Coronavirus Pandemic as a Challenge in Debt Sphere

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Abstract. The aim of the study is to carry out analysis of the coronavirus pandemic as a challenge in debt sphere and to develop forecasts regarding debts in the global economy, as well as some recommendations, connected with debt management. The trend in debts’ dynamics such as simultaneous increase in volume of advanced and developing countries’ debts is analyzed. Risks in debt sphere are detected, including contingent liabilities, increases in debt servicing costs in developing countries and problems of refinancing. Vicious circle of different types of debt (public and private) is revealed. The paper considers the modern problems with debt relief. It was shown that current situation in terms of the prospects of the world economy, structure of debts and specifics related to creditors complicates the process of debt restructuring. Some recommendations for more efficient management of debts’ presented in the paper are as follows: economic growth as main provision for deleveraging; increase in accountability and transparency of all types of debt; full coverage of internal and external risks; activization of the usage of new financial instruments; improvements in regulation, aimed at the participation of private creditors in debt settlement.

Keywords: Pandemic · Crisis · Public debt · Private debt · Debt relief · Management · Efficiency

1 Introduction

Current situation with COVID-19 and quarantine measures carried out by most countries of the world and the widespread reduction in economic activity is unprecedented. There is no experience in creating conditions for recovery from a shock of such magnitude. Both developed and developing countries urgently need significant funding to sustain economic activity, especially jobs. Ant-crisis measures undertaken by the governments of different states lead to increase in borrowing and, accordingly, public debt. Debt overhang usually slows investment and hinders economic growth for years, all this reduces the well-being of the population. So, public debt management is one of the most important directions of economic policy and a constant search of its efficiency is one of the purposes of the government in each state.

There is significant amount of publications devoted to the problem of debt in the global economy. Among the modern authors, who contributed to the creation of the
foundations of debt management we should name the following researchers: C. Reinhart [1–3]; K. Rogoff [1–4, 7, 8]; V. Reinhart [3]; A. Abbas, A. Pienkowski [4]; S. G. Cecchetti, M. Mohanty and F. Zampolli [5], M.A. Kose, P. Nagle, F. Ohnsorge and N. Sugawara [6]. At the same time, a number of issues related to the latest trends in the debt sphere remain not revealed and are of scientific interest. There are many publications devoted to methods of debt management, developed by J. Bulow with co-authors [7, 8]; S. Claessens with co-authors [9]; B. Clements with co-authors [10]; P. Krugman with co-authors [9, 11]. The research gap is connected with the fact that many recommendations for prudent debt management and restructuring of debts in case of problems with repayments were formulated for the conditions that are quite different from current situation in terms of the prospects of the world economy, structure of debts and specifics related to creditors.

There is a fast-growing list of literature devoted to the studies of the COVID-19 epidemic and its impact on national and global economics. For instance, T. Antipova reveals coronavirus pandemic as Black Swan event for the world [12]. C. Hevia and P.A. Neumeyer show COVID19 as a perfect storm for emerging economies [13]. But it should be noted that we are at the early stage of understanding of the pandemic effects and corresponding ant-crisis measures in the global economy.

The purpose of this study is to consider the coronavirus pandemic as a challenge in debt sphere, to develop analysis regarding the volume and structure of debts in the global economy and to formulate some recommendations.

The findings of this research can be useful for the financial authorities that deal with debt management (Ministries of Finance, Central Banks, Debt Agencies, etc.) and participants of the financial markets.

2 Methodology of Research

The methodological basis of the research are system approach, fundamental provisions of economic theory and the theory of international economic relations. We applied methods of mathematical modelling, comparative analysis, expert assessments. Mathematical modelling (Eq. (1)) helped to speculate the idea about possibility to reduce the volume of public debt. The method of comparative analysis was used to determine the differences between debt situation in advanced and developing countries currently; as well as to reveal the differences between present situation and previous periods of debts’ restructuring.

Statistical data of international economic and financial organizations (International Monetary Fund, World Bank), for instance, Global Financial Stability Report by International Monetary Fund [14] and International Debt Statistics by the World Bank [26] as well as publications of foreign [1–11] and domestic authors [20, 24] were used as sources of information.

3 Overview of the Situation in the Global Economy and Global Finance in 2020

Global economy is currently experiencing a combination of a severe health crisis, a deep recession in many countries and regions, and unprecedented social consequences for all
countries. The governments of many countries impose mitigation and lockdown policies that limit social interactions to stop the spread of COVID-19. These measures have been effective in taming the spread of the disease but caused significant economic costs.

