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ECONOMIC EVALUATION OF DEBT SUSTAINABILITY OF UKRAINE

The importance of assessment of sustainability of public debt as the reflection of the country's ability to fulfill its commitment as loans regards servicing and repaying is proved and the dynamics of public debt of Ukraine is analyzed herewith. It is also noted that in the recent years there is a tendency to increase the national debt due to high risks of currency loans and significant debt load on the state budget. The concept of national debt sustainability is clarified. The different scientific and methodological approaches to assessing debt sustainability of the country are studied. The state of the debt sustainability is analyzed within three groups of indicators: liquidity, solvency and indebtedness of the public sector. It is noted that the debt load in Ukraine is not very threatening, but further loans increase pressure on the state budget. It is proposed to reduce interest rates and to make effective exchange rate policies. The need for reducing the debt limit and establishing effective control over the repayment and servicing of external resources is brought herewith. It is noted that in order to improve debt sustainability the "targets method" should be applied.

Keywords: *national debt, debt burden, debt sustainability, debt sustainability indices.*

Statement of the problem. One of the global problems on the modern stage of development of Ukraine is the excessive build-up of public debt that has a number of negative consequences for the country's financial system and debt security. Exceeding the maximum allowable amount of national debt could cause negative consequences for the country's economy functioning and debt sustainability. The analysis of public debt sustainability estimations reflects the country's ability of to perform its commitments as regards to managing and repay of financial loans. High debt load increases reliance on foreign lenders, debt accompanying costs and budget deficit grow.

Analysis of recent studies and publications. The problem of debt sustainability was researched in scientific works of some domestic scholars, namely, O. Baranovskyi, T. Bondarchuk, T. Vakhnenko, V. Demianyshyna, A.

Kyrylenko, S. Korabliova, V. Koziuka, V. Kornieyev, V. Lisovenko, V. Oparina, V. Fedosova, O. Tsaruka, S. Yuriy. Among western scholars special attention is paid to the works of R. Barreau, D. Bukennen, R. Davis, J. Keynes, R. Mazgrave, F. Modigliani, A.. Radzivil.

The high level of scientific research as well as the scientists are afforded the honour; however, at the present stage there is a variance in approaches to measuring debt load in the country. Therefore, the analysis of debt sustainability and search for increasing its level remains actual.

The purpose and objectives of the study. The purpose of the article is the analysis of key indices of debt sustainability that would assist objective and reliable assessment of the quality of public debt management, and practical recommendations for minimizing debt load onto state budget. The next objectives were identified to achieve the goal: to clarify the concept of debt sustainability, to describe the basic indices for measuring debt sustainability, to suggest measures to increase its level.

Summary of the basic material. The impact of the global financial crisis and unpractical policy for external debt formation caused the significant increase of the national debt and further load of debt payments to the state budget of Ukraine.

Therefore, according to the quarterly reports of the AgencyCapital IQ, Ukraine in the 1st quarter of 2014 ranked the 7th among 70 countries risking default. The general possibility of default (CPD) of Ukraine was estimated at 44.25% [9]. It was forced on by significant accumulation of public debt, great share of external debt in the total structure, political instability, complexity of loan servicing, uncertainty concerning the economic situation in the country.

The tendency towards public debt growth became noticeable in recent years; it is defined by unstable situation with refinancing the debt of the previous periods, high currency exchange risks of external loans, significant debt load on the state budget.

The dynamics of aggregate public debt of Ukraine for 2003-2013 is shown in Fig. 1.

The results of the analysis indicate that the total amount of public debt and state guaranteed debt during the period from 2003-2013 is 5.4 times greater. The quick growth of the total amount of the national debt in 2009 is grounded by financial expenses for debt servicing, increase of government loans to cover budget deficits, mitigation of the global financial crisis.

