

EFFECT OF COVID-19 ON THE MAIN MACROECONOMIC INDICATORS (GEORGIAN CASE)

Revaz GERADZE

Ilia State University, 0179 Tbilisi, Georgia
revaz.geradze@iliauni.edu.ge

Abstract

From the first day of the COVID-19 pandemic, it was clear that negative impact of it would hit both, demand and supply side of the economies in different countries all over the world. First and most severe obstacle for the economies was supply side shock caused by restrictions imposed by the governments on some economic activities. On the other hand demand side shock was also solid, economic agents were massively postponing their decisions regarding consumption and investment. This paper aims to conduct descriptive statistical analysis of the Effects of COVID-19 on the main macroeconomic parameters of Georgia. Moreover, research aims to identify and classify country level various support schemes and policy measures taken by the government during the COVID-19 pandemic. In the paper it is discussed that pandemic severely affected almost all the main macroeconomic indicators of Georgian economy. On the other hand, supply shock, some demand side policy measures, rise of import prices and post pandemic hike in demand originated inflationary process and high prices became a post pandemic problem of Georgia.

Key words: COVID-19, effect of crisis, macroeconomic indicators, Real GDP growth, Unemployment rate, Inflation, Final Consumption, Monetary policy rate, Exchange Rate.

JEL Classification: F15; F41; F43; F62; F63.

I. INTRODUCTION

On 11 March, 2020 start of COVID-19 pandemic was officially declared. According to the Organization for Economic Co-operation and Development (OECD) negative effects of pandemic has spread to the world economy via braking supply chains, restricting production, contacted import, tourism and business visits.

Similar trends of falling main macroeconomic indicators were observed in developing and developed world. A lot of countries appeared to have negative economic growth. Similar tendencies could be observed for unemployment rates, income from tourism sector etc.

Most governments around the world imposed massive and various support schemes to soften negative impact of COVID-19. Starting from the measures that are classically used during the financial crisis, but while this crisis was specific we have seen very new support mechanisms from some countries. Policy decisions were directed to help supply side as well as to support and maintain demand.

Georgia is a small country with an open economy and free trade access to the EU and other big markets. It also is a transit corridor in international/regional logistic chain.

Georgia benefits from various multilateral and bilateral trade agreements listed below, according to the Ministry of Economy and Sustainable Development of Georgia (2023):

- Most-Favored-Nation (MFN);
- Generalized System of Preferences – GSP;
- Free Trade Regime with EU: EU-Georgia Association Agreement signed on June 27, 2014, in Brussels;
- Multilateral international agreements on free trade;
- Other bilateral international free trade agreements;
- In 2017, the "Free Trade Agreement between the Government of Georgia and the Government of the People's Republic of China" was signed.

“Financial sector development is a vital component for the economy of Georgia. It is one of the most important factors contributing to the creation of new jobs as well as for the ensuring of the sustainable economic development and innovations” (Pataraiia, Geradze, et al., 2017).

“This level of economic integration and financial liberalization of the small open economy is always associated with a risk of high external vulnerability and global crises. If country like Georgia is significantly depended on the demand in the region, money transfers, import of goods and services and foreign direct investment inflows, international crises can have significant contagion effect on the country’s economy and supply chain” (Geradze, 2017). Georgia as a severely dependent country on external financial sources also faced the risk of an immediate drop in foreign financial inflows according to Financial Stability Report” of the National Bank of Georgia (2020).

II. SUPPORT SCHEMES

Not surprisingly, COVID-19 crises effected Georgia’s economy. Tourism sector was the most negatively affected by the pandemic. Tour operators, hotels and restaurants have stopped functioning. That brought full stop of the sector and massive loss of the income of the companies and employees in the sector. As a one of the leading sector of Georgian economy rapid fall of the tourism sector negatively affected to the whole economy of the country.

Government of Georgia developed economic stimulus package. Tourism sector, together with construction sector was one of the main addressee of the support scheme. Anti-crisis financial support amounted around 7 billion Georgian Lari. Those support mechanisms could be split into three main directions:

- Health care measures;
- Business support schemes (mainly stimulating supply side);
- Other social measures (mainly stimulating demand side).

Among demand stimulating measures “subsidized mortgage loan” program had important influence on the construction sector. This program started in 2020 and was covering loans up to 200 000 GEL, interest rate subsidy was 4 percent up to 5 years. This program still exists, it was modified starting from the 1st September 2021 and now potential beneficiaries of the program are (Enterprise Georgia, 2023):

- Family/single parent/widow if at the time of taking the loan has a child under the age of 1 born after September 1, 2021;
- Family/single parent/widow, if at the time of taking the loan has 3 or more children;
- A family/single parent/widow who has a minor child at the time of taking the loan, whose admission was made after September 1, 2021.