The COVID-19 pandemic has negatively affected a considerable number of sectors of the economy and threatened the existence of a large percentage of companies around the world. The situation in many economies around the world is characterized by a significant decline in business activity. Contraction in global economic activity is unprecedented, with global growth projected at –4.4% for year 2020, according to the October 2020 World Economic Outlook. Both advanced and developing economies are affected, with more than 85% of countries around the world expected to see subzero growth in 2020 [14, p. 1].

The most significant losses in the COVID-19 situation were incurred by service sector [15]. Deterioration is noted in the wholesale and retail trade, the tourism industry and the restaurant business, sectors providing other services. Small and medium-sized businesses have difficulties. Significant decrease in the consumption of energy resources is forecasted. There are sharp declines in car travel, flights; as well as lower electricity and heat consumption in restaurants and offices. There is a threat of massive bankruptcies in the passenger transport, tourism and hospitality industries.

A significant decrease in production is observed in industrial sectors focused on investment demand (mechanical engineering, production of electronic and electrical devices, etc.). Some segments of mechanical engineering will also be challenged. For example, airlines are unlikely to make new orders for aircraft in the near future. Overall, companies in many industries will need to rethink their strategies and business models.

Additional negative factors were the changes in labor markets caused by the pandemic, associated with an increase in underemployment and a decrease in income of the population, and a decrease in the inflow of remittances in some developing countries. As a result, domestic consumer demand declined; there is a “cooling” of credit activity and a general decline in the indicators of enterprises.

In general, the following factors are negatively affecting national economies: weakening domestic and external demand, measures of social isolation and limited communication between states, uncertainty about the prospects for economic development, deteriorating business sentiment, as well as disruption of value chains. Many governments were forced to make fiscal transfers to support consumption during the lockdowns [15].

Developing countries have been hit by COVID-19 significantly more than advanced countries. It can be explained by overreliance on revenue from foreign trade and international tourism. Such countries are also more financially vulnerable and faced significant capital outflow. As it is revealed by IMF experts, the extraordinary level and speed of portfolio outflows from February to April 2020 created serious disruptions for emerging markets [14, p. 20]. Major economies have been able to implement massive monetary and fiscal ant-crisis measures, that are not affordable to other countries. For emerging markets limited policy space can prevent necessary anti-crisis policies.
4 Analysis of Debts’ Dynamics and Structure

By objective reasons the modern world economy can’t develop without movement of borrowed funds between national economies, as well as between their entities. The global economy at the present stage is characterized by reliance on debt. Debt can be classified as public and private as well as it can be external and internal.

Public debt arises when government spending begins to exceed revenues and budget deficits become chronic; at the same time, the coverage of the budget deficit is carried out not by monetary emission methods, but by borrowing.

The growing public debt, on the one hand, can be associated with the implementation of state regulation of the economy, aimed at ensuring progressive shifts in the structure of the economy, but, on the other hand, in many cases, it is a reflection of the crisis processes taking place in the country and requires the adoption of stabilization measures. As it is stressed by one of the most famous researches in the sphere of debt, World Bank Chief Economist C. Reinhart: «Debt is what enables governments to have extra resources they need to invest in health systems, education, or infrastructure… If you have a debt problem, all those ambitions suffer. That’s why it’s important to get the debt onto sustainable ground as quickly as possible. We can’t afford another lost decade» [16].

Debt problems often become the most difficult economic problems to deal with. A sharp increase in the growth of government debt is always caused by an economic downturn, a budget deficit, and the inability of the government of a country to keep the dynamics of the financial situation under control. Unsustainable debt makes it difficult to reform the economy, slows down economic growth, and has a negative impact on the state’s position in the world community.

Dynamics of general government debt in advanced economies and in emerging economies during the period 1880–2020 years are revealed in Fig. 1.

According to IMF, even prior to the pandemic, public and private debt were already high and rising in most countries, reaching 225% of GDP in 2019, 30% points above the level prevailing before the global financial crisis. Global public debt rose faster over the period, standing at 83% of GDP in 2019. In 2020, global general government debt is estimated to make an unprecedented increase up to almost 100% of GDP [17, p. ix]. We can see nearly vertical part of the curve, that shows the jump of public debt both in advanced and emerging markets economies. The patterns of such increase are similar to the conditions of the Global Financial Crisis (especially in advanced countries) and, unfortunately, it is similar to the circumstances of the World War I and World War II. The major drivers of such significant growth of the public debts are as follows: sharp contraction in economic activity and decline in revenues to the budgets; increase in public expenditures; rises in the primary deficits and as consequence – necessity to increase borrowing.

