy for nearly a century. Such a quarter-on-quarter decline in macroeconomic activity was observed neither during the 2007-2009 financial crisis, nor following the dot-com bubble or the rise in oil prices in the 70s and 80s, nor even during the Second World War.

Thus, the analysis of the data leads to the conclusion that the COVID-19 recession is very deep. At the same time, the further analyses of the data show that it is not long-standing because an inflection point was once again passed and a process of *recovery of economic activity* began shortly. In the second half of 2020 and 2021, economies returned to positive real output growth. A faster recovery was reported for in the US economy with an increase of 35.3% in the third quarter of 2020, 3.9% in the fourth and positive values in all 2021 quarters. In the Euro area, macroeconomic activity recovered at slower rates – by 12.4% for the third quarter of 2020 and with almost no change in the next two quarters. In Q2 of 2021, the change was already by 2% and trend remained positive beyond this point.

It should be noted that the return of the business cycle to an upward dynamics does not mean that the impact of the SARS-CoV-2 pandemic has been completely eliminated. The reverse in the dynamics of the business cycle means that the main part of the short-term negative impact of the pandemic has been overcome, although not to an extent that allows us to conclude that the impact on macroeconomic activity, which would have been higher without these impacts, has been completely eliminated.

The positive change is visible not only from the overall data, but also from the specific indicators related to households and companies. A more detailed analysis is beyond the scope of the present study but here we can summarize some overall observations.

- Official data from Eurostat and the Bureau of Economic Analysis shows that for the fourth quarter of 2020, compared to the last quarter of 2019, there was no major change in wages. Thus, despite the negative initial shock, household incomes were more or less protected.

- The same is valid for corporate incomes. The operating surplus, which is included in the calculation of GDP, did not change much on an annual basis.

- In addition, there is no increase in the number of bankruptcies - something that was seen as a serious threat and seemed highly likely at the

beginning of the recession. OECD data (2021) shows that in many OECD economies there was even a decrease in the number of bankruptcies. Some studies have proved this fact as well. Collins-Thompson (2021), for example, states that in the initial months of the recession the number of bankruptcies in the US economy increased, but then fell and there was no increase overall for the year.

This leads to the question of what are the possible explanations for the stabilization of economies after the COVID-19 exogenous shock. Generally, there are *two alternatives* and as concepts related to the business cycle and macroeconomic equilibrium dynamics, they are not new.

*First*, the economic recovery in 2020 and 2021 could have been the result of the *automatic adjustment mechanisms* that are part of the macroeconomic system.

*Second*, the main cause for the recovery processes could have been the *macroeconomic stabilization policy*.

The first explanation assumes a freely functioning macroeconomic system based on flexible markets that can absorb negative effects and overcome them. Is this a reasonable explanation regarding the COVID-19 exogenous shock? Is this the logical reason why the dynamics of the business cycle changed and the negative trend of macroeconomic development became positive in the short run?

On the one hand, the concept of an intrinsically stable macroeconomic system, which has the mechanisms to adjust and self-regulate itself, is highly debatable. There is much evidence to the contrary, which gives reason not only to J. Keynes, but also many other researchers after him to argue that this is not true.

On the other hand, the emergence of a macroeconomic healthcare shock caused the economies to freeze. In this regard, the impact of the pandemic was observed in two aspects. First, in the direct health effects - the change in the behaviour of the healthy workers to prevent infection, the reduction of working capacity of infected workers, the reduction of the workforce due to the lethal outcome of the disease in some cases. The second aspect are the various measures to contain and control the waves of spread of the infection. Their restrictive effect on economies during the COVID-19 pandemic was manifested as extreme difficulties for the normal operation of the economic systems that affected not only production but also all other economic activities related to household demand and supply.

If we assume that the macroeconomic system has mechanisms for automatic recovery from healthcare shocks, then the exogenous factors should no longer be present in order for the automatic stabilization processes to take place.

In order to test this hypothesis, we can analyse various indicators directly related to health. In order not to shift the focus of the study, here we shall mention two key factors - the number of newly infected patients on a daily basis and the excess mortality. According to the official information of the World Health Organization (WHO), the highest numbers of daily infections were not reported in the first half of 2020 but after that period and throughout the first half of 2022 (World Health Organization, 2023).

