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THE IMPACT OF FOREIGN EXCHANGE RESERVES AND STATE DEBT ON THE ECONOMY OF UKRAINE

The economic processes of the countries of the world are built on the interaction of many mechanisms and factors that influence each other in one way or another, causing certain economic phenomena. The functioning of the financial system of each state is closely related to the management of its public debt. The impact of debt on the economy cannot be unequivocally considered as positive or negative for a number of reasons, as on the one hand the state needs external and internal borrowing, especially when it is unable to finance its own expenditures or in case of unforeseen circumstances arising. On the other hand, debt servicing entails additional budget expenditures, which sometimes causes an even greater deficit. Another equally important factor influencing the country's macroeconomic stability is the volume of its gold and foreign exchange reserves, which is a set of international financial assets owned by a particular state. In Ukraine, like in most countries of the world, the total sum of these reserves first of all supports to maintain the stability of the national currency.

Studies in the field of determining the impact of gold and foreign exchange reserves and public debt on the economic processes of Ukraine have been studied in the works of many domestic and foreign scientists, including those of: Melykh Yu. O., Marshaliuk T., Moroz I., Buhil S. Ya., Mosiondz O. A., Filatova H. P., Zhuravka H. O., Diakovskiy D., Korol M. M., Lapa I. V.¹

The main task of the study is to determine the impact of gold and foreign exchange reserves on the main macroeconomic processes of the state, to define the

¹ Melykh, O. Y. (2019), «State credit and current condition of Ukraine's national debt», *Efektivna ekonomika*, [Online], vol. 12, available at: <http://www.economy.nayka.com.ua/?op=1&z=7509> DOI: 10.32702/2307-2105-2019.12.83; Marshalok Taras, Ivanna Moroz (2019). The impact of public debt on economic development. *World of Finance 2*: p. 23-36.; Bugil, S. Y., O. A. Mosjondz. (2018) "External Public Debt Management in Ukraine and Foreign Countries." *Young Scientist* 10 (2): p. 721-725.; Filatova G. P., Zhuravka F. A. (2020) Estimation of the impact of economic development on public debt of Ukraine // *Actual problems of economy*. №12 (233). pp. 6-17. DOI: 10.32752 / 1993-6788-2020-1-233-6-17.; Dyakovsky D. (2020). The essence and current trends in the formation and use of gold and foreign exchange reserves of Ukraine. *Scientific notes of NaUKMA. Economic Sciences*, 5 (1), pp. 48–54. <https://doi.org/10.18523/2519-4739.20205.1.48-54>; Korol M. M., Lapa I. V. (2018). Theoretical bases of formation and management of gold and foreign exchange reserves / M. M. Korol, I.V. Lapa / *Scientific Bulletin of Uzhhorod National University. Series: International Economic Relations and the World Economy - Issue № 21/2018*. - Uzhhorod National University. 128–131.

relationship between the sum of these reserves and the dynamics of the exchange rate of the national currency, and also to specify the role of Ukraine's public debt through the prism of its structure and potential use spheres over recent years.

The purpose of gold and foreign exchange reserves has several areas of their use; in particular, they can be used to make international payments for state obligations, cover the balance of payments deficit, but they also play an significant role in ensuring the stability of the national currency. Let us analyze the dynamics of Ukraine's gold and foreign exchange reserves over the past 14 years, and compare this dynamics with the hryvnia exchange rate against the US dollar for the same period. The results will be presented in Table 1.

Table 1

Dynamics of the value of Ukraine's gold and foreign exchange reserves and the hryvnia exchange rate against the US dollar during 2008-2021

Years	Ukraine's gold and foreign exchange reserves, million US dollars (as of the end of the year)	Exchange rate of hryvnia to US dollar, UAH
2008	31543,2	5,26
2009	26505,11	7,79
2010	34576,4	7,93
2011	31794,61	7,96
2012	24546,19	7,99
2013	20415,71	7,99
2014	7533,33	11,89
2015	13299,99	21,84
2016	15539,33	25,55
2017	18808,45	26,60
2018	20820,43	27,20
2019	25302,16	25,85
2020	29132,89	26,96
2021	30940,95	27,29

**Source: compiled by the author on the basis of data²*

Having analyzed these data, we can find out that the trend in the dynamics of gold and foreign exchange reserves of Ukraine can be divided into two major stages: from 2008 to 2014 and from 2014 to 2021. During the first stage, the gold and foreign exchange reserves of Ukraine trend could be characterized as a downward. Having analyzed their dynamics, we can see that in 2009 there was

² Ministry of Finance. State finance. Gold and foreign exchange reserves of Ukraine. URL: <https://index.minfin.com.ua/ua/finance/assets/>

a certain decline, probably due to the effects of the global financial crisis in 2008. At the period specified the exchange rate of the hryvnia against the US dollar increased by 47, 92%. In 2010, the amount of reserves grew significantly, but in the next years it commenced to decrease. The dynamics of the currency rate during this period did not undergo significant changes, keeping a slight growing trend. In order to better understand how strong the relationship between these indicators was, as well as determine the direction of this relationship, we shall calculate the Pearson correlation coefficient; its value is -0,814. This value of this indicator means that during 2008-2014 there was a fairly strong converse correlation between the size of gold and foreign exchange reserves and the exchange rate of the hryvnia against the US dollar. Thus, the decrease in gold and foreign exchange reserves amount, together with the influence of other factors, led to the devaluation of the national currency, which emphasizes the significant impact of reserves on ensuring the stability of the national currency once again.

