Mila Gadžić
University of Mostar, Mostar, Bosnia and Herzegovina
Faculty of Economics
E-mail: mila.gadzic@ef.sum.ba

Jelena Jurić
University of Mostar, Mostar, Bosnia and Herzegovina
Faculty of Economics
E-mail: jelena.juric@ef.sum.ba

INDEBTEDNESS IN THE TIME OF THE COVID-19 PANDEMIC – CASE OF BOSNIA AND HERZEGOVINA

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Abstract

The COVID-19 pandemic is a global unprecedented event since the Spanish flu pandemic in 1918. The IMF addressed this pandemic-caused economic fallout as the worst crisis since the Great Depression. Entire continents are in lockdowns just with essential services and activities. Unlike the global financial crisis that derived from a financial sector, this pandemic-caused crisis is shock in real economy, both on the demand and supply side. During previous crisis, especially during global financial crisis, most governments responded with austerity measures and fiscal consolidation. This time it is different. Governments worldwide approved additional expenditures, tax cuts, government bond issuance and borrowing in order to mitigate economic consequences of the looming crisis. One of the pandemic's result is dramatic increase of indebtedness that could affect efficiency of fiscal and monetary responses created before to fight against crisis. This sudden and strong COVID-10 shock especially effects developing countries and emerging markets, but also advanced countries with already limited fiscal space. The COVID-19 pandemic-caused crisis evoked again fear of debt crisis and expanded a number of countries with indebtedness problems. Bosnia and Herzegovina as developing country with complex state structure and its own macroeconomic, political, institutional problems is not spared of negative effects of the pandemic. In order to save economy when recovery from the previous crisis is still in swing, Bosnia and Herzegovina did emergency measures to support economy. Increase of government spending in addition to reduced tax revenues have created the need for budget rebalance and additional borrowing. The aim of this work is to show macroeconomic situation and problems in the EU countries, countries in the region and especially in Bosnia and Herzegovina before the pandemic as well as current problems, their reactions to COVID-19 pandemic and necessary financial support that could cause increase of indebtedness.

Keywords: COVID-19 pandemic, indebtedness, Bosnia and Herzegovina

1. INTRODUCTION

The COVID-19 pandemic is a global unprecedented event since the Spanish flu pandemic in 1918. The IMF addressed this pandemic-caused economic fallout as the worst crisis since the Great

Depression. Entire continents are in lockdowns just with essential services and activities. The pandemic worldwide showed how insecurity can significantly affect global economy, lead to lower consumption, investments and higher unemployment (Al-Thaqeb et al., 2020). During the last economic crisis, most governments responded with austerity measures and fiscal consolidations, but this time is different. Instead to cut expenditures and increase taxes, governments approved additional expenditures, cut taxes and issued government bonds (Raudla and Douglas, 2020). The COVID-19 pandemic and adopted measures worsen the existing conditions in global economy, primarily by increasing debt that could become chronic and adverse in long-term without large actions (Song and Zhou, 2020). As European Commission (2021) states in its report world fiscal response of the COVID-19 pandemic is about €6 billion of direct budget supports in 2020 (around 7.5% of world GDP) what caused increase of deficit and public debt. It estimates that world public debt was 98% of the world's GDP at the end of 2020 (in comparison to 84% in 2019). Bosnia and Herzegovina as developing country with macroeconomic, political, institutional problems is not spared of negative effects of the pandemic. In order to save economy when recovery from the previous crisis is still in swing, Bosnia and Herzegovina did emergency measures to support economy. Increase of government spending in addition to reduced tax revenues have created the need for budget rebalance and additional borrowing. The aim of this work is to show macroeconomic situation and new debt issues in the European Union, countries in the region and especially in Bosnia and Herzegovina before the pandemic and current situation.

The aim of this paperwork is to show macroeconomic situation regarding GDP fallout and increase of deficit and debt in the European Union and Bosnia and Herzegovina from the beginning of the COVID-19 pandemic until now. Secondary data from various sources were used for this analysis. Mostly, data referring to data on the European countries are obtained from the European Commision and Eurostat database. Data regarding macroeconomic conditions in Bosnia and Herzegovina are obtained from the Central Bank of Bosnia and Herzegovina and BiH Ministry of Finance. The debt-to-GDP ratio and share of deficit in GDP are used as indicator of changes in indebtedness. The subject of our interest are mentioned data in the period from 2007 to 2020, before and after Global Financial Crisis and before and during the COVID-19 pandemic. Based on data and facts we get general conclusions using inductive method to make conclusions of economic situation in the European Union, region and especially in Bosnia and Herzegovina during the COVID-19 pandemic. The paper is structured as follows: after the introduction, literature background is provided. It is followed by analysis of the European Union and its indebtedness in the Global Financial crisis and COVID-19 pandemic, respectively. Short preview of posible post-pandemic solutions for indebtedness is given afterwards. The indebtedness in time of COVID-19 and taken measures in Bosnia and Herzegovina is given in the fourth section that is followed by the conclusion.