Another demand side support mechanism was initiated in 2020 by the Government of Georgia with the resolution No. 655 “On the approval of the rules and conditions for subsidizing utility bills”. According to this Resolution, due to the deterioration of the socio-economic situation caused by the new coronavirus in Georgia, in order to help the population, subsidizing the electricity and/or natural gas and/or drinking water bills consumed in the months of November, December 2020 and January and February 2021 (for each month) shall be implemented as follows (Government of Georgia, 2020):

a) For household users who consumed/will consume 200 kilowatts/hour or less of electricity in the reporting month, the electricity fee will be subsidized from the state budget;

b) For household consumers who consumed/will consume 200 cubic meters or less of natural gas in the reporting month, the natural gas fee will be subsidized from the state budget;

c) For those household users who, in accordance with the law, pay for electricity distribution, water supply, cleaning services and related fees/charges through a single integrated and coordinated system of administration and who consumed/will consume 200 kilowatts/hour or less in the reporting month Electricity, drinking water fees will be subsidized from the budget;

d) For those household users who, in accordance with the law, do not pay for electricity distribution, water supply, cleaning services and corresponding fees through a single integrated and coordinated system of administration, the drinking water/water supply fee will be subsidized from the budget.

Another demand side initiative was covering socially vulnerable population. On February 3, 2022 Government of Georgia approved Resolution No. 52 “On the partial subsidy of the cost of some utility services used by the socially vulnerable population”.

For those families registered in the "Unified Data Base of Socially Vulnerable Families" (except for socially vulnerable families registered in the administrative boundaries of the Tbilisi City Municipality), whose socio-economic

status rating score is equal to or less than 70,000, a subsidy should be implemented for the consumed electricity, in the form of assistance. The amount of the subsidy is the difference between the end-user tariff for the relevant level in December 2020 and the electricity consumer tariff for the relevant level in July 2015, and an additional 3.5 Tetris per 1 kWh (taking into account the difference between the tariffs applicable in January 2022 and December 2020 and including VAT) in the amount.

From April 1 to October 31 of every year, socially vulnerable families registered in the administrative boundaries of Tbilisi Municipality, whose socio-economic status rating score is equal to or less than 70,000, receive the assistance provided in the first paragraph of this article.

In the form of assistance, the monthly consumption of no more than 200 kWh of electricity should be subsidized in the amount of 3.5 Tetris per kWh (taking into account the difference between the tariffs effective in the month of January 2022 and the month of December 2020 and including VAT), under the following conditions:

a) for the period from January 1, 2022 to December 31, 2022 - for those families registered in the database whose socio-economic status rating score is greater than 70,000 and less than or equal to 150,000, except for the socially vulnerable registered in the administrative boundaries of Tbilisi City Municipality of families;

b) For the period from April 1, 2022 to October 31, 2022 - for those families registered in the database, whose socio-economic status rating score is greater than 70,000 and less than or equal to 150,000, and according to the database, live within the administrative borders of Tbilisi Municipality.

The subsidy scheme provided above does not apply to those consumers who profit from the benefit provided by the Resolution No. 418 of August 25, 2016 of the Government of Georgia "On Reimbursement of Monthly Charges for Electricity Consumed by Subscribers in Highland Settlements".

From the month of January 2022 to the month of December 2022 (for each month) for families registered in the database, whose rating score is less than or equal to 70,000 and according to the database, they live in the city of Tbilisi, the city of Rustavi or the city of Mtskheta, assistance will be provided in the form of drinking water/wastewater fees Subsidy based on consumed drinking water or subscription fee, but not more than 100 GEL.

On the later stages there were few amendments in both above-mentioned resolutions and according to the amendments, the conditions of the subsidy were updated.

On the supply side government and national bank of Georgia addressed fiscal and monetary policy measures to assist business sector. On the fiscal side there were a Co-financing Mechanism to Support Small and Family Hotel Industry; Restaurant Industry, Sports Facilities and Kindergartens, Event Organisers. Also various tax exemption measures were taken. Monetary policy aimed to provide liquidity and availability of the capital In the financial sector. National bank of Georgia helped banking sector to evaluate and control financial risk related to COVID-19 crisis. Central bank also supported stronger exchange rate and sold solid portion (over 1 billion USD in 2020 and 2021) of its foreign value reserves on the financial market to sustain stable exchange rate for GEL (International Monetary Fund, 2020).

III. EFFECT OF COVID-19

Effect on GDP growth: In the process of analyzing economic growth of the country recent crises are also important factors to be taken into consideration (Geradze, 2017). This effect of COVID-19 on the real GDP growth of Georgia could be observed on the graph below. Economic growth of over 5 percent in 2019 fell to the negative growth of 6.6 percent in 2020. Main direction of reduction were accommodation and food service (-45 percent), Administrative and support service (-45 percent), transportation and storage activities (-23 percent), Construction (-8 percent) and Manufacturing activities (-7 percent). Vital recovery of the economic growth could be seen in 2021 and 2022 where Georgian economy showed double digit growth rate.