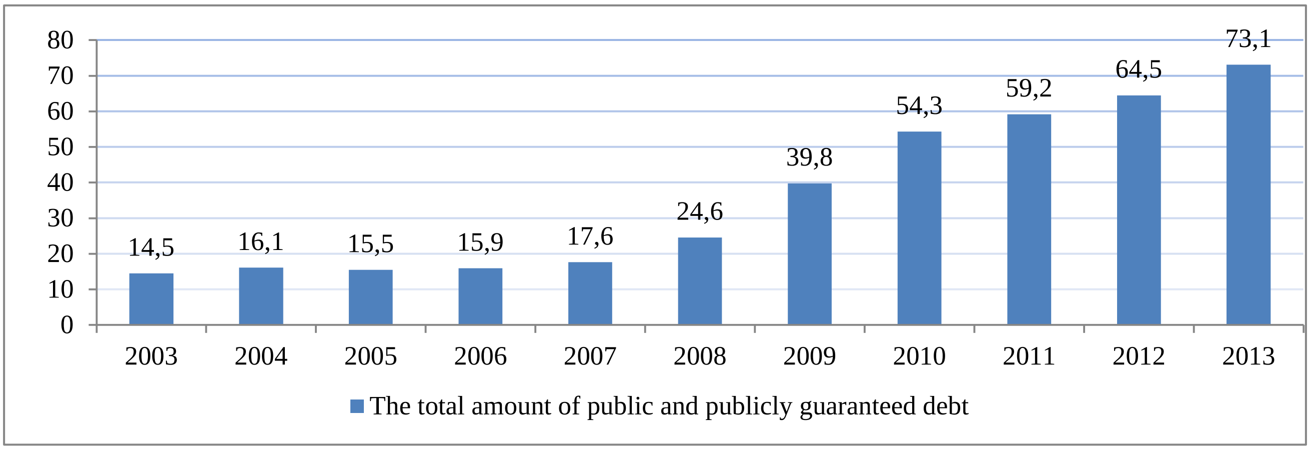

Fig. 1. Dynamics of aggregate public debt of Ukraine in 2003-2013, bln. USD *

* Build up by the author based on the data of Ministry of Finance of Ukraine

During 2009, further attraction of new loans and national currency devaluation stipulated significant debt increase (67.8%), however in 2012-2013 together with national currency stabilization and new loans reduction the increase made 8.9% and 13.4% respectively.

In this context, the quantifying debt sustainability and pace of public debt accumulation are of priority tasks at the present stage.

In the economic reference debt sustainability is meant as the qualitative characteristics of the size and structure of public debt that guaranties the state's ability to fulfill debt obligations without increasing debt load onto the budget provided the sufficient level of liquidity and solvency is maintained, and the need to resort to writing-off or restructuring of public debt is excluded [5, 42].

Analyzing the work of domestic and foreign scholars, and the experts of the World Bank, IMF and other international financial organizations one arrives to the conclusion that there is no clearly defined indices and their threshold values that should be used as the basis for the definition of debt sustainability.

So, the IBRD for each country separately, as well as for regional groups of countries and for countries with low-and middle-income publishes the following indices:

—external cumulative debt, % to goods and services export;

— external cumulative debt, % to national gross income;

— short-term external debt for the residual term of repayment, % to the total of aggregate debt;

—international reserves, external debt% to aggregate [10, 20]

At the same time, according to the Western financial opinion there are two approaches to the assessment of the state's debt sustainability:
1) it is considered that the debt position of the country is stable, if the ratio of national debt against GDP is at constant level or decreases after a certain period of time (O. Blankart, V. Buiter, N. Budina, s. Veinbergen, and others);
2) ensuring country's debt sustainability requires restraining the growth of public debt for the long ahead instead of its limiting (l. Slaventa, d. Hamilton, c. Flavin) [4, 101].

The domestic experts M. Stavnych and V. Topol define the next criteria of external loans: the ratio of external debt to GDP is 50% , to annual exports is 275%, debt repayment and servicing to annual exports is 30%, external debt servicing to annual exports is 20 % [8, 72]. The scholars make accent on probability of debt write-off if the three indices of its limit values are exceeded.

This opinion is also supported by A. Sarkisiants by noting that the debt is considered high if the maximum of the specified factors and indices of evaluation of a country's debt sustainability reach their maximum; it is average if at least three of the major indices exceed 60% of their maximum oriented values; in other cases the debt can be considered low [2, 357].