In terms of mortality, the first two quarters of 2020 were also not exceptional compared to the following quarters up to and including the second quarter of 2022. Mortality rate is an appropriate indicator because it gives a clearer picture of the impact of the COVID-19 pandemic by representing the difference between the observed mortality rates and rates considered normal based on historical data. The Economist database (2023) shows, in terms of information comparable across many countries, that subsequent excess mortality is comparable and even sometimes higher than the rates in the first half of 2020.

This leads to the **conclusion** that *it cannot be proved that health effects were severe only at the beginning of the pandemic and that economies were able to recover only when they were mitigated* as such a claim does not correspond to the empirical data.

Regarding the second aspect - restrictive response measures – we need a measure of their stringency in individual countries. Such a measure was compiled by a group of researchers from the University of Oxford (Hale et al., 2021) under the name of COVID-19 Stringency Index. It summarizes the stringency of lockdown measures in terms of 9 metrics: school closures; workplace closures; cancellation of public events; restrictions on public gatherings; closures of public transport; stay-at-home requirements; public information campaigns; restrictions on internal movements; and international travel controls.

The index takes values between 0 (0 = lack of restrictive response) and 100 (strictest response) (Hale et al., 2021) and is calculated on a daily basis. Data for some key economies, such as the USA, Italy, Spain, Germany, France, the Netherlands, and Greece can be compared. The response in Bulgaria can also be compared as data for our country is available and can further expand the scope of the analysis.

Assuming that a value below 40 indicates relatively less strict response, we can check when the index for any given economy falls permanently (i.e. for at least two consecutive months) below this threshold. The comparison shows that for all the economies stated above, without exceptions, the defined condition is met only in 2022 and not before that.

Therefore, our **conclusion** is that *it cannot be proved that the strictest restrictions were in the first half of 2020 and their easing led to a change in the phase of the business cycle*. The reason for the reversal of the dynamics of the business cycle is not the easing of restrictive measures.

Obviously, exogenous constraints on the macroeconomic system are present for an extended period rather than just for the duration of the COVID-19 recession. This is true both for health effects and for the measures to contain and control waves of contagion. Thus, the analysis leads to the following **general conclusion: The change in the dynamics of the business cycle and the transition to a phase of recovery and upswing is not due to the easing of exogenous constraints and the triggering of automatic adjustment mechanisms of the macroeconomic system.**

The logical conclusion from this finding is that the macroeconomic stabilization policy should be considered the main drive of the recovery processes. In the absence of opportunities for market flexibility in the conditions of externally set barriers, the stabilization role of monetary and fiscal policy during the COVID-19 crisis is paramount.

This logical conclusion is confirmed by empirical studies. Heimberger (2023) uses data for 28 advanced economies and argues that fiscal policy during the pandemic was countercyclical. Chudik et al. (2021) apply a threshold-augmented Global VAR model to 33 countries, the results of which suggest that fiscal policy had a key role in mitigating the effects of the COVID-19 exogenous shock.

Deb et al. (2021) analysed data for 52 economies and concluded that the implementation of various fiscal policy measures stimulated economic activity, increased confidence and reduced unemployment. Haroutunian et al. (2021) examined fiscal expansion in the Euro area countries and found evidence of its stimulating effect.

Carvalho et al. (2021) modelled data for 45 countries and estimated that for every 1% increase in public spending there is a 1% increase in economic activity. Based on specific macroeconomic modelling, Gourinchas et al. (2021) estimated that, globally, fiscal policy offset 8% of the decline in output. Di Pietro (2020) estimated that fiscal stimulus in Italy reduced the negative impact of the pandemic on GDP by 25%.

Feldkircher et al. (2021) used a mixed frequency VAR model with data on industrial production, unemployment, inflation, stock prices, interest rate spreads, etc. regarding the effectiveness of the Federal Reserve's monetary policy during the COVID-19 pandemic. The results show that monetary policy resulted in an increase of output and stock prices, an improvement of long-term financing conditions, and a depreciation of the US dollar.

The Bank for International Settlements published a collection of 21 studies, each dedicated to a specific country, and analysing the interaction between monetary and fiscal policy during the pandemic (Bank for International Settlements, 2022). The studies show that this interaction has led in individual countries to a positive effect on macroeconomic activity, having a key role in overcoming recession.