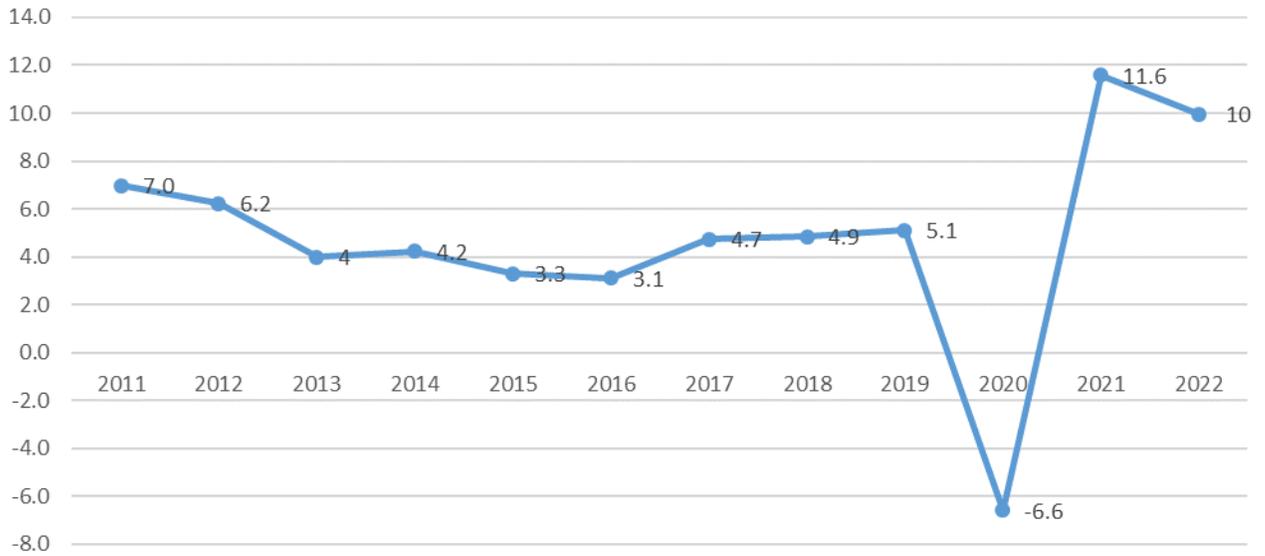


Figure 1. Real GDP growth, %

Source: National Statistics Office of Georgia, <https://www.geostat.ge/en/modules/categories/23/gross-domestic-product-gdp>;

Effect on employment: In line with the reduced economic activities unemployment rate started to rise. Unemployment rate has increased in almost all economic activities. Especially, in Accommodation and food service activities (36 percent), construction (19 percent), Public administration and defense; compulsory social security (14 percent), Education (5 percent), Transportation and storage (4 percent), Wholesale and retail trade; repair of motor vehicles and motorcycles (4 percent) and Industry (4 percent). As we observed in case of the economic growth, unemployment rate reached its peak in 2021 and then started to decline to 17.3 percent in 2022.