As for low and middle-income countries, additionally to problems, caused by increased expenditures and decreased revenues of the budgets, they faced another challenge, that was connected with high levels of capital flight from their financial markets. This in turn has led to devaluation of the national currencies, aggravated the burden of external debt and identified the problem of debt refinancing.
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Advanced economies show higher rates of public debt to GDP in comparison with emerging markets economies. As it can be seen from Fig. 1, in 1970–1990 the ratios of general government debt to GDP in % for advanced and developing countries were rather close. In previous several decades the problem of over-indebtedness has been observed mainly in poorest countries and emerging markets. In recent years the debt of the leading developed countries, whose politicians are faced with the need for significant fiscal consolidation, has spun out of control.

A simplified model for public debt can be applied to calculate the indicator of public debt to GDP:

\[
(D/G)_t = \left[ \frac{1 + i_t}{1 + g_t} \right] (D/G)_{t-1} + Pb_t,
\]

where \((D/G)_t\) is the ratio of public debt to GDP in the future period, \(g_t\) is the forecast of growth in nominal GDP, \(i_t\) is the interest rate on government obligations, \((D/G)_{(t-1)}\) is the current debt to GDP, \(Pb_t\) is the positive primary balance, that is, the fiscal balance minus interest payments.

Equation (1) stresses the role of the growth rates for GDP, interest rates on government obligations, current ratio of public debt to GDP and the primary balance as factors influencing the debt volume relative to GDP. Already accumulated significant debt, low growth rates of projected GDP and deficit of the budget will lead to further increase of the public debt to GDP ratio. As for the current interest rates, we can forecast positive influence of this factor on the situation with public debt. In several previous years low interest rates have been observed on the global capital market. Thus, even if government debt increased, interest payments increased slightly. In 2020, as anti-crisis measures the Federal Reserve System in the US and the European Central Bank have continued to
rely on a policy of quantitative easing, respectively, low interest rates, although earlier planned to finish carrying out this policy. But such decisions also have shortcomings. For example, they lead to negative interest rates on bank deposits, that increases banks’ costs and cuts their profits.

Taking into account the current forecasts of economic growth and budget deficits, public debts in the majority of advanced and developing countries will continue to grow. Accordingly, there is a need to develop measures to stabilize and make an attempt to decrease public debt. To reduce the ratio of public debt to GDP, a significant budget surplus is required, that is sufficient to pay off debt, or an increase in nominal GDP growth.

History offers some examples of countries that have significantly reduced their debt burden. After World War II, the public debt in Great Britain was 238% of GDP, in the USA - 121% of GDP. These figures were sharply reduced (in the US because of two decades of considerable GDP growth and in the UK as a result of spending cuts). There were successful deleveraging episodes of Sweden and Finland in the 1990s. As it was revealed by the experts of McKinsey based on the experience of Sweden and Finland, the critical markers of progress before the economic recovery takes off are the following: the financial sector is stabilized and lending volumes are rising; structural reforms have been implemented; credible medium-term public deficit reduction plans are in place; exports are growing; private investment has resumed; and the housing market is stabilized, with residential construction reviving [18]. In the recent past, Canada reduced its public debt from 91% of GDP in 1995 to 51% of GDP in 2007, thanks to strong growth in the global economy and commodity exports. So, the circumstances of the deleveraging process were different; but it is clear that this process is politically challenging [19].

An important aspect of public debt and its management is the problem of contingent liabilities. Contingent liabilities are obligations that are not explicitly recorded on government balance sheets and that arise in the event of a particular discrete situation, such as a crisis [17, p. 55]. Based on the experience of different countries, S. Storchak has classified basic forms of the contingent liabilities: 1) state guarantees and state insurance; 2) pension obligations for future periods; 3) commitments of regional and local authorities; 4) obligations under the public-private partnership; 5) obligations of enterprises with state participation; 6) commitments to maintain the stability of the financial system [20, p. 253]. There has been a steady increase in contingent obligations in the world economy. Underestimation of the volume of public debt can be connected with the fact, that there is no complete comprehensive accounting of all contingent liabilities accumulated by governments. This in its turn leads to the lack of the authorities’ ability to manage contingent liabilities and emerging risks in the sphere of debt.