2. LITERATURE BACKGROUND

When speaking about public debt and indebtedness the first thing that comes into mind is its sustainability and impact on the growth. The research of Reinhart and Rogoff (2010) started focus of economic thought on public debt after development and spread of the Global Financial Crisis 2008-09 around Europe and EU. In their research on 20 developed countries in the period 1790-2009, they argue that high public debt has negative, adverse impact on long-run economic growth after certain threshold (90% public-debt/GDP ratio). Below that threshold, the relation between debt and long-run growth is weak. Kumar and Woo (2010) also argue that sharp increase of public debt in developed economies as consequence of global financial crisis brought concerns on its adverse impact on economic growth and financial markets. They also find the threshold between debt-to-GDP to be at 90% on the sample of 38 advanced and emerging economies during 1970-2007. Checcheti, Mohanty and Zampolli (2011) debate that when debt-GDP ratios increase over certain threshold financial crisis are more likely and more severe. In their research, they find debt threshold of about 84% and 96 in the sample of 18 OECD countries in the period 1980-2010. Baum, Checherita-Westphal and Rother (2013) also confirm non-linear relation between public debt and GDP on the sample of 12 euro-area countries in the period 1990-2010 and find the debt threshold on between 66% and 96% debt-to-GDP ratio. Afonso and Jalles (2013) in their research found debt threshold of 50% for advanced economies and 79% for emerging countries. Egert (2012),Panizza and Presbitero (2013), Eberhardt (2014), Pescatori et al. (2014) in their research explored non-linear relation and negative effect of debt on GDP and concluded that the presence of non-linearity and threshold is not as strong as previously thought. Panizza and Presbitero (2014) in their research even raise the question of the reverse causality between public debt and economic growth concluding that higher debt leads to lower growth. Čeh Časni et al. (2014) finds significant negative effect of public debt on economic growth rates in short and long run on the sample of 14 central, eastern and southeastern European countries in the period 2000-2011. Other empirical studies also confirmed negative impact of high public debt on growth (Gomez-Puig and Sosvilla-Rivero, 2017; Chudik et al. 2017). Now, the story comes back again but this time differently. The COVID-19 pandemic is a global unprecedented event that is likely to cause even worse crisis than the Global Financial Crisis. It is more similar to the 1930s Great Depression crisis. The COVID-19 pandemic is still timely speaking short shock to make researches on medium or long-term impact on economic growth rates. Therefore, literature debating about effects of the pandemic and rising indebtedness on economic growth is still scarce and mostly focused on current measures and their impact, monetary and fiscal policy's tools to fight against this crisis and possible solutions. Benassy-Quere and di Mauro (2020) give comprehensive set of texts regarding protection of companies, workers, banks, national budgets and debts. They also propose new fiscal and monetary tools to fight financial impact of the current crisis. Amat et al. (2020) discuss on relief packages to mitigate economic consequences of lockdown, addressing that coming recession will have important consequences. Bozorgmehr et al. (2020) addresses that specific problem of Europe is fact that COVID-19 crisis converge with three other global crisis – management, economic and migrant crisis what complicate the situation much more. However, again the focus is on debt and indebtedness since, the COVID-19 pandemic expanded list of countries with debt problems and for some of them crisis is unavoidable (Bulow et al. 2020). To mitigate current emergency many countries introduced special budgets to ensure funds for public health and social programmes, support and tax relief for unemployment and companies. Therefore, many countries, including ones with strong fiscal discipline and budget balance before pandemic, record increase of indebtedness and increased their fear about long-term fiscal sustainability, especially among emerging countries (Adhikari et al., 2020; de Villiers et al., 2020). Decrease of debt and indebtedness recorded during and immediately after financial crisis was short-term and in the last decade debt increased in time when interest rates are low (Naisbitt, 2020). Burriel et al (2020) even though they justify debt increase, they warn that once crisis is over and recovery starts, maintaining debt at a high level in the medium-term by itself is source of vulnerability. Their analysis suggests that economies with higher debt can lose more output in crisis, are more affected by spillover and crowding-out private debt effects in short and long-term and potential output is adversely affected. Presbitero and Wiriadinata (2020) warn that despite of low interest rates period, there are risks of higher debt since growth rates stagnate from before pandemic in many countries and therefore fiscal expansion implemented in many countries brings significant risk. Buiter (2020) sees that fiscal stimulus, financed by debt or money created by central bank leaves costs for the future. Schiliro (2020) states that any government policy focused on grants and loans is reasonable in emergency time, but it cannot replace medium and long-term strategy of public finances recovery. In comparison with conditions before the global financial crisis 2007-09, many emerging countries have slower growth rates that means weaker development and slower poverty decrease. Because of this, these countries are more vulnerable than before the global financial crisis (Song and Zhou, 2020). Bartsch et al. (2020) states that COVID-19 pandemic leaves many countries with significantly higher public and private debt that are added to the existing debts from the global financial crisis and this makes economies more vulnerable to macroeconomic and financial instabilities.

3. EUROPEAN UNION AND INDEBTEDNESS

The issue of public debt again is in focus of academic community, policy makers and journalist in the European Union and Eurozone that went through three large breakdowns in the last 20 years: the subprime credits crisis, debt crisis and now the COVID-19 pandemic. No doubt, this current crisis stopped the large recovery from the last debt crisis that was still ongoing in Eurozone countries when they faced with the pandemic, large fiscal deficits and unprecedented increase of public debt due to pandemic, obligatory quarantine, social immobilization, border closing, decrease of international trade and high unemployment rates (Briceno and Perote, 2020).

3.1. The Global Financial Crisis and sovereign debt crisis in the European Union

The previous, global financial crisis started with the collapse of the US real estate market in 2007, then it convert in serious economic crisis and sovereign debt crisis in Europe threatening to existence of the common European currency (Schularick, 2012). The crisis affected the whole EU, but its depth was unequal across the Member States and recovery was different (European Parliament, 2019). There was robust growth in Poland, a strong recovery in Germany and near meltdown in Greece accompanied by sovereign debt crisis (Begg, 2012). Levels of debt-to-GDP ratio were sharply increased in Greece, Spain, Portugal, Ireland and Italy in the worst years of the crisis (2009-2012). In some of these countries, the mentioned ratios have not yet decreased significantly[1]. The EU took extraordinary measures to try to prevent and mitigate crisis. Three kinds of action were used: at the EU level, central bank level and government level. In 2008 large European economic recovery plan (EERP) was launched as stimulus. The ECB took measures to support banking sector liquidity and governments also supported financial system providing guarantees for bank liabilities and recapitalising banks. This dual crisis has a very negative impact on fiscal position of many Member States since debt ratio and deficit ratio of many States has drastically worsen causing few Member States to need financial assistance from the EU, euro area and the IMF after losing access to financial markets (European Parliament, 2019). In the Eurozone especially, highly indebted countries are still more vulnerable and less prepared to persist asymmetric shocks (Schiliro, 2020). Slowdown in economic activity also make high budget deficits unsustainable. The EU was forced to engage in short-term "fire-fighting" measures such as bailouts to help stresses sovereigns. The ECB expanded its standard tools with unconventional monetary policy measures (quantitative easing) providing banking sector with long-term liquidity, purchasing government bonds and other securities on secondary markets to support sovereigns and lowering interest rates to avoid deflation. In order to install some kind of safety net for sovereigns in crisis, the Member States of the euro area created the European financial stability mechanism (EFSM) and facility (ESFS) that provided financial assistance (complemented by bilateral loans) and funded through issuing bonds and other debt instruments on capital markets. In 2012, the European Stability Mechanism (ESM) was created as a permanent backstop for euro-area countries no longer able to access financial markets. (European Parliament, 2019).

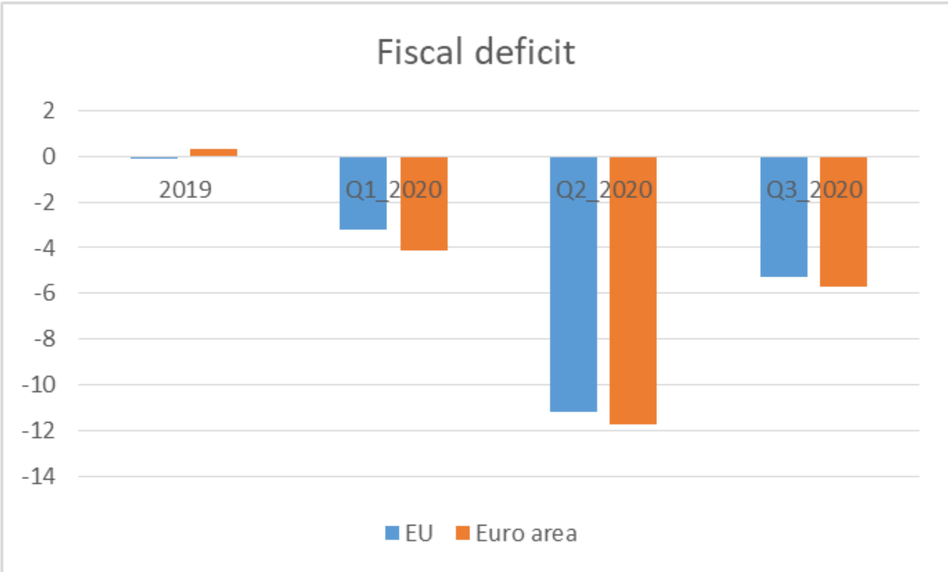
3.2. The COVID-19 pandemic crisis and the European Union indebtedness