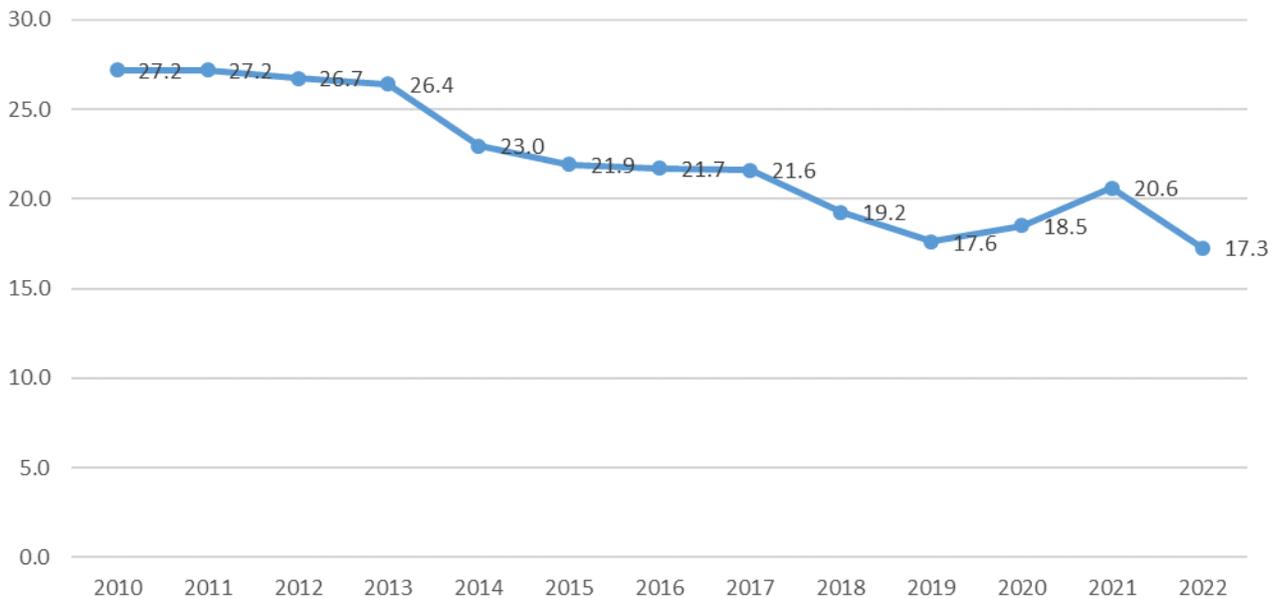
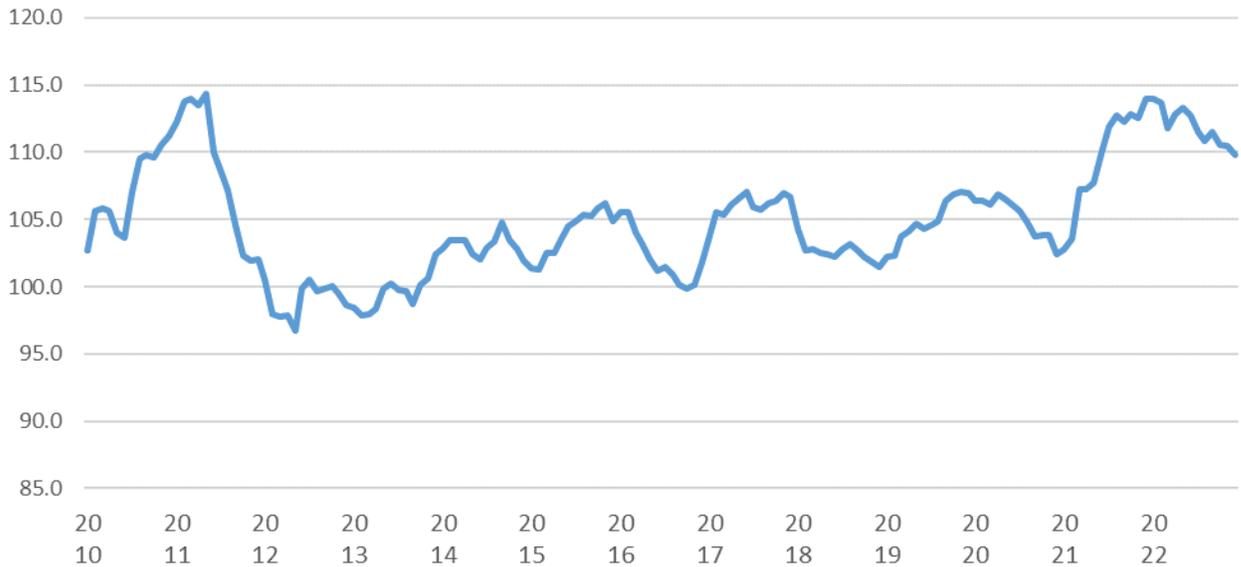


Figure 2. Unemployment rate, %

Source: National Statistics Office of Georgia, <https://www.geostat.ge/en/modules/categories/683/Employment-Unemployment>.

Effect on interest rates, consumption and prices: Because of above short run drop in consumption and price and wage rigidity inflation rate was quite stable during the 2020, however stood above the target level (3 percent). As it was discussed above on response to the crisis government announced several support mechanisms to stimulate consumption and help economic activities to rise.

As a result of constant demand stimulation and taking into consideration that households mainly postponed their decisions during the crises, as COVID-19 was declared to be over demand boosted and together with contracted supply caused prices to rise.



**Figure 3. Consumer price indices in Georgia, %
Corresponding month of the previous year=100**

Source: National Statistics Office of Georgia, <https://www.geostat.ge/en/modules/categories/26/cpi-inflation>

Inflation became a post pandemic problem of Georgia. Annual Average rate of prices compared to the same period of previous year has slowly started to increase and in 2019 reached to 4.9 percent, in 2020 to 5.2 percent and in 2021 9.6 percent. There were several reasons of price hike, first of all supply shock that came from the restrictions on the production side due to pandemic. Secondly, as you can see from the graph below in line with government demand stimulating measures final consumption of households remained on the increasing trend. So, at the beginning of the year 2022 revitalizing of post-pandemic demand together with previously mentioned factors boosted aggregate demand and as a result inflation reached to the double digit level (12.8 percent in June, 2022).

