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MODERN STATE AND WAYS OF IMPROVING DEBT SAFETY OF UKRAINE

Abstract. The article examines the debt safety as a priority trend to ensure financial safety of Ukraine and its main component. It considers modern scientific views of defining the nature of the debt safety and effects of the debt burden on the economy of Ukraine. In order to reveal the factors that affect the assessment of the debt safety of Ukraine, we have analyzed the dynamics of the state safety debt by means of a system of indicators. It researches on the main indicators of debt safety state reflecting the content and effectiveness of public debt management through taking into account some boundary values which allowed us to specify the main factors that caused some negative tendencies in the calculated indicators. The study has identified the most dangerous values of the indicators directly affecting the state of the debt safety in Ukraine. In particular, this is a ratio of the total public debt to GDP and the external debt per person in the US dollars. This study also conducted a detailed economic assessment of the state of the debt safety in Ukraine during 2013–2016. It provides some estimates of the public debt, internal and external public debt which is based on the cost of its maintenance, the ratio of total public and publicly guaranteed debt to GDP. We suggest some ways of increasing the debt safety of Ukraine, taking in account political instability and military conflict in the East of the country.

Keywords: debt safety, public debt, debt burden, debt safety indicators, state budget, financial safety.

JEL Classification: H60; H62; H63

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СУЧАСНИЙ СТАН І НАПРЯМИ ПОКРАЩЕННЯ БОРГОВОЇ БЕЗПЕКИ УКРАЇНИ

Анотація. У статті розкрито боргову безпеку, як пріоритетний напрям забезпечення фінансової безпеки України. Досліджено сучасні наукові погляди щодо визначення сутності боргової безпеки та проблем боргового навантаження на економіку України. Дано оцінку боргової безпеки України за допомогою системи показників, що дало змогу розкрити чинники, які мають вплив на стан боргової безпеки України. Розраховано основні індикатори стану

боргової безпеки, які відображають зміст і результативність управління державним боргом з урахуванням граничних значень, що дало змогу встановити основні фактори, які спричинили негативні тенденції розрахованих показників. Запропоновано напрями щодо підвищення рівня боргової безпеки України.

Ключові слова: боргова безпека, державний борг, боргове навантаження, індикатори боргової безпеки, державний бюджет, фінансова безпека.

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СОВРЕМЕННОЕ СОСТОЯНИЕ И НАПРАВЛЕНИЯ УЛУЧШЕНИЯ ДОЛГОВОЙ БЕЗОПАСНОСТИ УКРАИНЫ

Аннотация. В статье раскрыта долговая безопасность, как приоритетное направление обеспечения финансовой безопасности Украины. Исследованы современные научные взгляды относительно определения сущности долговой безопасности и проблем долговой нагрузки на экономику Украины. Произведена оценка долговой безопасности Украины с помощью системы показателей, что дало возможность раскрыть факторы, которые имеют влияние на состояние долговой безопасности Украины. Рассчитаны основные индикаторы состояния долговой безопасности, которые отображают результативность управления государственным долгом с учетом предельных значений, что дало возможность установить основные факторы, которые повлекли негативные тенденции рассчитанных показателей. Предложены направления относительно повышения уровня долговой безопасности Украины.

Ключевые слова: долговая безопасность, государственный долг, долговая нагрузка, индикаторы долговой безопасности, государственный бюджет, финансовая безопасность.

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Introduction. In a globalized environment Ukraine declared the intension to integrate to the world economy. In the next decade European integration is to become a major and constant priority for Ukraine and the foundation of the strategy of economic and social development. On the way to the European integration, Ukraine faced a lot of challenges that threaten the country's competitiveness. The problem of the debt safety and country debt burdens have arisen, resulting in the growth of public debt and the complexity of its service. Strengthening Ukraine's position in the world economy is only possible with the effective implementation of debt policy.

The leading western economists G. Wood and W. Allen [1] equal financial safety with financial stability at the macroeconomic level. They state that in general stability of the financial system is the foundation of the financial safety.