Undoubtedly, the COVID-19 economic shock is exogenous and it does not depend on will or previous bad behaviour of any government or private sector, what differs it from the global financial crisis. This new COVID-19 pandemic-caused crisis is very different crisis made of complex mix of supply and demand shock. (Botta et al., 2020). As debated in some studies (European Parliament, 2019; Botta et al., 2020) economic crisis 2007-08 converted in sovereign crisis in the eurozone due to imbalances among the Member States and institutional shortages of monetary and especially fiscal policy.[2] As Benassy-Quere et al. (2020) addresses, in this new crisis, Europe is with different strengths and weaknesses than in the previous crisis. Banking sector is better

[1] http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do (10.04.2021)

[2] Many studies emphasized procyclicality of austerity measures during the recession

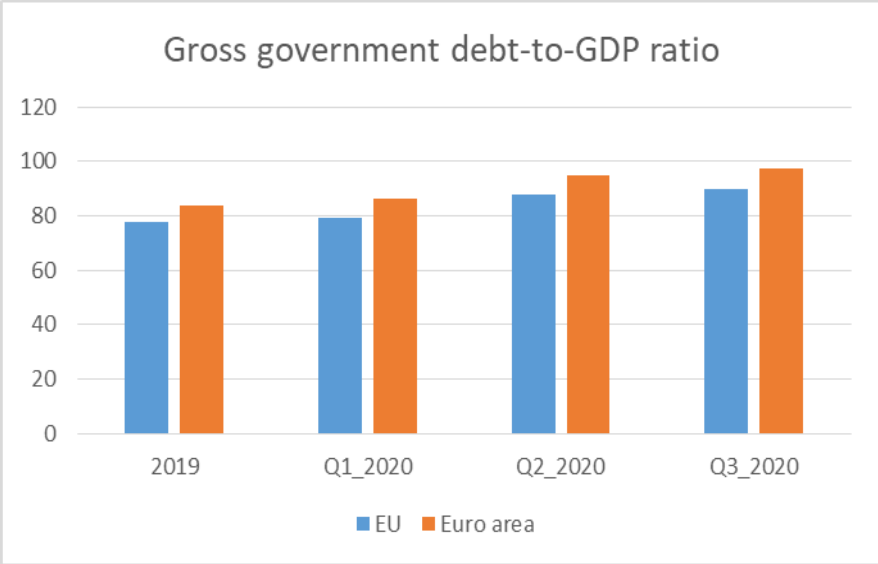
capitalized and liquid; securities market is more transparent; the European stability mechanism can act as protection to help banks and emergency help to the Member States and the ECB can help buying potentially unlimited amount of sovereign bonds according to adjustment programme. However, Member States itself are much weaker due to accumulated debt that in addition with new debt threat to become very unsustainable. The COVID-19 pandemic and unprecedented global recession and increase of indebtedness caused fear of new debt crisis that will need large interventions of international financial institutions and debt restructuring by private and official creditors (Truman, 2020). In order to prevent credit fall and large unemployment and maintain welfare of individual, government worldwide adopted different expansive monetary and fiscal measures (Song and Zhou, 2020). Strong response on national and the EU level buffered the impact of crisis on economic and social life in Europe. Economic fallout and emergency fiscal support resulted thus in large increase of public deficits and debt (European Commission, 2020). Having in mind the COVID-19 shock, governments worldwide responded properly by large fiscal support, fiscal deficits, in order to mitigate short and long-term negative impacts. Development of fiscal deficits in the in the EU, euro area and the Member States during the 2019 and three quarters in 2020 can be seen in the Figure 1.



Source: https://ec.europa.eu/eurostat/databrowser/view/tec00127/default/table?lang=en (10.04.2021)

Figure 1 Fiscal deficits (% of GDP) in EU, EMU and Member States (2019 and Q1-Q3 2020)

Since the Q1 2020, deficits (non-seasonally adjusted) started increasing because of the COVID-19 containment measures and policy responses to mitigate economic and social impact of the measures. This was in particular case in the Q2 2020, where the highest deficits since the start of the series was recorded (-11,7% of GDP). The financing of high deficits observed in the first three quarters in 2020, explain partly the increase in gross debt. Even though necessary, growing fiscal deficits led to increase of debt-to-GDP ratio. Kral (2021) states that debt-to-GDP ratio still increase and excess historical levels. This increased debt levels have some key risks including vulnerability to sudden tightening of financial conditions and sudden shocks, they limit government's ability to induce countercyclical fiscal policy stimulus during economic fallout. Data on development of debt-to-GDP ratio in the EU and euro area during the 2019 and three quarters in 2020 can be seen in the Figure 2.



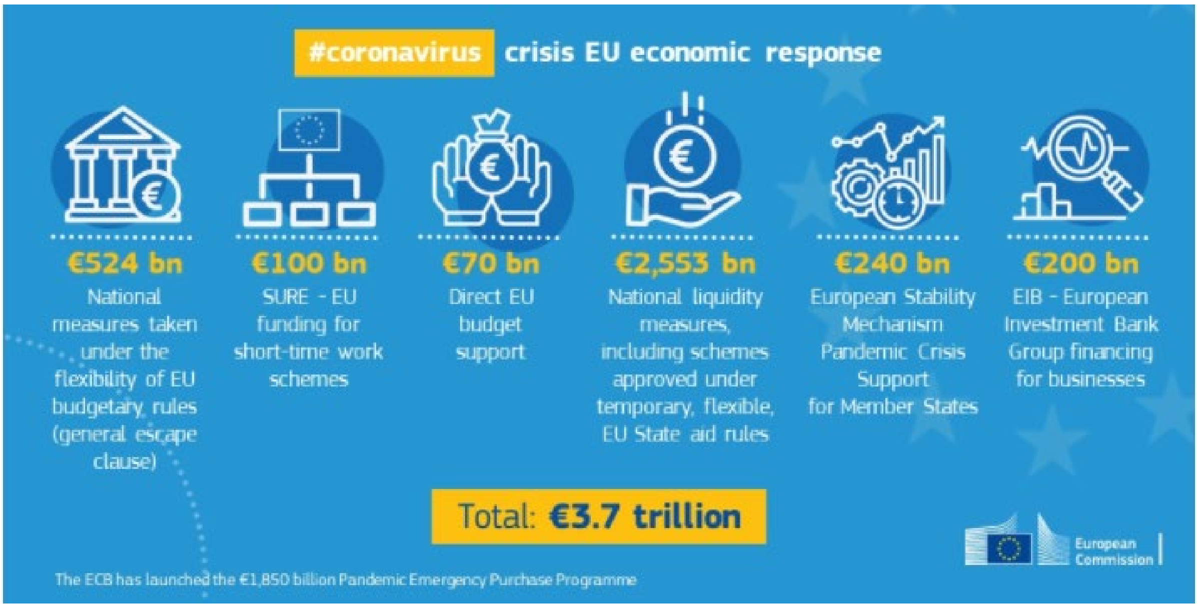
Source:
https://ec.europa.eu/eurostat/databrowser/view/gov_10q_ggdebt/default/table?lang=en(10.04.2021)