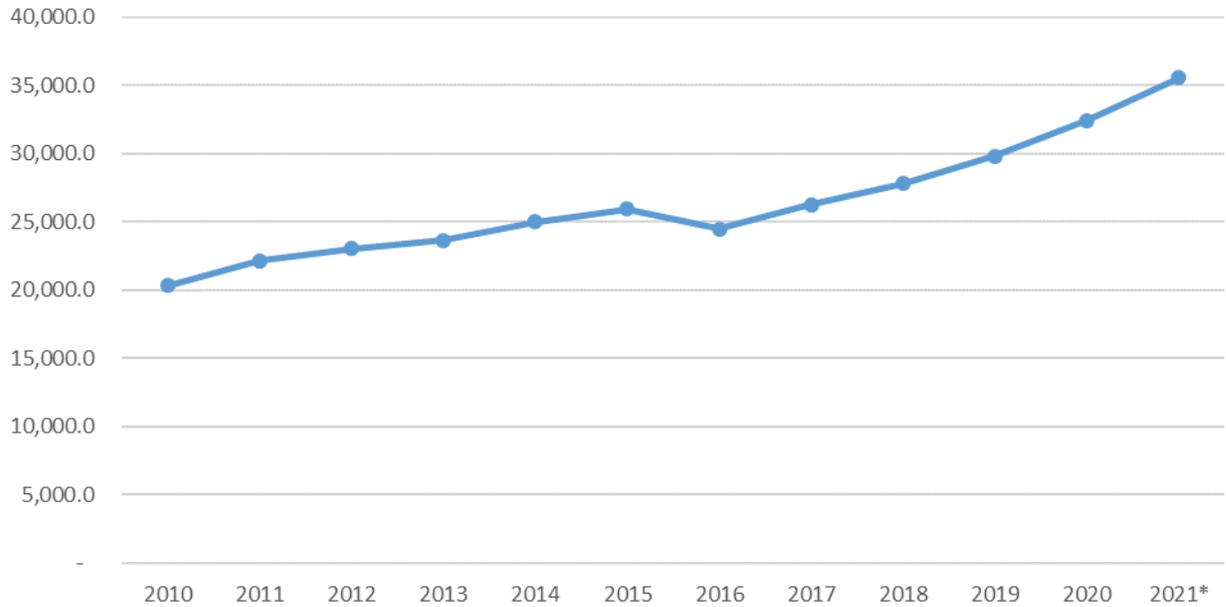


Figure 4. Household Final Consumption, million GEL (At constant 2015 prices)

Source: National Statistics Office of Georgia, <https://www.geostat.ge/en/modules/categories/48/standard-of-living>;

In the context of inflation, should be mentioned that COVID-19 had negative impact on energy markets. Pandemic severely affected on energy markets and heat significantly to the industrial countries that are using energy for the production (Zhang, Luo, et al., 2023). Energy is a main driver of the economies and demand on various type of energy is increasing every year. Especially this is noticeable after cryptocurrency mining process started to develop. “As it is known, the so-called mining process, including the cooling system, consumes significant amount of electricity. Thus, massive mining may lead to an increase in Georgia's dependence on electricity imports and a shortage of electricity” (Geradze, 2020). “In the list of top producer countries appeared Georgia, since BitFury, one of the largest producer entered to Georgian market. Mining process of cryptocurrency requires a lot of energy, respectively consumption of electricity has significantly increased in Georgia” (Geradze, 2020). Against this background, increased prices of energy on the international energy markets could have negative spillover effect on the energy prices in Georgia.

In response to high inflation National Bank of Georgia gradually has started to increase monetary policy rate. First rise happened in March, 2021 and monetary policy rate increased by 0.5 pp to the level 8.5 percent. Increase of policy rate continued in 2022 and reached to 11 percent in the middle of the year.