Such scholars as E. Balls and G. O'Donnell consider that economic growth may be negatively affected even by the stable dynamics of debt if its value is relatively high. The results of various studies show that the optimal level of debt for countries with advanced economies is within 20-50 % of GDP [7, 95]. However, for Ukraine, its optimal level should be lower than for the countries with advanced economies due to the significant proportion of debt in foreign currency, high currency exchange risks, and low efficiency of state management.

As noted earlier, the concept of debt sustainability, unlike debt security, apart from the optimum ratio between the external and internal loans sufficient for solving urgent socio-economic needs, includes the concept of solvency, liquidity, debt of public, financial and private domains.

The analysis of liquidity indices shows that during 2009-2013 the international reserves in Ukraine were not sufficient to cover short-term external debt for residual term of repayment. Moreover, a steady drop of this indices in the long period was observed (table 1).

Table 1

Dynamics of liquidity by 2009–2013*

Indices of debt sustainability	Threshold value in the world	Threshold value in Ukraine	Actual state in Ukraine				
			2009	2010	2011	2012	2013
International reserves against short-term debt (Alan Gripen's index)	1	1	0.67	0.7	0.54	0.57	0.41
The ratio between short-term debt and the total debt	–	-	0.99	0.9	1.0	1.02	0.91

* Calculated based on data [1; 3; 6]

As the data of the Table 1 show, the current A. Grispen's index in 2013 was 0.41 (i.e. only 41% of short-term debt covered by reserves). It is a long-term minimum and so it is a negative characteristic. The reason for the index drop is the continuous debt growth against the reduce of international reserves of the country. Since the ratio of reserves to short-term debt is smaller than 1, it is likely to have the situation when a country’s government or residents may break the schedule of external debt repayments in case of adverse changes on the international capital market .

The analysis of the indices of Ukraine’s solvency proves that during 2009-2013 the most of the indicators did not exceed their threshold values. The exception was the level of external debt per capita. I is stipulated by debt increases from year to year against continuous population decrease due to unfavorable demographic situation in the country. In 2013 the said the figure was as 824.0 USD and exceeded the threshold of 624.0 USD. The significant share of external debt per capita speak of debt sustainability derangements (table 2).

Table 2

Dynamics of Ukraine's solvency by 2009-2013*

Indices of debt sustainability	Threshold value in the world	Threshold value in Ukraine	Actual state in Ukraine				
			2009	2010	2011	2012	2013
The ratio of total public debt against GDP,%	≤ 50 – 60	≤ 60	31.9	39,4	36.1	36.6	39.2
The ratio of national external debt against GDP,%	–	≤ 25	21,37	25,25	260	21.91	20.1
The share of external debt per capita, USD	≤ 200	≤ 200	576,9	759,2	821,1	848,1	824,0
The ratio of external debt against annual goods and services export,%	≤ 165	≤ 70	49,12	54,04	40,39	37.4	48, 23
The ratio of domestic debt against GDP,%	–	≤ 30	11,51	14,41	15.34	15,67	19.1

* Calculated based on data [1; 3; 6]

The ratio between the public external debt and goods and services export is used as a dynamic index closely connected with the country's potential towards debt repayment and characterizes the capacity of the country to cover the debt in foreign currency from exports. By the end of 2013, the ratio between the public external debt and goods and services export was 48.23%. This is the highest value in the last three years. Despite the fact that this figure did not reach the critical value, its size indicates to significant insolvency of Ukraine.

According to the international and domestic standards, the top standard as regards the ratio of the total national debt to GDP is 60 %. During the analyzed period, index exceeding was not fixed. However, its significant increase shows the dangerous growth of debt risk and unstable debt position of the country.

The ratio of external debt against GDP characterizes the ratio between debt and resource base, identifying the possibility of changing manufacture for product export with the purpose of strengthening the potential of debt repayment. This index in 2010 exceeded the threshold of 5.25%, due to the close cooperation with international financial institutions in crediting. During the following years the ratio of external debt to GDP although decreased, but stayed at high level demonstrating the weakening of debt sustainability.