Figure 2 Debt-to-GDP ratio in EU and euro area (2019 and Q1-Q3 2020)

Quarter-to-quarter in 2020, debt-to-GDP ratio in the EU and euro area increased. The government debt-to-GDP ratios at the end of Q3 2020 were 89,8% and 97,3% in the EU and euro area respectively. The highest ratio was recorded in Greece (199,9$), Italy (154,2%), Portugal (130,8%), Cyprus (119,5%), France (116,5%), Spain (114,1%) and Belgium (113,2%). The lowest was recorded in Estonia (18,5%), Bulgaria (25,3) and Luxembourg (26,1). Increased debts bring bigger risk for turbulent market conditions when the ECB starts to ease its support (Wattret, 2021). In addition, it is important to address that fiscal deficits are not just European countries' issue but also of other countries. In USA, it is expected that federal budget deficit will be around $3,7 trillion and Japan's debt-to-GDO ratio is expected to be at 240% GDP in 2020-2021. As Lubik and Schwartzman (2020) debate, it is likely that this large indebtedness could affect efficiency of monetary policy and lead to pressure to maintain low interest rates for longer period. The large COVID-19 pandemic-caused crisis worsen this problem and emphasized need for better coordination between monetary and fiscal policy to resolve challenges of the European economies. The COVID-19 crisis raise financial burden not only in Europe but also worldwide. Also, an adverse COVID-19 shock causing increase of indebtedness can worsen economic fallout and lead to longer period of slow growth in recovery phase (Naisbitt, 2020). Current focus is on short-term actions and measures and aimed financial benefits to minimize negative economic impacts. Soon focus will again be on management of debt burden (Benassy-Quere et al., 2020). Especially since the Stability and Growth Pact's budgetary constraints are temporary cancelled by activating general escape clause of the SGP's, but they will again come back as key question (Schiliro, 2020).

In March 2020, the ECB launched its Pandemic Emergency Purchase Programm (PEEP), unrecorded volume of assets purchase in order to buffer financial markets and reduce spreads of highly indebted countries' bonds. In March, the ECB started its temporary asset purchase programme of private and public sector's securities of the total amount of €750 billion. In June this plan was expanded with €600 billion more, that is in total €1,350 billion without changing interest rate. The ECB also expanded duration of the PEPP until the end of June 2021 as previous deadline was December 2020. Funds will be distributed among states and sectors most affected by the pandemic and as loans and grants. The most of funds will be used for investment and reforms that should include green and digital transformation and resiliency of national economies. The European Stability Mechanism was expanded with the credit line called the Pandemic Crisis Support to help the Member States to cover the COVID-19 health costs. This line can be used from

June 1, 2020 until December 2022. In May 2020, the Member States agreed to establish the Support to mitigate Unemployment Risks in an Emergency (SURE) that will ensure financial support up to €100 billion in loans from the EU to affected Member State for sudden increase of public expenditures for maintenance of employment. These funds are financed through debt bonds issued by the EU and borrow to Member States in need at low rates (Schiliro, 2020). The Picture 4 shows the EU economic response to the COVID-19 crisis.



Source: https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/jobs-and-economy-during-coronavirus-pandemic_en (5.4.2021)

Picture 1 EU economic response to the COVID-19 crisis

3.3. Indebtedness after the COVID-19 pandemic

The European economy after the COVID-19 pandemic will be very different from before. It is very likely that rebound after the crisis will not be followed by sustainable recovery and situation will be much complex. Many countries will face with closure of companies and increase of unemployment; some financial institutions can weaken; interest rate is at or very near to effective lower bound; fight against climate changes will continue as priority. All this will request deep transformation that will threaten the growth (Wysploz, 2020). The COVID-19 shock left the European countries with limited fiscal space and under fiscal stress. Question is how to deal with the debt once crisis is over, since it is most dangerous after the crisis. The European solidarity weaken and Europe can easily repeat tragic mistakes of the European sovereign crisis. Therefore, it is very important to define clear and common strategy for debt payments especially for all this additional debt. Question is also what kind of support is necessary – loans or grants? (Benassy-Quere et al., 2020). Fiscal and monetary measures initiated to prevent economic fallout are important, but due to debt burden and inefficiency of monetary policy structural reforms are crucial to maintain long-term growth (Song and Zhou, 2020). Large interventions of public policies largely saved income of the most of population and enable existence of many companies. According to available data and projections, many Member States will have to borrow to get out of depression. This large borrowing is possible with large-scale public debt purchases by the ECB, and in the case of previously largely indebted states by the creation of the European Recovery Fund. In the same time, the ECB will possibly indirectly finance large share of newly issued debts through quantitative easing programme. Through APP, the ECB plans to acquire around €420 billion of debt by December 2021. Within PEPP, at least until June 2021, the ECB committed to spend €1,350 billion on public and private asset with large part considering debt. After the pandemic is over, many States will start to decrease their budget deficits. That can be large repeating mistake of the global financial crisis. Fiscal policy has to stay expansive, probably during few years, until recovery spreads and initiate corporative investments and demand strengthens. Lack of further fiscal policy support will be further debt accumulation. It is easy to predict pressures to cut deficits and debts. Then, the ECB could have important role by financing large share of new debt issues until expansive fiscal policy is not needed any more. Even though this ECB's role is often burdened by the fear of fiscal dominance,[3] it is still very important for sustainability of deficits and debts. The best solution for the ECB is to issue its own debt instruments that would be the real European safety asset that would remove any potential possibility of fiscal dominance and risk of loss (Wysploz, 2020). Botta et al. (2020) also address the importance of financing fiscal deficits of the Eurozone Member States. They debate that issue of long-term Eurobonds issued by the Member States but mutually guaranteed by the Eurozone's tax capacity are the best solution. One of reasons for this centralized Eurobonds is making fiscal space for stabilization policies in time of crisis. Governments would finance their emergency response by issuing public bonds that the ECB would buy directly on primary market (de Grauwe, 2020) and subsequently writes off from its balance sheet. On this manner, the ECB makes transfer on the account of the Eurozone governments to ensure needed funds for emergency[4] (Gali, 2020). This will stop further increase of public debts that can limit government efforts to induce economic recovery. Increase of debt-to-GDP ratio in addition to large GDP contraction and increase of government spending could make fiscal discipline and implementation of the SGP hard to achieve, once they again become active. Therefore, economists propose two alternatives: (1) debt-caused by the pandemic and accumulated during the pandemic will not take into account for implementation of fiscal rules when crisis is over; (2) bonds issued by the national governments during the crisis are fully monetized by the ECB, i.e. they are cancelled at maturity (Botta, et al., 2020). It is similar with grants and loans within NGEU that will also change budget position of States and interplay with fiscal rules. Solution is to not take into account the debt resulted from the NGEU as national debt and appropriate national spending financed from the EU debt would not be calculated as deficit (Darvas and Wolff, 2021).