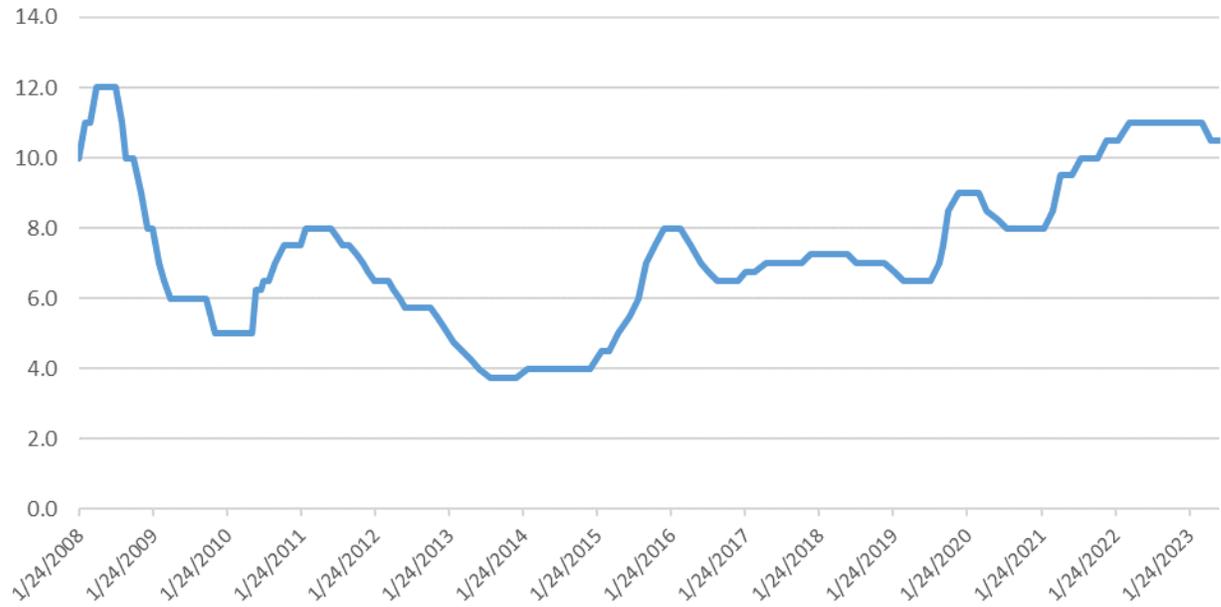


Figure 5. Monetary policy rate dynamics, %

Source: National Bank of Georgia, <https://nbg.gov.ge/en/statistics/statistics-data>.

This action of monetary policy tightening had significant effect on inflation from various directions, first of all lending became more expensive and interest rates on loans reached to 15 percent. It should also be taken into consideration that most consumers and businesses rely on the credit sources and increase in monetary policy rate made financial sources for them expensive (Pataraiia, Geradze, et al., 2017).

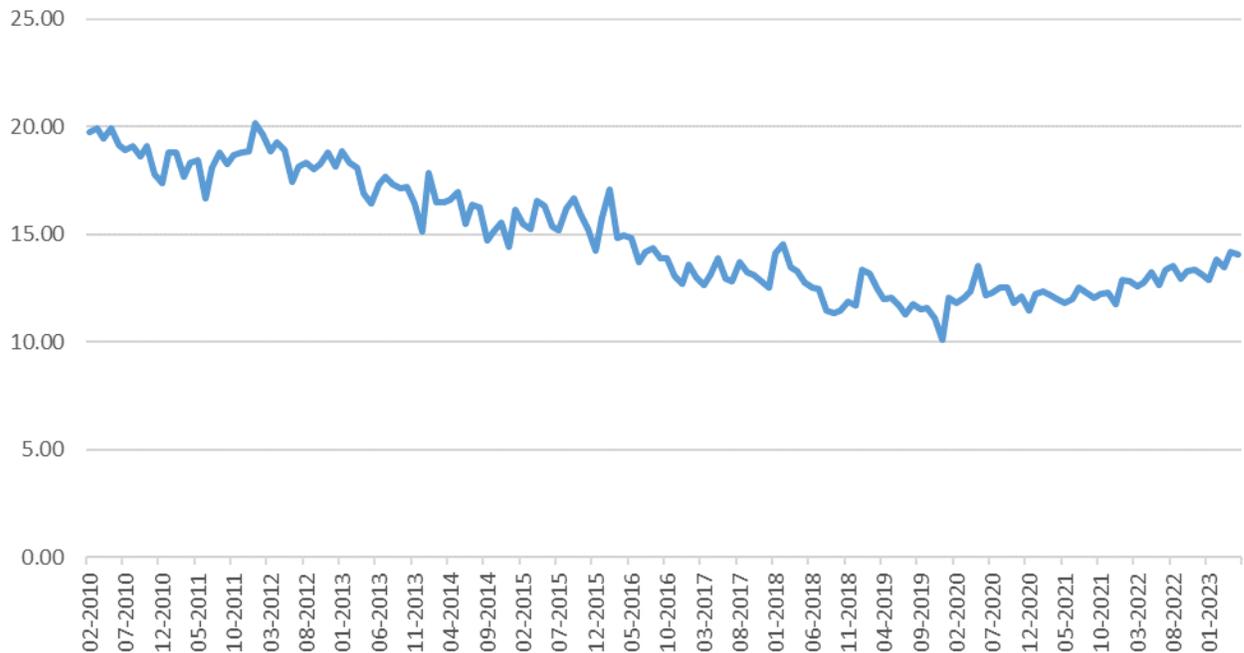


Figure 6. Annual Market Interest Rates on Loans (Percentage)

Source: National Bank of Georgia, <https://nbg.gov.ge/en/statistics/statistics-data>

In the development and soundness of a financial system of particular country, especially in the times of crises, rating agencies play a very important role (Geradze R., 2016). It worth to mention that, as you can see from the table below, credit rating of Georgia remained stable during the whole period of the COVID-19 crisis. The effect of COVID-

19 crisis on the sovereign ratings was less drastic than it appeared during the global financial crises in 2008-2009. Even more, “the severity of sovereign ratings actions is not directly affected by the intensity of the COVID-19 health crisis, but through a mechanism of its negative economic repercussions such as the economic outlook of a country and governments' response to the health crisis” (Tran et al., 2021).