Another type of the debt is private debt, that can include the debts of banks, corporates as well as debt of households. Nonfinancial corporate and household debt has trended upward for two decades, reaching almost 150% of GDP in 2019 and exceeding public debt by a large margin in most Group of Twenty countries. There was significant increase in corporates’ borrowings in the first half of 2020, with $5.4 trillion secured by companies across the globe, including $3.9 trillion since the start of March 2020 [17, p. 23]. There can be risks for the public finances because of the nexus between private and public
Let’s discuss the possible links between public debt, banks’ debt and the debts of corporates and households.

1st stage. In the situation of economic slowdown and limited fiscal space the sovereigns start to face complexities with their debts. In case of the concerns, connected with creditworthiness of the governments, there can be problems for banks, that hold corresponding governments’ obligations. That was the case for example in 2011–2012 in euro area, when banks faced mark-to-market losses on their holdings of governmental bonds of some European countries. In this scenario there is usually a decrease in the demand for sovereign as well as banks’ bonds and consequently increase in required yields on them. Sovereigns and banks face problems with servicing of their debts and with refinancing. Under such conditions banks’ funding costs increase and are transferred to corporates and households through higher interest rates on loans.

2nd stage. This increases the probability of nonperforming loans from the side of corporations and households. The situations is often accompanied by further economic slowdown. Companies and individuals have lower incomes, that in its turn decreases tax revenues to the budget. Banks face losses. The problem of contingent liabilities begins to manifest. As an extreme there can be bankruptcies of financial institutions and non-financial firms.

3rd stage. Public sector funds are used to rescue falling banks and companies that have strategic importance for the economy of the country. As a result it increases the expenditures of the state budget and the overall situation worsens. The government is forced to further increase the debt or implement austerity measures.
Under current conditions vulnerabilities in public or private debt can exacerbate each other through sovereign-corporate linkages.

5 Debt Relief Approaches and Related Contradictions and Problems

Different types of countries, not just developing countries, can face temporary financing challenges under the conditions of COVID-19 pandemic. For these purposes there is the lending capacity of the International Monetary Fund in the amount of $1 trillion, of which about one-fourth is already committed [17, p. ix]. The volume of financial resources from the World Bank comprises $14.5 billion as fast track facilities and $160 billion in the 15 months starting from spring 2020 to June 2021 [21, p. ix]. This includes $50 billion of new International Development Association (IDA) resources through grants and highly concessional loans.

Taking into account the fact, that the situation in the countries differs, the measures to mitigate debt problem are also different: the revision of the loan payment schedules, introduction of a moratorium on interest payments, provision of short-term or long-term capital.

As part of the plan for post-crisis economic recovery, debt relief measures are required. The International Monetary Fund, the World Bank, regional development banks and other international organizations support debt relief programs to help countries get through the COVID-19 epidemic. For instance, responding to a call from the World Bank and the International Monetary Fund, the G20 endorsed the Debt Service Suspension Initiative (DSSI) in April 2020 to help up to 73 of the poorest countries manage the impact of the COVID-19 pandemic [16]. It is a temporarily suspension of the payments by poor countries to repay official bilateral debt. Access to grants and concessional financing is necessary for some countries with low-income developing states.

Contradictions and problems in debt restructuring are connected with the structure of debts in terms of creditors and forms of borrowings. Over some previous years when low interest rates were observed on the global capital market many developing countries were able to increase their borrowing in the form of bonds. It helped to raise important financing; at the same time debt servicing costs have grown significantly. What complicates the management of the debts is the fact that the share of commercial creditors has risen: 69% of developing countries’ debt is now owned to commercial creditors compared to 41% in 2010 [22, p. 98]. It means that initiatives by international organizations with suspension of debt payments will not cover all problematic debts and debtor countries. The G20 has called on private creditors to participate in moratorium for debt payments but as of September 2020 there has been no private participation [22, p. 98].

6 Discussion

Current conditions of high and simultaneous increases in financing in different countries lead to actualization of the debt problem. For countries with unsustainable debt, options for debt restructuring must be considered. C. Arellano, Y. B. and G. P. Mihalache
show that debt relief programs can have profound positive effects: debt relief supports consumption, can reduce the severity of the debt crisis, and can save lives [23]. In this context, their research paper suggests that the recent debt relief policies promoted by the International Monetary Fund and other international organizations, are right on target to combat the costs associated with COVID-19. We do not fully share the optimism demonstrated for debt relief.