The ratio of domestic debt against GDP describes and summarizes the internal debt of the country. During 2009-2013 the standard value stayed within admissible norm and as of 2013 was 19.1 %. Thus, the stock of financial strength at the end of the analyzed period was 10.9 % showing little trust to the country's debt securities on the domestic market.

The analysis of the performance of the state management demonstrates the ratio index of government debt according state securities to GDP in 2013 to have been 1.2 % that is greater then in 2009 by 51 %. This fact testifies increase of the load onto the state budget and speaks of debt securities share grows involved in financial loans (table 3).

The average term for national debt repayment demonstrates the stability of financial position of the country against risks of debt refinancing. In 2013 the average term for national debt repayment of Ukraine was 4.7 years, that exceeds the allowed of 2.4, and displays the term for the country's obligations before the international financial organizations. The trend towards continued growth is showed by the index of debt servicing against export. Over the last five years, this index increased more than 2.4 times showing decline in state's readiness to make payments and increase of transfer risk associated with inability to transfer funds to a crediting country due to currency limits in creditor's country.

Table 3

Dynamics of state sector indices for 2009 – 2013*

Indices of debt sustainability	Threshold value in the world	Threshold value in Ukraine	Actual state in Ukraine				
			2009	2010	2011	2012	2013
The ratio of government's debt according the state securities against GDP,%	≤ 30	–	14.0	18.0	16.4	16.3	19.1
The average term for debt repayment, years	2.3	6.4	3.6	3.7	4.1	4.6	4.7
Government's debt servicing before exports	–	–	2.1	2.8	4.0	4.6	5.1

* Calculated based on data [1; 3; 6]

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However, the wide use of international and domestic practice for limiting values of debt factors does not allow to determine the critical limit, beyond which the country is already partially may be considered not solvent, being only reference values. Therefore, compliance with the conditions and criteria for debt sustainability, as well as the effective management of public finances, monetary and credit system and currency domain is extremely important to minimize debt risks and ensuring economic long-term stability.

To increase the level of debt sustainability in Ukraine and holding the values in the allowable limits in our opinion is advisable to:

— provide the development of the domestic financial market and reducing the share of external debt with simultaneous diversification of loan rates;

—apply the method of "target references" (benchmarking) as the basis for unbiased estimation of efficiency of debt policy by means of using the procedures of anticipatory debt redemption, hedging and securitization of, which would allow saving significant funds used for public debt servicing and redemption;

— reduce the public debt limit to 40% of GDP, which reflects the development of domestic financial markets;

— provide budgetary surplus with credit operations that will gradually enable decrease of debt load;

— develop the strategy for refocusing on market sources for loans using a proven international toolkit;

—set the control over international reserves that will allow guaranteeing the country's current solvency;

—define necessity of financing of some social payments and reduce the size of financial loans to cover budget deficit;

—establish tough control over loans with floating-rate mortgages, also loans involved for up to one year in total public debt;

—reduce interest rates and carry out the effective currency rate policy that will reduce the cost of public debt servicing.

Conclusions. According to the analysis of public debt sustainability assessment it is true to declare that according to the international standards, debt load in Ukraine is not too threatening for the country's economy, however, adopting public loans largely increases pressure on the state budget. The significant aggravation of debt sustainability occurred in 2009, when the profit of Ukrainian Eurobonds increased significantly, and domestic market of state loans was unable to meet the state's needs in loan resources. Over the next years, the situation stabilized, although, significant threat to debt sustainability in Ukraine was caused by high levels of public debt against GDP (39.2%), significant external debt per capita (824 USD), large share of public external debt against GDP (20.1%), and little international reserves against the amount of short-term external liabilities of Ukraine's residents (0.41).

In our opinion, to solve this problem, it is advisable to improve the organizational basis for public debt management and appropriate legal base, as well as to toughen responsibility of the debtors receiving funds under public guarantees. One of the effective ways to improve debt sustainability is to establish effective control over external resources repayment and servicing in order to finance the country’s economic development and introduction of monitoring and operational accounting of all kinds of the country’s financial obligations that may potentially affect the size of public debt.

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