4. INDEBTEDNESS IN TIME OF THE COVID-19 PANDEMIC – CASE OF BOSNIA AND HERZEGOVINA

Despite the macroeconomic stability that Bosnia and Herzegovina (hereinafter BiH) has enjoyed over the last decade, the pace of growth has been below the European peer countries and below what is needed to converge to the EU living standards. The economy is driven by consumption rather than production, investment is low and economy is inward-looking. The pandemic highlighted all these problems even more[5]. As Reinhart (2020) states for emerging countries that can be applied for BiH, with insufficient health system, limited capacity for fiscal or monetary stimulus and underdeveloped (or non-consistent) protection measures emerging countries are on the edge of the maybe most severe financial crisis from 1930s. Therefore, emerging countries will have to manage the new crisis with lower capacities of public health, bigger informal sector, less work from home and less fiscal spaces (Hevia and Neumeyer, 2020).

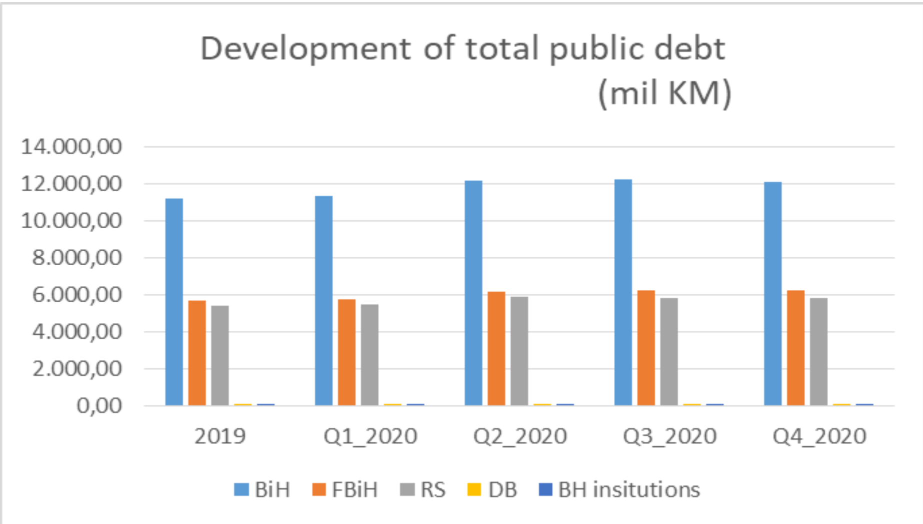
Before and in the beginning of the financial crisis BiH had slightly low level of the debt. According to the BiH Ministry of Finance and Treasury (2019) the highest increase of debt was recorded in 2009 and 2010 of 11,76% and 14,73% respectively due to the financial crisis. In 2017 debt decreased for 9,02%, while in 2018 and 2019 debt increased slightly for 0,90 and 0,84% in

[3] Fiscal dominance is often seen as main threat to the ECB independance. It occurs when government, formaly or informally, forces central bank to finance deficit.

[4] This could mean violation of the ECB's statute. But purchases of government bonds could bed one indirectly by making public special purpose vehicle, an institution that would by bonds from governments on primary market and then indirectly transfer them to the ECB by issuing liabilities that the ECB can buy in the contex of quantitative easing (Botta et al, 2020).

[5] https://pubdocs.worldbank.org/en/130501492011101536/mpo-bih.pdf (08.04.2021)

comparison to the previous year (Ministry of Finance and Treasury, 2020). Regarding the fiscal balance in BiH, according to data of the Central Bank of BiH, fiscal deficit was recorded in eight years in a row (2007-2014), the highest in 2009 of -4,3. Fiscal surplus was recorded in the recent years, from 2015 until 2019[6]. But, in 2020 the COVID-19 pandemic happened. As well as worldwide, the COVID-19 pandemic in BiH caused large economic consequences. According to data of the BiH Indirect Taxation Authority (2021) indirect taxes incomes in 2020 were 9,3% less than in 2019. According to the FBiH and RS Tax Administration taxpayers payed 6,47% and 6% respectively less public revenues in the period January-May 2020, than in the same time in 2019[7]. Faced with all consequences of the COVID-19 pandemic, governments of all levels in BiH adopted set of measures to mitigate the effects, including financial support for households, workers and companies. The FBiH Government adopted rebalanced budget in the amount of KM5,51 billion to ensure implementation of the Law on Mitigation of Negative Economic Consequences caused by the COVID-10 Pandemic. The National Assembly of Republika Srpska has adopted amended Decision on the long-term borrowing and instead of KM315 million they intend to borrow KM675 million. In the second quarter deficit was recorded for the first time after a long time, due to expenditure increase and revenues drop[8]. Governments of both entities allocated about KM50 million (0,15% GDP) for medical equipment. Federal government transferred KM 30 million (0,1% of GDP) to hospitals and the RS Government pays contributions for health and pension insurance for 40.000 workers in the amount of KM50 million (0,15% of GDP) and payed to Unemployment Fund about KM25 million (0,08% of GDP). Therefore, levels of debt and deficit worsen during the 2020. According to the WB projections, fiscal deficit in 2020 is expected to be -5,5. Development of the total public debt in BiH can be seen in the Figure 3 for the period 2019 until Q4 2020.