Table 1. Credit Rating of Georgia

Agency	Rating	Outlook	Date
Fitch	BB	positive	Jan 27 2023
Moody's	Ba2	negative	Apr 28 2022
S&P	BB	stable	Feb 25 2022
Fitch	BB	stable	Aug 06 2021
S&P	BB	negative	Feb 26 2021
Fitch	BB	negative	Apr 24 2020
S&P	BB	stable	Oct 11 2019

Source: Trading Economics, <https://tradingeconomics.com/georgia/rating>

On the other hand, as it was mentioned above, Georgia is significantly dependent on the import of goods and services. In the process of calculation of the price of the consumer basket price of imported goods and services play significant role. Therefore when exchange rate devaluates in Georgia this has negative effect on the inflation via imported inflation. When national bank of Georgia has increased monetary policy rate this supported strong GEL and exchange rate has stabilized. In consequence, imported inflation was down and pressure from this side on the overall inflation was over.

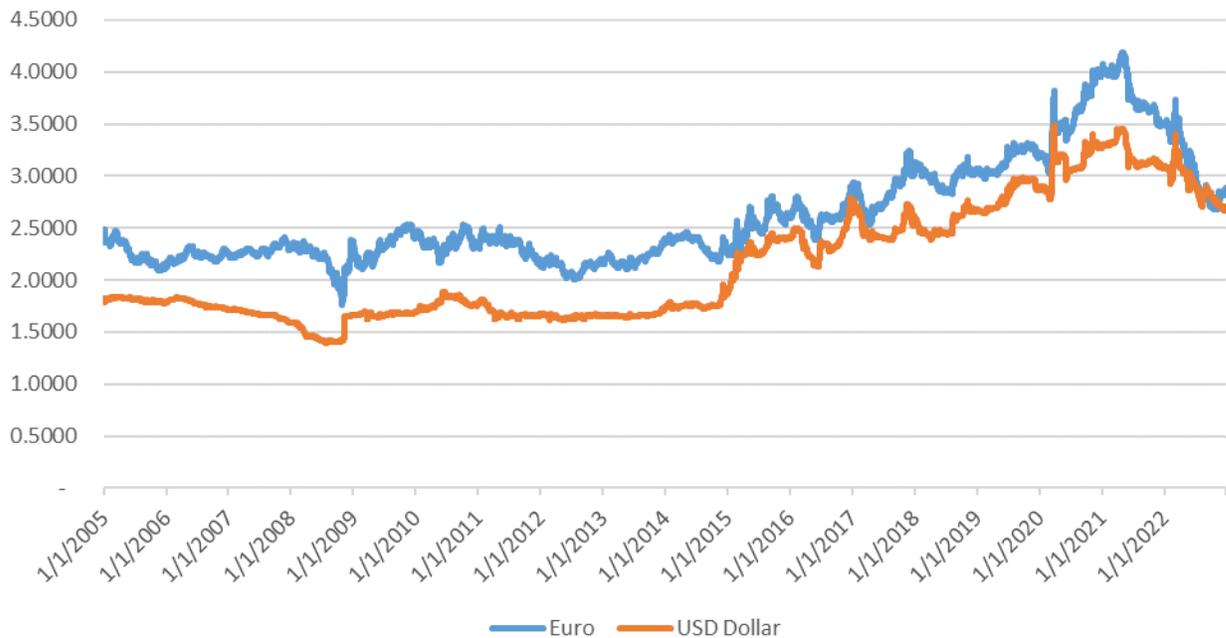


Figure 7. GEL Official Daily Exchange Rates

Source: National Bank of Georgia, <https://nbg.gov.ge/en/statistics/statistics-data>

IV. CONCLUSIONS

Above analysis shows that COVID-19 pandemic had significant negative effect on the economy of Georgia. Real GDP growth fell to negative growth rate in 2020, there was increase in unemployment rate and on the later stage significant inflationary process. Despite the fact that main macroeconomic indicators fell, household final consumption, at constant 2015 prices, was continuing to increase even in 2020 and 2021. There were few reasons for consumption upsurge. Supply

shortage risk and inflationary process stimulated consumers to increase their consumption. On top of that, government support measures stimulate demand. As a result, consumption continued to rise. After end of COVID-19 pandemic was declared refreshing of post-pandemic demand together with previously mentioned demand side factors enthused additional pressure on prices and inflation became post pandemic problem of the economy of Georgia. However, gradual and continuous tightening of the monetary policy rate slowly delivered results and in 2023 inflation is back to its target level. As a conclusion, main macroeconomic indicators of the economy of Georgia were diminished. Policy measures taken helped both supply and demand side of the economy to recover, however problem of the inflation was still there and it took quite a while to stabilize prices.