In 2014, the value of reserves amount reached its critical minimum which was caused by the political and economic crisis in Ukraine. It was that very moment when a significant outflow of capital from the country and a major devaluation of the hryvnia took place. However, starting from 2015, Ukraine gradually began to increase the amount of reserves, and already in 2019 it was possible to reach the pre-crisis level and growth over the next years. In total, from 2014 to 2021, the value of Ukraine's gold and foreign exchange reserves increased by more than 4 times. As for the exchange rate, its dynamics also grew; we have got the possibility to trace its significant growth during 2014-2015, in subsequent periods it was approximately at the same level with slight fluctuations. If we calculate the Pearson correlation coefficient for gold and foreign exchange reserves and the exchange rate during 2015-2021, its value will make 0,697. As you can see, the relationship between these indicators became somewhat weaker within the second conditional stage, but here it is direct, which indicates that with the increase in the amount of gold and foreign exchange reserves, the currency exchange rate was also growing to some extent, that is, there was a devaluation of the national currency. This can be explained, first of all, by the difficult economic situation in Ukraine during 2014-2015, when the amount of gold and foreign exchange reserves fell to its record low levels, which was accompanied by a collapse in the hryvnia exchange rate. In the following years, the state gradually commenced the process of the reserves restoration and increase, but such a decrease in 2014, as well as a substantial outflow of capital

and investment from the country due to the political and economic crisis led to a major devaluation of the national currency and inflation. For example, the average annual exchange rate of the hryvnia against the US dollar increased by 83, 77% in 2015 compared to the previous year. During 2016-2018, the value of the exchange rate was still growing, but not at such a high pace. In 2019, they even managed to stabilize the exchange rate at a certain level due to a decrease in energy prices, an increase in the number of investors in domestic government bonds (OVDP [IGLBs – Internal Government Loan Bonds]) of Ukraine, and the normalization of the foreign trade balance. Particular attention should be paid here to the increase in the amount of foreign investment in IGLBs, because thanks to this, the National Bank of Ukraine (NBU) was able to accumulate a significant amount of foreign currency to pay off external debts, as well as to increase gold and foreign exchange reserves through receipts from non-residents, and thus the amount of the above-mentioned reserves was increased by 21, 53% in 2019 against the backdrop of strengthening national currency. The growth in demand from foreign investors for IGLBs can be primarily associated with the high yield rate for government bonds, which, in turn, was due to the high values of the NBU discount rate in 2018-2019, which was used by the NBU to curb inflation. Thus, the increase in foreign exchange earnings from foreign investors on the one hand contributed to increasing the amount of gold and foreign exchange reserves, and on the other hand - to strengthen the stability of the hryvnia. During the next two years, foreign exchange reserves continued to grow despite the 2020 crisis caused by the pandemic. The exchange rate has increased compared to the previous 2019. Thus, based on this analysis, it can be summarized that on the one hand the decrease in gold and foreign exchange reserves leads to destabilization of the national currency and devaluation, as it could be observed during 2008-2014. On the other hand, starting from 2015, the values of these indicators changed approximately in the same way, that is, with a significant increase in gold and foreign exchange reserves after the rapid fall in 2014, the values of the hryvnia exchange rate were also growing, which was attributed the fall of the economy caused by the consequences of the same crisis in 2014.

Public debt arises for a number of reasons, but one of the most common is that the state often goes beyond its financial capabilities, and therefore needs to attract additional resources to finance expenditures. According to the source of its attraction, public debt can be external and internal. The state, guided by certain interests and levers, determines from which sources it is more expedient and