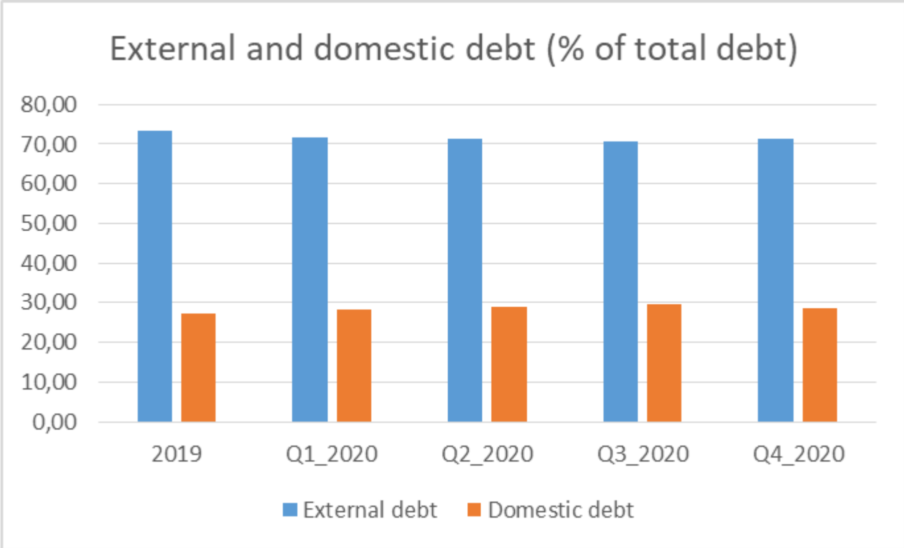
Source: https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2021/mart/Quarterly%20 overview%20of%20public%20debt%20of%20BIH%20-%20IV%20quarter%20of%202020.pdf (13.04.2021)

Figure 3 Development of debt in Bosnia and Herzegovina (2019 and Q1-Q4 2020)

After few years of significant decline, public debt in Bosnia and Herzegovina records increase in 2020. In the Q1 2020 total public debt increased in comparison to the 2019. Public debt significantly increased in the Q2 2020 due to withdrawals of earlier agreed arrangements and continued borrowing on the local capital market. In April 2020, BiH borrowed KM648,1 million from the IMF within Rapid Finance Instrument.. The increase also continued in the Q3 and Q4 2020. The

[6] http://statistics.cbbh.ba/Panorama/novaview/SimpleLogin_bs_html.aspx (12.04.2021)
[7] http://library.fes.de/pdf-files/bueros/sarajevo/16514.pdf (05.04.2021)
[8] The main contribution to the revenue drop was poor VAT collection as the most important component in indirect taxes structure.

trend of increase can be seen in both Entities as well as in District Brčko and for BiH institutions. Structure of the debt in 2019 and Q1-Q4 2020, can be seen in the Figure 4.

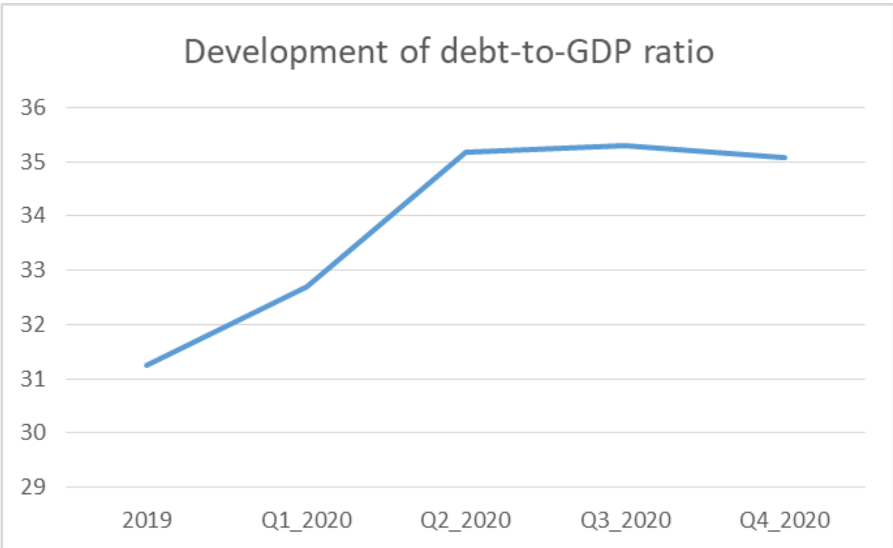


Source: https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2021/mart/Quarterly%20overview%20of%20public%20debt%20of%20BIH%20-%20IV%20quarter%20of%202020.pdf (13.04.2021)

Figure 4 External and domestic debt (2019 and Q1-Q4 2020)

Share of the external debt in the total public debt is much higher than domestic. In the last quarter in 2020, the share of external debt in the total public debt amounted for 71,27%.

According to the Central Bank of BiH, sharp contraction of real GDP growth rate is expected in 2020, in the amount of -4,6%. Following the mentioned and due to increase of the debt, quarter-to-quarter in 2020, debt-to-GDP ratio increases. The Figure 5 shows development of debt-to-GDP ratio in BiH in the period 2019 until Q4 2020.



Source: https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2021/mart/Quarterly%20overview%20of%20public%20debt%20of%20BIH%20-%20IV%20quarter%20of%202020.pdf (13.04.2021)

Figure 5 Development of debt in Bosnia and Herzegovina (2019 and Q1-Q4 2020)

The largest increase of the debt-to-GDP ratio was in the Q2 2020 due to new mentioned borrowings. In the Q4 2020, total public debt-to-GDP ratio was 35,08%. According to the all mentioned and current health and economic situation, it is evident that BiH will need additional credit funds to replace loss of revenues and start economic recovery once the pandemic is over. Projections of the Ministry of Finance and Treasury for total public debt-GDP ratio in 2020, 2021 and 2022 were 29%, 27,9% and 25,5% respectively. It is obvious that the COVID-19 pandemic will cause change of the numbers. Financial needs for fiscal support to households and economy will weigh heavily economic activity, worsen the mentioned indicators and could delay further recovery.

5. CONCLUSIONS

Currently, policy makers are focused on health measures and activities and to maintain social conditions to people. The first next thing in the post-pandemic world would be to think how to pay all these expenditures. Due to mass financial supports needed worldwide and increase of debt worldwide, the debt restructuring will be necessary in the future. It is evident that the COVID-19 pandemic has and will have long-term consequences on public finances, budget institutions and fiscal management. National budget responses are now focused on domestic economic situation and are mostly focused on short-term measures for output causing increase of deficits and debts. Situation in emerging countries is even more complicated since they are faced with lack of measures to fight pandemic problems. Firstly, lack of capacities for the measures and secondly proper long-term strategies to focus on real needs and solutions This crisis will probably bring structural changes in economies worldwide. Development of technologies, change of consumer behaviour and changed role of state will have different impacts on economies and recovery. However, not less important are promotion of sustainable development, green growth and digitalization. Public spending can have positive impact on growth, especially if spent in targeted projects aimed at increasing productivity of a country and complementary with private consumption, investment in R&D, innovations and human resources. However, radical fiscal measures designed to temporary support in wide range economy will in future have to be replaced with more sustainable measures. The central fiscal capacity will for sure have starting stability role. Conclusion is that governments in BiH followed similar actions and measures like the EU. Primarily actions and measures regarding lockdowns and other restrictions to stop spread of the virus. Financial measures in Bosnia and Herzegovina, like in the EU, are adopted to help companies, employers and employees and to save national economy. As it can be seen from the data in the paper, those measures resulted in increase of deficits and debts, in BiH and the EU. In the case of BiH, it is clear that additional funds and support are needed and will be needed in the future for economic recovery. Fiscal space and capacities in BIH are limited and since it is impossible to predict when the pandemic will be over and post-pandemic time will start, situation with indebtedness very likely will further worsen. Output downturn and revenues drop will in future have much more effect on need for borrowed funds. It is also important for BiH to fast public works realization, capital projects and investments for which funds are already available. Once the recovery start this will be a good springboard. Bosnia and Herzegovina is a complex state and its problems and issues in the time of crisis are much more visible. In the time when many mention reset of the economies, maybe it is time for BiH to do the same.