Despite the considerable attention of the scientists to the problem of debt safety, the reasons of the public dept dependence are not investigated properly, its consequences and the regulations mechanisms. The system creation of the dept safety needs complex investigation. Even in the economic literature the problem of debt safety is not fully depicted. The stable concept instrument and the system of generalized indicators of risk and loss evaluation caused to the public safety are absent. Currently, there are no single concept on the public debt management. The interrelation of debt safety and national interests requires a separate consideration.

The problem of public debt along with the budget deficit problem is relevant for many countries nowadays; the situation in Ukraine is no exception. Addressing such critical issues as financial stabilization in the environment of Ukrainian economy being in the state of crisis is the basis of national stability. This debt safety is the most important component of the public financial safety, which became relevant during the financial crisis of 2008–2010 and still preserves the status of current importance.

The research analysis and study objectives. Among the important domestic and foreign research a significant contribution to the study of debt safety made by such scholars as V. Allen, G. Wood, O. Vasilik, V. Geyets, T.Koliada., I. Lunina, I. Liutyi, N. Matsedonska, V. Oparin, V. Sutormina, V. Fedosov, O. Futerko, S. Yuriy etc. The conducted research provide only some specific features of the conditions, indicators and criteria of the debt safety, institutional mechanisms for protection against current and future threats in the area of debt policy. The interrelation of debt safety and national interests requires a separate researches.

The study objective is to evaluate the indicators dynamics of the debt safety of Ukraine and to identify priority areas of country's debt safety management through the system of identification and evaluation of the public debt economic impact. The objective achievement identified the following tasks: define the concept of the public debt safety, describe the main indicators measuring the debt burden, analyze the possible economic impact of the public debt.

The debt sphere trends. The dangerous trends in debt sector in 2016 due to political crisis escalation because of the armed conflict in the east, economic recession, the accumulation of problems with of the financial system functioning complimented by declining credit ratings of Ukraine, social tension growth in society. Taking into consideration the current difficult situation in the country we assume that ignoring the problem of the debt safety in Ukraine will eventually lead to even more destructive consequences for socio–economic development of society. There is an urgent need to study complex debt safety of Ukraine, which will enable to identify the main aspects of vulnerability and develop a number of specific measures to remedy the current situation [2].

The ability to fully maintain and promptly repay the public debt is one of the main indicators of the public financial stability that reinforces the state's image as a reliable borrower and opens opportunities for new loans on more favorable terms [3].

A certain overdraft of the public debt can damage the ability of a country to fulfill their payment obligations in full extend. The study of domestic scientists of the public debt impact for the economy was reflected in the concept of debt safety.

In a broad sense the public debt safety means some level of internal and external public debt with service expenses and efficiency of internal and external borrowing and optimal balance between them. The public dept should be sufficient to address urgent social and economic needs and do not put sovereignty and domestic financial system in danger.

In a narrow sense the public debt safety can be defined as the optimum correlation between internal and external borrowings considering the total value of public debt and the cost of servicing its components.

The following factors influence the dept safety:

- degree of information and regulatory support of the debt policy;
- public debt strategy policy;
- structure of public debt;
- level of socio–economic development;
- direction of political and economic course of the country;
- “debt experience” of the state, etc. [4]

Londar S.L. forms the key principles of public debt management policy:

- unconditional fulfillment of state obligations to creditors;
- optimal debt structure of the state;
- the minimum possible risk for the government debt securities with fluctuations in the global financial market;
- the cost reduction of the public debt service under the next borrowing;
- replacement of the short–term borrowing in the long term;
- ensure uniformity and to avoid significant peak debt payments;

– information transparency and accessibility of attraction, use and repayment of loans [5].

The key concept of the debt safety is the public debt – the total amount of the public debt from the return of received and outstanding loans on the reporting date, resulting from public borrowing. On the other hand, debt safety should be seen not only from the public debt point of view, but also in terms of its service and repayment [6].

Effective public debt management, its maintenance and size determine the state of the public debt safety. The level of debt safety affects many factors:

– the legal framework state that regulates the formation and management of public debt. The legal framework forms the public debt strategy;

– the total amount and structure of debt obligations classified by different currencies, terms of emissions, sources, income and repayment period;

– the development of debt instruments available for use under the conditions of internal and external borrowing. A wide range of such instruments enables risks diversification;

– the official exchange rate and GDP growth. These factors have a direct impact on debt bondage;

– public debt management system is related to its service and repayment;

– country's political and economical stability. The permanence of these development vectors contribute to long-term forecasting debt indicators and more balanced debt policy.