## **2. Macroeconomic policy and the specifics of the COVID-19 economic shock**

The unexpected occurrence of the COVID-19 exogenous shock placed the heavy burden of making concrete action strategy decisions on the macroeconomic policy. The core of these decisions was the choice between an active or passive strategy. Active policies implies that the monetary and fiscal policy should play a stabilization role. In our case this had to be implemented as an expansionary monetary-fiscal mix.

The key question is to what extent one can talk about the necessity and justification of such a direction of the macroeconomic policy, which is also related to one of the hypotheses formulated at the beginning of the study. In order to answer this question and test the hypothesis, we have to define the characteristics of the crisis and the environment in which it occurs.

The term *exogenous shock* is of utmost importance for this endeavour. Unlike many other crises, the one that began in March 2020 was not the result of successive economic processes. It was not the result of a natural process of evolution of the macroeconomic system. The COVID-19 pandemic cannot be characterized as a cause of “creative destruction” the way Joseph Schumpeter defines this essential systemic feature in the context of evolutionary economic development, i.e. when the macroeconomic system operates inefficiently, crises are considered to have remedial effect as they have the potential to improve the efficiency of economic agents and the efficiency of economic activity in general.

In the case of the COVID-19 crisis, the cause is external to the economic system, and, therefore, the implementation of a macroeconomic stabilization policy cannot be seen as an obstacle to the natural process of correcting the direction of economic initiatives that would either make the inefficient economic entities improve their economic results or go out of business. Since the shock is exogenous, this crisis does not represent a creative destruction or a need to “purge” the economies that could possibly be prevented by fiscal and monetary policy intervention..

Added to this is the aforementioned *inability of the macroeconomic system to adjust automatically*. The externally imposed stalling of economies due to what is happening in the healthcare sector and the associated restrictive measures is something that requires the implementation of an active stabilization policy as an alternative.

In the conditions of the exogenous shock of COVID-19, we needn't eliminate the ineffective endogenous causes of the crisis but *protect the efficient economic agents*. At the onset of the crisis, there are many businesses in the individual economies that, from an economic point of view, have done what they must over the years to operate successfully, have invested quite a lot in their development and their activity is useful. On the other hand, the barriers put in place during the pandemic are "unnatural" for the macroeconomic system. During this period, they risk not only to lose certain well-performing firms, but also to face some more serious overall negative effects in the long term, leading to a reduction in production potential – i.e. long-term "scarring effects".

Another aspect is related to incentives and stems from the theory of asymmetric information, according to which one of the main problems in economic activity is the moral hazard. Economic agents that do not have to face the consequences of their inefficient decisions and actions will be motivated to keep acting as they do. The possible implementation of an expansionary monetary and fiscal policy would provide help for such economic agents instead of doing something more useful – let them modify their behaviour according to the negative consequences. In other words, negative effects need to be experienced rather than spared. Protecting inefficient agents would create incentives to further increase inefficiency in the economy.

However, in the conditions of the COVID-19 crisis, such logic does not apply because the crisis is not the result of accumulation of imbalances and inefficient activities of the economic agents, i.e. *the macroeconomic policy aimed at overcoming the COVID-19 shock does not imply a moral hazard*. Its being referred to as a hazard is justifiable when analysing macroeconomic policy problems such as the too-big-to-fail policy. The engagement of the government and the central bank to bail out large inefficient enterprises (both in the financial and the non-financial sectors) can lead to serious negative effects for the economy, including crises. According to some researchers, for example, this was the main cause of the Korean crisis in 1997. In the case of the COVID-19 shock, such a risk did not exist, since there was no protection of inefficient or "faulty" companies causing problems for the economy but the business entities were protected from effects that had originated outside of the system. Thus, the case of the pandemic does not imply a moral hazard and distortion of incentives when taking measures to protect the economy.



Another aspect to consider is the level of uncertainty as a fundamental element of the macroeconomic environment. It can be evaluated using certain market indices, such as the CBOE Volatility Index of the Chicago Stock Exchange (Chicago Board Options Exchange, CBOE) known as VIX as well as the based on trading on the Eurex Exchange trade index EURO STOXX 50 Volatility Index traditionally denoted as VSTOXX. On February 20, 2020, the former had a value of 17.08 and the value of the latter was 15.75. On March 13, these values were already 82.69 for VIX and 85.62 for VSTOXX.