REFERENCES

Adhikari, P., Upadhaya, B., Wijethilake, C., Jayasinghe, K., Arun, T. (2020). COVID-19 policy responses: reflections on governmental financial resilience in South Asia, *Journal of Public Budgeting, Accounting and Financial Management, 32(5)*. https://doi.org/10.1108/JPBAFM-07-2020-0130

Afonso, A., Jalles, J.T. (2013). Growth and productivity: The role of government debt, *International Review of Economics and Finance 25*, pp. 384-407. https://doi.org/10.1016/j.iref.2012.07.004

Al-Thaqeb, S.A., Algharabali, B.G., Alabdulghafour, K.T. (2020). The pandemic and economic policy uncertainty, Wiley Reasearch Article, *Int J Fin Econ*, pp. 1-11. https://doi.org/10.1002/ijfe.2298

Amat, F., Arenas, A., Falco-Gimeno, A., Munoz, J. (2020). Pandemics meet democracy: experimental evidence from the COVID-19 crisis in Spain, https://osf.io/preprints/socarxiv/dkusw/ (08.03.2020). https://doi.org/10.31235/osf.io/dkusw

Bartcsh, E., Benassy-Quere, A., Corsetti, G., Debrun, X. (2020). It's All in the Mix: How Monetary and Fiscal Policies Can Work or Fail Together, *Geneva Report 23, Centre for economic policy research, CEPR PRESS*, International center for monetary and banking studies

Baum, A., Checherita-Westphal, C., Rother, P. (2012). Debt and Growth – New Evidence for the Euro area, ECB Working paper Series, No. 1450, https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1450.pdf (11.11.2020)

Begg, I. (2012). The EU's response to the global financial crisis and sovereign debt crisis, *Asia Europe Journal, 9(2-4),* pp. 107-124. https://doi.org/10.1007/s10308-012-0304-8

Benassy-Quere, A., Marimon,R., Pisani-Ferry, J., Reichlin, L., Schoenmaker, D., Weder di Mauro, B. (2020). COVID-19: Europe needs a catastrophe relief plan, Europe in the Time of Covid-19, VoxEU.org, 11 March 2020, https://voxeu.org/article/covid-19-europe-needs-catastrophe-relief-plan (01.03.2021)

Botta, A., Caverzasi, E., Russo, A. (2020). Fighting the COVID-19 Crisis: Debt Monetisation and EU Recovery Bonds, *Intereconomics 55(4)*, pp.239-244. https://doi.org/10.1007/s10272-020-0907-z

Bozorgmehr, K., Saint, V., Kaasch, A., Stuckler, D., Kentikelenis, A., (2020). COVID and the convergence of three crisis in Europe, *Lancet Public Health, 5(5),* pp. 247-278. https://doi.org/10.1016/S2468-2667(20)30078-5

Briceno, H.R. i Perote, J. (2020). Determinants of the Public Debt in the Eurozone and Its Sustainability Amid the Covid-19 Pandemic, *MDPI*. https://doi.org/10.3390/su12166456

Buiter, W. (2020). Paying for the COVID-19 pandemic will be painful, Financial Times, 15 May 2020, https://www.ft.com/content/d9041f04-9686-11ea-899a-f62a20d54625 (11.03.2021)

Bulow, J., Reinhart, C., Rogoff, K., Trebesch, C. (2020) The debt pandemic, *Finance&Development*

Burriel, P., Checherita-Westphal, C., Jacquinot, P., Schön, M., Stähler, N. (2020). Economic consequences off high public debt: evidence from three large scale DSGE models, ECB Working paper No2450, https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2450~e008f3b9ae.en.pdf?288603824407529b99e726c6bd552797 (08.03.2021)

Cecchetti, S.G., Mohanty, M.S., Zampolli, F. (2011). The Real Effects of Debt, BIS Working Paper No. 352

Central Bank of Bosnia and Herzegovina http://statistics.cbbh.ba/Panorama/novaview/SimpleLogin_bs_html.aspx (12.04.2021)

Chudik, A., Mohaddes, K., Pesaran, M.H., Raissi, M. (2017). Is There a Debt-Threshold Effect on Output Growth?, *The Review of Economics and Statistics, MIT Press, Vol. 99(1)*, pp. 135-150. https://doi.org/10.1162/REST_a_00593

Čeh Časni, A., Badurina Andabaka, A., Sertić Basarac, M. (2014). Public debt and growth: evidence from Central, Eastern and Southeatern European countries, *Zbornik radova Ekonomskog fakulteta Rijeka, Vol. 32, Sv. 1*, pp. 35-51

Darvas, Z., Wolff, G.B. (2021). The EU's fiscal stance, its recovery fund and how they relate to the fiscal rules, *Bruegel BLOG. 4 march*

De Grauwe, P. (2020). The ECB must finance COVID-19 deficits, *Project Syndicate*, https://www.project-syndicate.org/commentary/ecb-needs-to-embrace-covid19-monetary-financing-by-paul-de-grauwe-2020-03?barrier=accesspaylog (25.03.2021)

de Villiers, C., Cerbone, D., Van Zijl, W. (2020). The South African government's response to COVID-19, *Journal of Public Budgeting, Accounting and Financial Management, 32(5).* https://doi.org/10.1108/JPBAFM-07-2020-0120

Eberhardt, M., Presbietro, A.F. (2013). This Time They're Different: Heterogeneity and Nonlinearity in the Relationship Between Debt and Growth, IMF Working Paper, WP/13/248, https://www.imf.org/external/pubs/ft/wp/2013/wp13248.pdf (03.08.2020). https://doi.org/10.5089/9781484309285.001

Egert. B. (2012). Public Debt, Economic Growth and Nonlinear Effects, Myth or Reality?, OECD Economics Department Working Paper, https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP(2012)70&docLanguage=En (03.05.2020)

European Commission (2020). EU contributes 183million eur to debt relief for 29 of the world's poorest and most vulnerable countries, Press Release,Brussels,https://ec.europa.eu/commission/presscorner/detail/en/IP_20_2183 (10.03.2021)