The evaluation of the debt safety. It is a common practice of both the World Bank and EBRD to use a number of indicators for assessing debt safety. The most famous normative document is the Maastricht Treaty which the EU as well as many other countries around the world uses as guidelines [6].

The World Bank has its own system of indicators to assess a country's debt safety (Tab.1).

Table 1

The system of debt safety indicators developed by the World Bank

Indices	Formula, %	The economic content
The ratio of total external debt to exports of goods and services	EDT/XGS	It demonstrates a country's relative long-term ability to accumulate foreign currency income without additional pressure on balance of payments
The ratio of total external debt to gross national product	EDT/GNP	It shows an overall debt component of the economy
The ratio of total debt service to exports of goods and services	TDS/XGS	It is a debt service ratio, which shows an amount of foreign currency income used to pay off debt
The ratio of total interest payments to gross national product.	INT/GNP	It determines whether an external debt can be serviced
The ratio of total interest payments to exports of goods and services	INT / XGS	It indicates an amount of foreign currency income used to service a debt
The ratio of international reserves to total external debt	RES / EDT	It shows whether a country can use its reserves (and the exact amount of them) to pay off debt
The ratio of international reserves to imports of goods and services	RES / MGS	It displays a country's stock of financial strength
The ratio of short-term debt to total external debt	Short-term / EDT	It demonstrates a share of short-term debt in total external debt
The ratio of multilateral debt to total external debt	Multilateral / EDT	It reflects an amount of debt to international financial institutions in total external debt or in some way a country's dependence on funding from these organizations

Source: [7]

By summarizing the experience of domestic and foreign financial institutions and achievements of the researchers who studied the indicators of a country's debt safety, we can determine the most common indicators that reflect the content and effectiveness of debt management (Fig. 1). As we can see, the values of the debt safety in Ukraine are different from recommended [3].

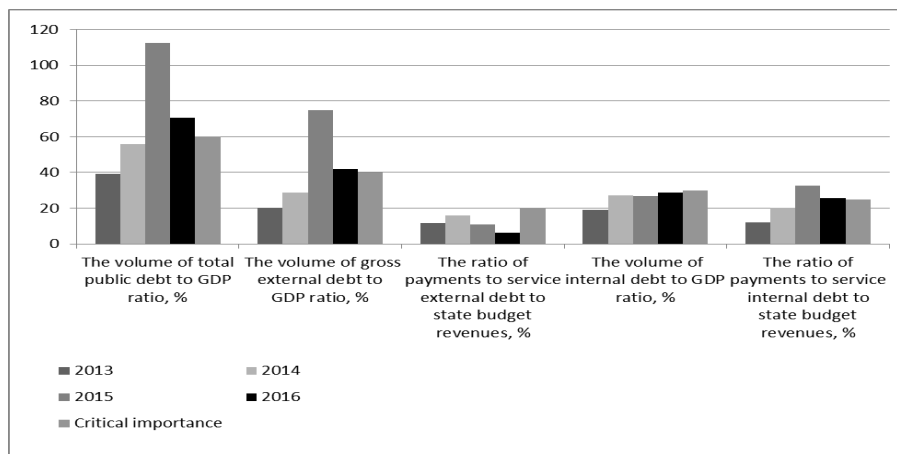


Figure 1. The indicators dynamics of the Ukrainian debt safety
Source: author's calculation and figure based on data from [8; 9; 10]

The main factors that have shaped the growth of the debt burden over the past years are:

- the devaluation of the hryvnia, its rate was 7 % in 2016; this resulted in an increase in both the volume of local currency debt and the cost to service it;

- a sharp drop in real GDP which, according to the results of 2015, was about 9,9 % compared to 6,6 % in 2014, worsened a budget risk. However, it should be noted that a decrease in the primary budget balance contributed to the positive dynamics in the gross financing needs of the state budget, the rate of which decreased from 12,9 % of GDP in 2014 to 5,9 % of GDP at the end of 2015;

- a decline in internal consumer demand resulted from inflation processes (inflation rate in 2016 was 12,4 %) and unemployment, an average amount of which (based on ILO methodology) in 2016 was 9,5 % of the economically active population. A reduction in consumer demand over the last year was noticeable in all consumer purposes; they particularly included food as well as housing, water, electricity, gas and other types of fuels. The most vulnerable to heavy cuts of citizens' income was spending on recreation and culture [11].