This indicates an extremely rapid and large increase in the level of uncertainty in the American and European economies. The exogenous shock was completely unexpected, the economic agents were unprepared, what was happening was beyond their expectations, the outcome of the situation was unclear and the consequences could not be predicted accurately. All this led to *great uncertainty, which required the implementation of a macroeconomic stabilizing policy.*

Special attention should be paid to the financial sector in view of the fact that financial crises are one of the main forms of deterioration of the macroeconomic environment. The effect on the financial system can be measured by the financial stress indices for 2020. St. Louis Fed Financial Stress Index had a value of -0.6247% on February 14<sup>th</sup> and reached 5.3145% on March 20<sup>th</sup>. The New Composite Indicator of Systemic Stress for the Eurozone increased from 0.0238 on 20 February to 0.6779 on 18 March. On February 14<sup>th</sup>, the value of the Global Office of Financial Research Financial Stress Index was -3.804, and on March 19<sup>th</sup> it was already 10.266.

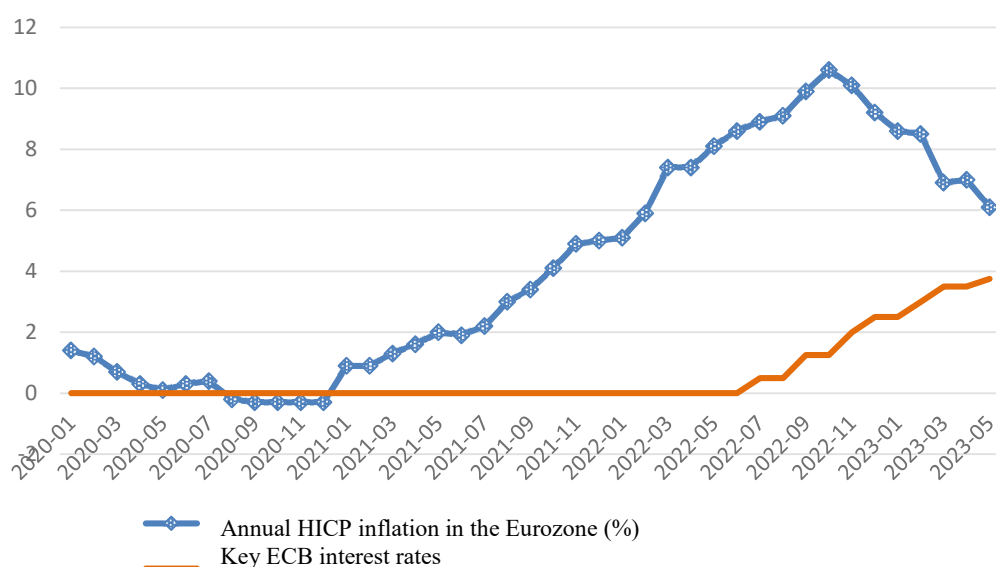
All this indicates a very rapid and significant worsening of the situation in the financial sector and a huge increase of the risk of a financial crisis. Macroeconomic policy plays a key role in such situations (Todorov, 2012). Therefore, *in the COVID-19 crisis, financial stability is a function of stabilization intervention through monetary and fiscal policy.* The need for such a quick and decisive intervention is evident, because the departure of the financial system beyond the limits of financial stability means an additional and even more serious reduction of the macroeconomic activity and an exacerbation of the recessionary processes.

### **3. Weaknesses of the implemented macroeconomic policy**

The beneficial effects of a stabilization monetary and fiscal policy have already been highlighted but they do not mean that everything being implemented by central banks and governments in the course of the COVID-19 pandemic should be considered positive. The analysis would not be complete

and sufficiently critical without discussing the specific weaknesses in the implementation of the policy to smooth out the large short-term deviations in macroeconomic activity. The identification of such weaknesses provides an opportunity to improve the process of conducting the stabilization policy in view of the specific influence of exogenous shocks on business cycle dynamics.

The above analysis shows that the decisive and rapid intervention of central banks in the transition to a recessionary phase of the business cycle in the first two quarters of 2020 is a reaction to macroeconomic policies that have a positive effect on economic activity. However, is the subsequent monetary policy as flexible and adequate to the changing short-term macroeconomic equilibrium?



Source: Eurostat and the European Central Bank.