profitable to attract loans. It is possible to overcome or at least reduce the budget deficit in several ways. First of all, it can be done by increasing the revenue side of the budget, therefore, to increase tax revenues by raising tax rates or increasing the number of payers. Increasing tax rates will not be effective in the medium and long term, because over time, most of the taxpayers will move into the shadow sector of the economy; this will have an even worse effect. Increasing the number of taxpayers by bringing them out of the shadows or introducing tax incentives, this will be a more effective measure, but it will take a longer period of time to get a result. Another option to reduce the budget deficit is to reduce expenditures. However, it should be understood that such actions, especially during a crisis period, cannot be introduced without damage to certain sectors of the economy that should be financed from the budget. That is why the state can use the third way to cover the budget deficit, namely, attracting borrowed funds, resulting in public debt. The concept of debt is often perceived negatively and many believe that it should be avoided, as some experts are sure that debt can lead the state to bankruptcy and impair its financial stability. However, there are a number of other views on the interpretation of the role of public debt in the country's economy, namely that through borrowing the state can attract additional financial resources that it can use to stimulate the economy, which in the future will cause its growth. Therefore, the role of public debt can be considered from two sides: on the one hand, the attraction of loans by the state allows it to cover its expenses in the shortest possible time and invest in those sectors that can result in economic growth in the future. On the other hand, the emergence of public debt entails the payment of interest, i.e. the need for constant debt service, which in turn may exacerbate the problem of budget deficit.

A marginal debt-to-GDP ratio of 60% has been set in Ukraine. It should be mentioned that it was in 2020-2021 that the values of both gold and foreign exchange reserves and public debt were the highest, but it was obvious that their ratio reached its highest value, because during the study period, gold and foreign exchange reserves grew at a faster rate than public debt did. If compare this figure with other advanced economies, then for example as of the end of 2021 its value in the US is 0, 88%, in the UK - 8.00%, and in Germany – 11, 29%. The corresponding figure for Ukraine for the same period makes 31, 59%. As you can see, despite the rather small share of international reserves in ratio to public debt and the large amount of public debt of these countries, they remain quite financially

stable and resistant in comparison with Ukraine, where the amount of reserves compared to public debt is much higher than in the countries with advanced economies. Thus the United States, the amount of public debt is extremely high, thus in 2022 it exceeded USD 30 trillion, and the ratio of public debt to GDP is 137%. This indicator for the UK was 95% in the previous year³. Obviously, such large amount of public debt and its ratio to the GDP do not prevent these states from holding their positions among the most developed economies in the world, which allows us to conclude that from this point of view, public debt can be used to develop the state's economy, subject to its effective management, as these countries send the raised funds to support small and medium-sized businesses in their countries, which in turn reduces the unemployment rate, and also helps with the expansion of lending to small businesses.

Also, when speaking about the effectiveness of public debt management, it is necessary, first of all, to compare and analyze the structure of debt, because the amount of payments on it will depend on it. After all, the effectiveness of the state's financial planning should lie in the correctness and optimality of the sources of attraction and directions for the use of borrowed funds.

In the course of the study, it was possible to reveal that such financial categories as public debt and gold and foreign exchange reserves have a key impact on the economic processes that have taken place in our country in recent years. Gold and foreign exchange reserves are primarily designed to maintain the stability of the national currency, and as it has been proven, in different periods there was a certain correlation between them - direct or converse. On the other hand, the exchange rate nominally affects the amount of reserves, because the greater the devaluation of the national currency is, the more funds are necessary to be raised to replenish reserves. As for the role of public debt in the economy of our state, we managed to find out that its role should also not be defined only from the standpoint of deteriorating the financial stability of the state only. In the countries with advanced economies, public debt is much higher than in Ukraine, and this allows them to expand their economic potential through borrowed funds. Ukraine can also use these funds to increase investments in support of small and medium businesses and economic development. Also, it is necessary to increase the share of government bonds in the structure of public debt; this will allow to develop the stock market and involve foreign investors.

3 Exchange portal №1. Macroeconomic statistics by country. URL: <https://take-profit.org/statistics/>

However, this requires a change in a number of factors is required for this, for example, one of them is the current political situation in our country, not allowing the economy to fully function and depriving Ukraine of the opportunity to be a safe country in terms of investment.

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SOCIAL RESPONSIBILITY OF ECONOMIC ENTITIES IN CRISIS CONDITIONS IN THE DEVELOPMENT OF MARKET RELATIONS

The development of market relations and the practice of existence of economic entities in these conditions proves that their economic performance is directly related to the so-called "social value" of the company, which is defined as the total effect of positive impact on society from the operation of this company. and its reputation in society and its commitment to its brand of consumers of the company's results and suppliers of resources needed to ensure its operation. That is why modern management of business structures and economic entities involves the transition to the so-called "socially oriented" concept of management (Total Responsibility Management (TRM)), which involves a significant increase in attention to the requirements of various "stakeholders" under the influence of or another business entity – from environmental issues to the development of civil society in the regions of presence and the country as a whole.

The results of scientific research on these issues and generalization of practical experience of leading companies in economically developed countries, where the principles of market economy dominate, shows that in modern conditions the issue of effective business is impossible without efficient and profitable business, as well as the fact that this business must be «socially oriented». That is, business must be one that is based on a comprehensive system of protection of the interests of all participants in economic relations, guaranteed by the state and perceived by society as a whole. To be a socially responsible business entity in the conditions of a high level of economic development and sustainable welfare means, in terms