It is the effective management of the public debt and its service that determines the country's debt safety. The latest data, provided by the Ministry of Finance of Ukraine, show that the amount of public and publicly guaranteed debts is increasing from year to year (Tab. 2).

During 2015 and 2016 in the public debt there is a tendency to further increase in the volume of total public and publicly guaranteed debt of Ukraine. Over 2016 the total debt increased by USD 358,1 billion (growth rate of 22,7 %) compared to 2015 and it was UAH 1929,8 billion (USD 70,9 billion) on 31.12.2016.

A characteristic of the analyzed period is a growth of debt burden, expressed as a ratio of total public and publicly guaranteed debt to GDP, the index of which was 97.5 % as it shows the results of 2016, and the ratio of public debt to GDP was 83.4 %. In 2014 these same indices were 89.7 % of GDP and 76.2 % of GDP respectively. Thus, the debt burden at the end of 2016 exceeded the prescribed by the Budget Code of Ukraine maximum limit of the debt burden by 60 % of GDP. However, it should be noted that the growth rate of the debt burden has slowed down [11].

Over the past nine years a direct public debt of Ukraine has increased by UAH 1262,6 billion or 18 times more.

As a result, according to Business Insider, Ukraine ranks third after Venezuela and Greece among the countries with the probability of default [12].

Table 2

Indices of Public and Publicly guaranteed debt of Ukraine for 2008–2016 years

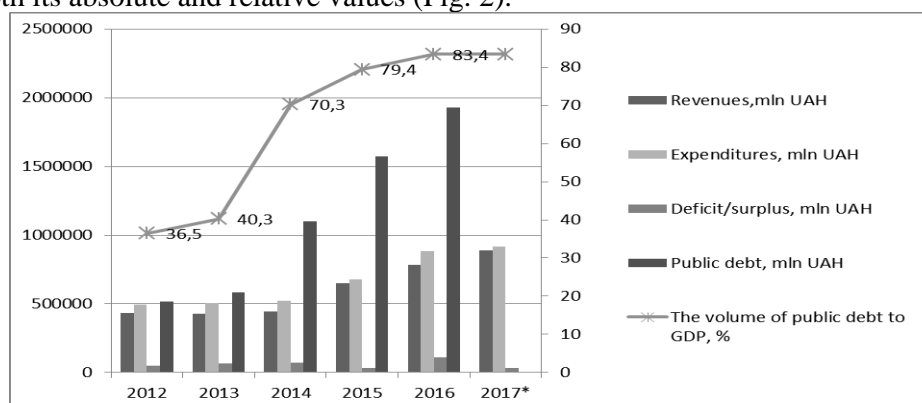
Years	Public internal debt		Public external debt		Publicly guaranteed debt		Public and Publicly guaranteed debt		GDP		Exchange rate USA dollar to 100 USD
	billion	billion USD	billion UAH	billion USD	billion UAH	billion USD	billion UAH	billion USD	billion UAH	billion USD	
2008	44,7	8,5	86,0	16,3	58,7	11,1	189,4	36,0	948,1	180,0	526,7
2009	91,1	11,7	135,9	17,4	90,9	11,7	317,9	40,8	913,3	117,2	779,1
2010	141,7	17,9	181,8	22,9	108,8	13,7	432,3	54,5	1082,6	136,4	793,6
2011	161,5	20,3	195,8	24,6	115,8	14,5	473,1	59,4	1316,6	165,2	796,8
2012	190,5	24,5	208,9	26,8	116,3	14,9	515,5	66,2	1408,9	180,8	779,1
2013	257,0	32,2	223,3	28,0	104,6	13,1	584,9	73,2	1454,9	182,0	799,0
2014	461,0	29,3	486,0	30,8	153,8	9,8	1100,8	69,9	1566,7	99,4	1576,0
2015	508,0	24,1	825,9	39,5	237,9	11,3	1571,7	74,5	1751,0	83,0	2109,6
2016	670,6	24,7	980,2	36,1	278,9	10,3	1929,8	70,9	1979,5	73,0	2702,0

Source: author's figure based on data from [8]

The main tasks to ensure an effective system of the public's debt safety include a rational management of debt resources and a complete system of controlling budget deficit.