*Figure 1. Actual HICP inflation in the Eurozone and key ECB interest rates for the period January 2020 – May 2023 (monthly data)*

A striking example in this regard is the monetary policy in the Eurozone. Figure 1 shows the dynamics of the annual inflation rate in the Eurozone in terms of the Harmonized Index of Consumer Prices (HICP) used by the ECB and the key ECB interest rates which are indicative for the Bank's monetary policy. The data confirm the need for expansionary policy during the recession, but also show the delayed reaction to the rising price level from the beginning of 2021. A serious and rapid increase in the money supply has a beneficial effect

initially, but as the symmetric 2% inflation target is reached and prices continue to rise rapidly, the need for a change in policy direction becomes apparent..

The European system has always had a hierarchical mandate with price stability as a priority. At the same time, for the entire period of existence of the common monetary policy within the framework of the third stage of the Economic and Monetary Union, the inflation rates have never even approached double-digit values. *The need to move to a restrictive monetary policy* was long denied by the Governing Council of the ECB, whose official position was that inflationary pressures were temporary and did not require specific discretionary measures<sup>1</sup>. Time has shown the fallacy of this judgment. When a central bank sharply increases liquidity in the monetary sector, it has to react promptly in the opposite direction in order to avoid the negative effects of the emergence of high inflation rates. The ECB's overall mandate and monetary strategy are based on such a balance.

The monetary strategies of other leading central banks such as the Federal Reserve (FED), the Bank of England (CBOE), the Reserve Bank of Australia (RBA) and the Bank of Canada (CCB) also assign a key role to maintaining price stability. In comparative terms, it can be argued that these countries also do not show sufficient flexibility to respond adequately by limiting inflationary processes. Inflation rates in these economies follow similar upward dynamics from 2021. At the same time, the transition to a restrictive monetary policy was initiated in March 2022 by the FED and the CCB and in May by the RBA. The CBOE had the fastest reaction – restrictive measures were implemented on December 16, 2021, and the ECB was the slowest to react - on July 27, 2022..

There are weaknesses in the fiscal response to the crisis as well. Tracing the way in which the fiscal stabilization policy was implemented shows that its advantage over the monetary policy in terms of precision was not used in the best possible way. The purchase of assets, the increase in liquidity and the reduction of short-term and/or long-term interest rates by central banks have a general impact on economic entities. Fiscal measures can be much better targeted and precise and can be used discretionary according to the degree to which the various sectors or geographical regions of the economy are affected. It was not used well enough during the pandemic. In the conditions of an exogenous shock, some governments followed a general implementation approach without sufficiently taking into account the need of individual entities

---

<sup>1</sup> See for example

<https://www.ecb.europa.eu/press/accounts/2022/html/ecb.mg220407~8e7069ffa0.en.html>

for fiscal support. Thus, *budgetary measures were not targeting optimally*. Funds were allocated to economic agents that were relatively unaffected by the pandemic, which indicates discretionary intervention inefficiency.

This was confirmed empirically by Gourinchas et al. (2021), who examined the specific features of fiscal measures during the COVID-19 crisis based on data for 50 sectors in 27 economies. They come to the conclusion that "fiscal policy was poorly targeted: most of the funds disbursed went to firms who did not need it." To this must be added the issue regarding the correct allocation of certain grants, such as those in the energy sector, in terms of their size and the extent to which they are needed (Gercheva, 2021).

Besides the beneficiary companies, there is another related aspect – the fiscal support to households. In this regard, the policy implemented during the pandemic aimed to protect their income in the extraordinary conditions in order to support consumption as an element of aggregate demand. Murphy, C. (2023) finds empirical evidence of *over-compensation through budgetary measures*. According to his calculations for the US economy, for every \$1 of private sector income lost, \$2 were given in fiscal compensations.

Another weakness is associated with a specific budgetary instrument - during the pandemic, some governments *used public investment as a stabilization measure*. Such expenses are made over long periods of time. Similar measures were also implemented on supranational level within the framework of the EU budget and funding. However, this was not necessary during the exogenous shock, as there was a need for short-term stabilization rather than long-term policy for economic growth for years to come. A stabilization policy is focused on short-term support to mitigate the effects of the crisis and protect economic entities from the immediate negative effects.