Unfortunately, the prerequisites and necessary conditions for active debt cancellation have not been created. As it was proved by E.A. Zvonova [24, p. 15], there is a high probability that globalism, especially hyperglobalization, will give up positions, the world economy will return to a bloc confrontation. The dominant trends in the future will be regionalization and protectionism. In this situation, some creditors will be reluctant to restructure the debts owed to them and to indulge debtors. The possibilities of debt relief will depend on many factors, including the probability of repayment of the remaining part of the debt, types of the creditors (official or private) and their incentives. That is why detailed statistical information on all of the aspects of the debts is of crucial importance.

There are changes in the world economy, structure of debts and specifics related to creditors that can make management of the debts more complex.

The difficulty in the work of international organizations, including the IMF, World Bank, regional development banks is due to the fact that an increase in allocated funds, along with a moratorium on debt repayment, will put the international financial institutions themselves in a difficult financial situation. The volatility of payments from middle-income borrowing countries can reduce aid to the poorest countries. Despite all the difficulties of the multilateral cooperation, it is necessary in the sphere of debt restructuring.

The conducted research does not claim to fully highlight the key problems of debt management. As areas for further investigation we can name the following topics: approaches to increase accountability and transparency of debt management, including new technologies, including Distributed Ledger Technology (DLT); detailed analysis of the methods of debt restructuring and accumulated experience of different counties in this sphere in previous decades; practice of some countries, that successfully conducted deleveraging in their economies.

7 Conclusion and Recommendations

There is some kind of consensus about the fact, that the lockdown policies are useful for alleviating the health crisis, caused by COVID-19. But such measures carry large economic costs that can finally lead to debt crisis. Both advanced and developing countries deal with the problem of debt nowadays. But the ability of different countries to respond to pandemic crisis and challenges in debt sphere is different.

We can make some general and some more specific recommendation in connection to debt management.

1. As for general recommendations, the main provision for successful deleveraging is economic growth. Governments should prepare conditions and stimulus for activisation. There should be measures to support safe and successful reopening; programs
to increase employment and economic activity; facilitation of the transformation to a post-pandemic economy that should be more resilient, inclusive and greener. Different countries can have their own paths to deleveraging.

2. To improve the quality of decision-making, it is necessary to increase accountability of debt. As it was highlighted by T. Antipova [25], the role of accounting increases under the conditions of the financial crisis. For example, in response to an urgent need for greater debt transparency, the latest edition of the International Debt Statistics (IDS) report [26] provides more detailed and more disaggregated data on external debt than ever before in its near 70-year history (including breakdowns of what each borrowing country owes to official and private creditors in each creditor country, and the expected month-by-month debt-service payments) [16]. Both advanced and developing countries should improve accounting and prudent management of contingent liabilities.

3. It is required to enhance transparency in the public management sector in many countries. It is necessary to take into account that, for example, scenario forecasts perform an important function of forming the expectations of society and economic entities [27].

4. Debt management should be more holistic, comprehensive, with an understanding of existing relationships between different types of debt and the full coverage of internal and external risks.

As for some more specific recommendations, the following should be mentioned:

1. The variety of financial instruments should be increased. For example, already now developing countries are more actively using complex debt instruments, such as the central bank and currency swap arrangements that represent loans from other central banks.

2. Additionally to traditional, conventional bonds as a main tool that is used to borrow, it is advisable to attract financial resources by new types of obligations: sustainability bonds, green bonds, social bonds, vaccine bonds. It can be recommended for the potential investors to pay attention to the opportunities of Environmental, Social, Corporate Governance (ESG) investments.

3. There should be improvements in legislation connected with restructuring of the debts. The changes in the structure of creditors brought new challenges that should be addressed. Possible solutions aimed at participation of private creditors in debt settlement include incentives provided by Financial Stability Board, Bank for International Settlements and other regulators in the form of lessening of some requirements; or, contrary, compulsion to suspend debt payments, even in the absence of a force majeure clause in bond contracts. Legal measures should be aimed at preventing the predatory behavior of some creditors, among them are limits on amounts that can be obtained from the sale of government bonds, that were purchased at a significant discount; counteracting to blocking by predatory funds of decision-making in connection with debt restructuring.

Measures taken within debt management should be aimed at borrowing at favorable conditions, rationally allocating attracted financial resources and effective usage of
the volume and structure of the debt and countering the negative consequences of the crisis events.

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