European Commission (2021). Communication from the Commission to the Council, One year since the outbreak of COVID-19: fiscal policy response, Brussels, https://ec.europa.eu/info/sites/info/files/economy-finance/1_en_act_part1_v9.pdf (20.3.2021)

European Parliament (2019). https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/642253/EPRS_BRI(2019)642253_EN.pdf (10.03.2021)

Eurostat,http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do (10.04.2021)

Gali, J. (2020). Helicopter money:The time is now, *VOX CEPR Policy Portal*,https://voxeu.org/article/helicopter-money-time-now(25.03.2021)

Gomez-Puig, M., Sosvilla-Rivero, S. (2017). Public Debt and Economic Growth: Further Evidence for the Euro Area, *ICEI*, WP09/17. https://doi.org/10.2139/ssrn.3041117

Hevia, C., Neumeyer, A. (2020). A Conceptual Framework for Analyzing the Economic Impact of Covid-19 and its Policy Implications, UNDP Latin America and the Caribbean, Policy Document Series, UNDP LAC C19 PDS, No.1, https://www.undp.org/content/dam/rblac/Policy%20Papers%20COVID%2019/finaldocuments/UNDP-RBLAC-CD19-PDS-Number1-EN.pdf (01.04.2021)

http://library.fes.de/pdf-files/bueros/sarajevo/16514.pdf (05.04.2021)

https://ec.europa.eu/eurostat/databrowser/view/gov_10q_ggdebt/default/table?lang=en (10.04.2021)

https://ec.europa.eu/eurostat/databrowser/view/tec00127/default/table?lang=en (10.04.2021)

https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/jobs-and-economy-during-coronavirus-pandemic_en (5.4.2021)

https://pubdocs.worldbank.org/en/130501492011101536/mpo-bih.pdf (08.04.2021)

https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2021/mart/Quarterly%20overview%20of%20public%20debt%20of%20BIH%20-%20IV%20quarter%20of%202020.pdf (13.04.2021)

https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2021/mart/Quarterly%20overview%20of%20public%20debt%20of%20BIH%20-%20IV%20quarter%20of%202020.pdf (13.04.2021)

https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2021/mart/Quarterly%20overview%20of%20public%20debt%20of%20BIH%20-%20IV%20quarter%20of%202020.pdf (13.04.2021)

Indirect Taxation Authority, Department for Macroeconomic Anylsis (2021)http://www.oma.uino.gov.ba/bilteni/Oma_Bilten_hr_187_188.pdf (08.04.2021)

Kral, D. (2021). COVID-19's legacy of high public debt in Europe: Prospects and problems, *HIS Markit, Economics&Country Risk Research& Analysis*

Kumar, M.S., Woo., J. (2010). Public Debt and Growth, IMF Working Paper, WP/10/174, https://www.imf.org/external/pubs/ft/wp/2010/wp10174.pdf (08.12.2020). https://doi.org/10.5089/9781455201853.001

Lubik, T. A., Schwartzman, F. (2020). Public and Private Debt after the Pandemic and Policy Normalization, Economic Brief, EB20-06

Ministry of Finance and Treasury of Bosnia and Herzegovina (2019) https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2020/Informacija%20o%20stanju%20javne%20zaduzenosti%20BiH%2031%2012%202019%20-%20HRV.pdf (08.04.2021)

Ministry of Finance and Treasury of Bosnia and Herzegovina (2020) https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2020/Informacija%20o%20stanju%20javne%20zaduzenosti%20BiH%2031%2012%202019%20-%20HRV.pdf (08.04.2021)

Ministry of Finance and Treasury of Bosnia and Herzegovina, Public Debt Management Strategy,2017-2020 https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2018/Srednjorocna%20strategija%20upravljanja%20dugom%20BiH%20za%20period%202017-2020%20za%20objavu%20pdf%20BOS.pdf (08.04.2021)

Ministry of Finance and Treasury of Bosnia and Herzegovina, Public Debt Sustainability Analysis,2018-2022 https://www.mft.gov.ba/hrv/images/stories/javni_dug/informacije/2018/Analiza%20odrzivosti%20duga%20BiH%202018%20-%202022%20god.%20-%20lekt%20Hrv.pdf

Naisbitt, B. (2020). Vulnerability from debt in the coronavirus crisis, National Institute of Economic and Social Research, NIESR Policy Paper 020

Panizza, U., Presbitero, A.F. (2014). Public debt and economic growth: Is there a causal effect?, *Journal of Macreconomics*. https://doi.org/10.1016/j.jmacro.2014.03.009

Pescatori. A., Sandri, D., Simon, J. (2014). Debt and Growth: Is There a Magic Threshold?, IMF Working Paper, WP/14/34, https://www.imf.org/external/pubs/ft/wp/2014/wp1434.pdf (03.08.2020). https://doi.org/10.5089/9781484306444.001

Presbitero, A., Wiriadinata, U. (2020). The risks of high public debt despite a low interest rate environment, VoxEU.org, 5 August 2020, https://voxeu.org/article/risks-high-public-debt-despite-low-interest-rate-environment (09.03.2021)

Raudla, R., Douglas, J.W. (2020). This time was different: the budgetary response to the pandemic-induced crisis in Estonia, *Journal of Public Budgeting, Accounting and Financial Management*, *32(5)*. https://doi.org/10.1108/JPBAFM-07-2020-0094

Reinhart, C. (2020). Suspend Emerging and Developing Economies' Debt Payments, Project Syndicate, https://www.project-syndicate.org/commentary/suspend-emerging-and-developing-economies-debt-payments-by-carmen-reinhart-and-kenneth-rogoff-2020-04 (25.03.2021)

Reinhart, C.M., Rogoff, K.S. (2010). Growth in a Time of Debt, *American Economic Review: Papers and Proceedings, 100*, pp. 573-578. https://doi.org/10.1257/aer.100.2.573

Schiliro, D. (2020). COVID-19 Crisis and Public Debt Issue: The Case of Italy, *International Journal of Business and Management and Economic Research (IJBMER), 11 (4),* pp. 1851-1860

Schularick, M. (2012). Public debt and financial crisis in the twentieth century, *European Review of History: Reveu européenne d'historie, 19(6)*, pp.887-897. https://doi.org/10.1080/13507486.2012.739149

Song, L., Zhou, Y. (2020). The COVID-19 Pandemic and Its Impact on the Global Economy: What Does It Take to Turn Crisis into Opportunity, *China&World Economy, 28(4),* pp. 1-25. https://doi.org/10.1111/cwe.12349

Truman, E.M. (2020). Sovereign Debt Relief in the Global Pandemic: Lessons from the 1980s, Policy Brief 20-13, PIIE Peterson Institute for International Economics

Wattret, K. (2021). Is the Eurozone at risk from another sovereign debt crisis, *HIS Markit, Economics&Country Risk Research& Analysis*

Wysploz, C.(2020). The Euro Area After COVID-19, IN_DEPTH ANALYSIS, European Parlieament, Monetary Dialogue Papers