Thus, the bias of the *fiscal policy*, like that of the *monetary policy*, was changed rather late. According to Murphy's (Murphy, C. (2023)) calculations the additional and long-term expenditures along with continued expansionary policy lead to excess demand, which in turn leads to an increase in inflation by 3% on an annual basis. This, according to Murphy, is combined with distorting economic incentives and growing inequalities as a fiscal effect. Another study conducted by de Soyres et al. (2022) of the Federal Reserve estimated that the fiscal stimulus added 2.5% to US inflation.

All this leads to the aggravating of another unwanted *problem* - that of *fiscal sustainability*. Short-term measures put a heavy burden on central budgets and increase the government debt. Taking on larger long-term commitments further increases the risks of debt problems and sovereign debt crises in the future.

## Conclusion

The study on the role of macroeconomic stabilization policy during the economic crisis caused by the COVID-19 pandemic leads to specific conclusions. Some of them have already been described in the text above. However, in this section we shall draw conclusions and summarise the finding regarding the tested hypotheses.

*Hypothesis 1*, which states that considering the specific characteristics of the COVID-19 exogenous shock, there was a need for a quick and decisive response by means of a macroeconomic stabilization policy, **was confirmed**.

As a shock which is non-economic in nature, it placed the economies in different macroeconomic conditions by creating "unnatural" obstacles to the usual economic activities from an economic point of view, eliminating the need to recover the economy from the effects of the crisis by purging the inefficient economic agents and supporting the efficient ones, creating moral hazard from the implementation of monetary and fiscal stabilization policies, drastically increasing uncertainty, subjecting the financial system to great stress that is pushing it beyond the boundaries of financial stability, etc. Thus, the very rapid and significant deterioration of the macroeconomic environment and the contraction of macroeconomic activity necessitate a quick and decisive stabilization reaction by means of macroeconomic policy interventions. .

*Hypothesis 2*, which states that expansionary macroeconomic policies played a key role for the recovery of the economies from the COVID-19 recession and their subsequent growth, **was confirmed as well**.

The results from the analysis show that we cannot claim that health effects were severe only at the beginning of the pandemic, nor that the most stringent restrictions were implemented in the first half of 2020. This means that the two conditions to trigger the automatic adjustment mechanisms of the macroeconomic system were not met. Crucial to changing the phase of the business cycle is the impact of the expansionary monetary-fiscal mix implemented by central banks and governments.

## References

- Todorov, V. (2012). *Finansova stabilnost i makroikonomicheska politika (Makroikonomicheska politika za poddŭrzhane na finansovata stabilnost v usloviyata na asimetriya na informatsiyata)*. Dissertation thesis submitted for acquisition of the educational and scientific degree of Doctor of Philosophy in Economics, Varna.
- Bank for International Settlements (2022). *The Monetary-Fiscal Policy Nexus in the Wake of the Pandemic*. BIS Papers No 122, Monetary and Economic Department.  
<https://www.bis.org/publ/bppdf/bispap122.pdf>
- Carvalho, L., Cardomingo, M., & Toneto, R. (2021). *Saving Lives and the Economy: The Role of Fiscal Policy in the Covid-19 Recession*. 25th FMM Conference: Macroeconomics of Socio-Ecological Transition, Macroeconomic Policy Institute [online]  
[https://www.boeckler.de/pdf/v\\_2021\\_10\\_30\\_carvalho.pdf](https://www.boeckler.de/pdf/v_2021_10_30_carvalho.pdf)  
[Last accessed: 10.06.2023]
- Chudik, A., Mohaddes, K., Raissi, M. (2021). *Covid-19 Fiscal Support And Its Effectiveness*. *Economics Letters*, Vol. 205, 109939.  
<https://doi.org/10.1016/j.econlet.2021.109939>
- Collins-Thompson, J., Collins, B., & Maher, J. (2021). *Review of U.S. Business Bankruptcies During the COVID-19 Pandemic*. SRA Notes, Issue Number: 2021-05, Federal Reserve Bank of Boston. Online:  
<https://www.bostonfed.org/publications/supervisory-research-and-analysis-notes/2021/review-of-us-business-bankruptcies-during-the-covid-19-pandemic.aspx> [Last accessed: 06.06.2023]
- de Soyres, F., Santacreu, A., & Young, H. (2022). *Fiscal Policy and Excess Inflation during Covid-19: A Cross-Country View*. FEDS Notes. Board of Governors of the Federal Reserve System, Washington.
- Deb, P., Furceri, D., Ostry, J., Tawk, N., & Yang, N. (2021). *The Effects of Fiscal Measures During COVID-19*. International Monetary Fund, Working Paper, WP/21/262  
<https://www.imf.org/en/Publications/WP/Issues/2021/11/05/The-Effects-of-Fiscal-Measures-During-COVID-19-504347>
- Di Pietro, M., Marattin, L., & Minetti (2020). *Fiscal Policies Amid a Pandemic: the Response of Italy to the Covid-19 Crisis*. *National Tax Journal*, Vol. 73(3). <https://doi.org/10.17310/ntj.2020.3.13>
- Feldkircher, M., Huber, F., & Pfarrhofer, M. (2021). *Measuring the Effectiveness of US Monetary Policy during the COVID-19 Recession*.