V. REFERENCES

1. European Commission (2020) Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak (2020/C 91 I/01), Official Journal of the European Union, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AJOC_2020_091_I_0001;
2. Fernando M. Martin, Juan M. Sánchez, Wilkinson O., (2023) "The Economic Impact of COVID-19 around the World", Federal Reserve Bank of St. Louis, Volume 105, No. 2, <https://files.stlouisfed.org/files/htdocs/publications/review/2023/04/10/the-economic-impact-of-COVID-19-around-the-world.pdf>;
3. Government of Georgia (2020) „Report on measures taken by the Georgian government against COVID-19“ https://www.gov.ge/files/76338_76338_444796_COVID-19angarishi...pdf
4. Government of Georgia (2020) the resolution No. 655 "On the approval of the rules and conditions for subsidizing utility bills", <https://matsne.gov.ge/>;
5. Government of Georgia (2020) the resolution No. 52 "On the partial subsidy of the cost of some utility services used by the socially vulnerable population", <https://matsne.gov.ge/>;
6. Government of Georgia (2021) the resolution No. 4, ""On approval of the rules and conditions of subsidizing utility bills" amendments to Resolution No. 655 of October 30, 2020";
7. Geradze R., (2020) "Analysis of The Electricity Consumption and Cryptocurrency Price Dynamics (Georgian Case)", Ecoforum, Volume 9, Issue 3 (23), <http://www.ecoforumjournal.ro/index.php/eco/article/view/1128/702>;
8. Geradze R., (2018) "The Impact of Financial Liberalization on the Economic Development of Georgia", International Reviewable and peer-reviewed scientific-practical journal "Economy and Business" №3, <http://eb.tsu.ge/?cat=nomer&leng=eng&adgi=389&title=The%20Impact%20of%20Financial%20Liberalization%20on%20Economic%20Development%20of%20Georgia>;
9. Geradze R., (2017) "Financial Liberalization and Economic Growth", Ecoforum, Volume 6, Issue 3 (13), <http://www.ecoforumjournal.ro/index.php/eco/article/view/649/405#>;
10. Geradze R., (2017) "The Role of Credit Rating Agencies and Spillover Effects of Financial Liberalization", Association 1901 "SEPIKE", Edition 15, pages 62-66, France https://5b925ea6-3d4e-400b-b5f3-32dc681218ff.filesusr.com/ugd/b199e2_04578798e9674308b31a331b54085232.pdf
11. Geradze R., (2016) "Sovereign ratings and sovereign yield spreads in Europe", international conference Challenges of Globalization in Economics and Business, Universal, A collection of conference papers, pages 151-157.
12. International Monetary Fund (2020) "Policy Responses to COVID-19", <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>
13. National Bank of Georgia (2020) "Financial Stability Report", <https://nbg.gov.ge/en/publications/financial-stability-reports>;
14. Pataraiia L., Geradze R., Dushuashvili T., (2017) "Financial Sector Analysis in the Cluster Theory Context (Georgian Case)", Technology audit and production reserves, Volume 1, Issue 4 (33) pages 36-42, <https://journals.uran.ua/tarp/article/view/90448/90050>;
15. The Organization for Economic Co-operation and Development (2020) "Coronavirus: The world economy at risk", OECD Interim Economic Assessment, <https://www.oecd.org/berlin/publikationen/Interim-Economic-Assessment-2-March-2020.pdf>;
16. Sahu S., Manaloor V., Bagchi P., (2022) An Empirical Analysis of the Impact of COVID-19 on the Power Sector of India, Volume 3, Issue 2, <https://erl.scholasticahq.com/article/32617-an-empirical-analysis-of-the-impact-of-COVID-19-on-the-power-sector-of-india>;
17. Siokis F., (2020) "The Federal Reserve and its balance sheet: A Herculean task in mitigating the economic effects of the coronavirus pandemic (Part I)", The Economic Studies Group, <https://esg.gc.cuny.edu/2020/07/31/the-federal-reserve-and-its-balance-sheet-a-herculean-task-in-mitigating-the-economic-effects-of-the-coronavirus-pandemic/>;
18. Tran Y., Vu H., Klusak P., Kraemer M., Hoang T., (2021) "Sovereign credit ratings during the COVID-19 pandemic", International Review of Financial Analysis Journal, Volume 78, <https://www.sciencedirect.com/science/article/pii/S1057521921002088>;
19. Zhang H., Luo W., Yang S., Yu J., (2023) "Impact of COVID-19 on economic recovery: empirical analysis from China and global economies", Economic Change and Restructuring, volume 56, pages 57–78, <https://link.springer.com/article/10.1007/s10644-022-09405-4>;
20. <https://www.geostat.ge>, accessed July-August, 2023;
21. <https://www.economy.ge/index.php?page=home>, accessed July-August, 2023;
22. <https://nbg.gov.ge/>, accessed July-August, 2023;
23. <https://www.imf.org/en/Data>, accessed July, 2023;
24. <https://www.ecb.europa.eu/home/html/index.en.html>, accessed August, 2023;
25. <https://ec.europa.eu/eurostat/data/database>, accessed July, 2023;
26. <https://matsne.gov.ge/>, accessed August, 2023.
27. <https://tradingeconomics.com/georgia/rating>, accessed August, 2023.