- Scottish Journal of Political Economy, Vol. 68(3), pp. 287-297.  
<https://doi.org/10.1111/sjpe.12275>
- Gercheva, S. (2021). Public Subsidies - a Condition Sine Qua None for the Energy Sector in Bulgaria? *Izvestia Journal of the Union of Scientists – Varna. Economic Sciences Series*, Varna: Union of Scientists - Varna, Vol. 10(2), pp. 61-68.  
<https://journals.mu-varna.bg/index.php/isuvsin/article/view/8319/7324>
- Gourinchas, P., Kalemli-Özcan, S., Penciakova, V., & Sander, N. (2021). Fiscal Policy in the Age of Covid: Does It ‘Get in All of the Cracks? NBER Working Paper 29293, National Bureau Of Economic Research.  
<https://www.nber.org/papers/w29293>
- Hale, T., Angrist, N., Goldszmidt, R., Kira, B., Petherick, A., Phillips, T., Webster, S., Cameron-Blake, E., Hallas, L., Majumdar, S., & Tatlow, H. (2021). A Global Panel Database of Pandemic Policies (Oxford COVID-19 Government Response Tracker). *Nature Human Behaviour*, Vol. 5, pp. 529–538. <https://doi.org/10.1038/s41562-021-01079-8>
- Haroutunian, S., Osterloh, S., & Sławińska, K. (2021). The Initial Fiscal Policy Responses of Euro Area Countries to the COVID-19 Crisis. *ECB Economic Bulletin*, Issue 1/2021.  
<https://www.ecb.europa.eu/pub/economic-bulletin/html/eb202101.en.html>
- Heimberger, P. (2023). This Time Truly Is Different: the Cyclical Behaviour of Fiscal Policy During the Covid-19 Crisis. *Journal of Macroeconomics*, Vol. 76, 103522. <https://doi.org/10.1016/j.jmacro.2023.103522>
- Murphy, C. (2023). Fiscal Policy in the COVID-19 Era. *Economic Papers*. Vol. 42(2), The Economic Society of Australia  
<https://doi.org/10.1111/1759-3441.12382>
- OECD (2021). Bankruptcy Rates Fall During COVID-19. [online] [https://www.oecd.org/coronavirus/en/data-insights/bankruptcy-rates-fall-during-covid-19\\_](https://www.oecd.org/coronavirus/en/data-insights/bankruptcy-rates-fall-during-covid-19_) [Last accessed: 06.06.2023]
- The Economist (2023). Tracking Covid-19 excess deaths across countries. [online] [https://www.economist.com/graphic-detail/coronavirus-excess-deaths-tracker\\_](https://www.economist.com/graphic-detail/coronavirus-excess-deaths-tracker_) [Last accessed: 30.05.2023]
- World Health Organization (2023). WHO Coronavirus (COVID-19) Dashboard. [online] <https://covid19.who.int/data> [Last accessed: 30.05.2023]

**Veniamin Todorov, PhD** is a Chief Assistant Professor at the Department of General Economic Theory at the Economic University – Varna. He has defended a doctoral dissertation on macroeconomic policy and its effects in conditions of asymmetric information. **Scientific interests:** fiscal policy, monetary policy, business cycle, financial stability and financial crises, sovereign debt management, country-specific risk.

**ORCID:** 0000-0002-1921-4872



ISSN 0323-9004

# Economic Archive

Svishtov, Year LXXVI, Issue 3 - 2023

---

**Small and Medium Sized Enterprises Management  
and Business in Crisis Conditions**

---

---

**Economic Theory and Politics of Regional Development:  
One View of the Origin and Transformation**

---

---

**The New European Customs Reform – Opportunities  
and Challenges**

---

---

**Methodological Aspects of Teaching Circular  
Economy**

---

---

**Stabilization Role of the Macroeconomic Policy  
During the Covid-19 Crisis**

---

D. A. TSENOV ACADEMY OF ECONOMICS  
SVISHTOV



**EDITORIAL BOARD:**

Prof. Andrey Zahariev, PhD – Editor-in-chief  
Prof. Yordan Vasilev, PhD – Deputy Editor  
Prof. Stoyan Prodanov, PhD  
Prof. Todor Krastevich, PhD  
Assoc. Prof. Iskra Panteleeva, PhD  
Assoc. Prof. Plamen Yordanov, PhD  
Assoc. Prof. Svetoslav Iliychovski, PhD  
Assoc. Prof. Plamen Petkov, PhD  
Assoc. Prof. Anatoliy Asenov, PhD

**INTERNATIONAL BOARD:**

**Prof. Mihail A. Eskindarov, DSc (Econ)** – Financial University under the Government of the Russian Federation, Moscow (Russia).  
**Prof. Grigore Belostechnik, DSc (Econ)** – Moldovan Academy of Economic Studies, Chisinau (Moldova).  
**Prof. Mihail Zveryakov, DSc (Econ)** – Odessa State Economic University, Odessa (Ukraine).  
**Prof. Andrey Krisovatiy, DSc (Econ)** – Ternopil National Economic University, Ternopil (Ukraine).  
**Prof. Yon Kukuy, DSc (Econ)** – Valahia University, Targovishte (Romania).  
**Prof. Ken O'Neil, PhD** – University of Ulster (Great Britain)  
**Prof. Richard Thorpe, PhD** – Leeds University (Great Britain)  
**Prof. Olena Nepochatenko, DSc (Econ)** – Uman National University of Horticulture, Uman (Ukraine)  
**Prof. Dmytro Lukianenko, DSc (Econ)** – Kyiv National Economic University named after Vadym Hetman, Kyiv (Ukraine)  
**Assoc. Prof. Maria Cristina Stefan, PhD** – Valahia University of Targoviste (Romania)  
**Assoc. Prof. Anisoara Duica, PhD** – Valahia University of Targoviste (Romania)  
**Assoc. Prof. Vladinir Klimuk, PhD** – Baranovichi State University, Branovic (Belarus)

**Support Team**

Rositsa Prodanova, PhD – Technical Secretary  
Anka Taneva – Bulgarian Copy Editor  
Ventsislav Dikov – Senior Lecturer in English – Translation from/into English  
Margarita Mihaylova, PhD – Senior Lecturer in English – Translation from/into English

**Editorial address:**

2, Emanuil Chakarov street, Svishtov 5250  
Prof. Andrey Zahariev, PhD – Editor-in-Chief  
☎ (+359) 889 882 298  
Rositsa Prodanova, PhD – technical secretary  
☎ (+359) 631 66 309, e-mail: nsarhiv@uni-svishtov.bg  
Blagovesta Borisova – computer graphic design  
☎ (+359) 882 552 516, e-mail: b.borisova@uni-svishtov.bg

*In 2023, the journal will be printed using a financial grant from the Scientific Research Fund – Agreement № KP-06-NP4-36 from Bulgarska Nauchna Periodika – 2023 competition.*

© Academic Publishing House “Tsenov” – Svishtov  
© D. A. Tsenov Academy of Economics – Svishtov

---

# ***ECONOMIC ARCHIVE***

**YEAR LXXVI, BOOK 3 – 2023**

---

## ***CONTENTS***

**Nikola Vujanović, Miloš Pavlović**

Small and Medium Sized Enterprises Management and Business  
in Crisis Conditions /3

**Živorad Gligorijević, Petar Veselinović, Aleksandar Manasijević**

Economic Theory and Politics of Regional Development:  
One View of the Origin and Transformation /16

**Momchil Antov**

The New European Customs Reform – Opportunities and Challenges /32

**Petko Angelov, Margarita Mihaylova**

Methodological Aspects of Teaching Circular Economy /47

**Veniamin Todorov**

Stabilization Role of the Macroeconomic Policy During  
the Covid-19 Crisis /63