As the majority of researchers state it, both the national budget deficit and the country's debt dependence do not have a destabilizing effect on the economy if they do not exceed the threshold of 3 % of GDP.

In Ukraine since 2008 the amount of annual budget deficit has been growing rapidly in terms of both its absolute and relative values (Fig. 2).

Figure 2. The revenues and expenditures dynamics of the Consolidated budget of Ukraine
* plan

Source: [13; 14]

A significant gap between the amount of government borrowing and repayment of public debt shows that the debt burden on the state budget of Ukraine will be worse in the future and this will lead to a growing problem in debt safety [15].

Conclusion. A rapid increase in external public debt, publicly guaranteed external debt in particular, is affecting the state budget and the entire financial system. However, on the other hand, an assessment of the debt safety level and analysis of debt policy have shown that according to international standards a total debt burden of Ukraine does not threaten the country's economic safety.

In our opinion, strengthening debt safety and debt management require some special

attention to implementation of the following strategic measures:

- to develop alternative, non-debt tools for government expenditures that will minimize main risks of the country's debt portfolio and provide the state finance with sufficient safety;
- to reduce debt burden through debt capitalization and to replace existing debts with new ones;
- existing deficits in an economy makes it more appropriate to use domestic loans on terms preferential interest rates as a means of redistributing income inside the country;
- to improve citizens' capital by investing loaned funds and providing their effective use.

Further research into debt safety of Ukraine need to focus on how European criteria of debt safety are used in international practice, development of a unified system of indicators to assess it.

Література

1. Allen, W. Defining and achieving financial stability [Text] / W. Allen, G. Wood // *Journal of Financial Stability*. – 2006. – Vol. 2, Issue 2. – P. 152–172.
2. Петрошук, О. Напрями підвищення рівня боргової безпеки України [Електронний ресурс]. – Режим доступу: <http://naub.ua.edu.ua/2012/napryamy-pidvyschennya-rivnya-borhovoji-bezpeky-ukrajiny>.
3. Лось, В. В. Теоретичні основи управління борговою безпекою [Текст] / В. В. Лось, В. І. Усик // *Молодий вчений*. – 2015. – № 2 (17). – С. 153–156.
4. Омельченко, Л. С. Боргова безпека України та аналіз її сучасного стану [Текст] / Л. С. Омельченко, І. В. Суміна // *Збірник наукових праць Національного університету державної податкової служби України*. – 2012. – № 1. – С. 309–320.
5. Лондар, С. Фінанси [Текст] / С. Лондар, О. Тимошенко. – Вінниця : Нова книга, 2009. – 384 с.
6. Славкова, А. А. Боргова безпека України: сучасний стан, проблеми та перспективи [Текст] / А. А. Славкова, А. В. Проценко // *Вісник Одеського національного університету. Серія: Економіка*. – 2014. – Т. 19, Вип. 1 (2). – С. 137–141.
7. Макар, О. П. Зміцнення боргової безпеки – передумови економічного зростання в Україні [Текст] / О. П. Макар // *Науковий вісник НЛТУ України*. – 2012. – № 22.12. – С. 288–292.
8. Міністерство фінансів України [Електронний ресурс]. – Режим доступу: <http://www.minfin.gov.ua>.
9. Державна казначейська служба України [Електронний ресурс]. – Режим доступу: <http://www.treasury.gov.ua>.
10. Державна служба статистики України [Електронний ресурс]. – Режим доступу: <http://www.ukrstat.gov.ua>.
11. Лондар, Л. Оцінка стану державного боргу та ключові напрями підвищення рівня боргової безпеки України [Текст] / Л. Лондар // *Відділ фінансової безпеки*. – 2015. – № 69. – С. 1–13.
12. Рух, М. Україна вошла в тройку ближчих к дефолту стран [Електронний ресурс] / Максим Рух // *Пресса Украины*. – Режим доступа: <http://uapress.info/ru/news/show/90888>.
13. Одосій, О. Взаємозв'язок бюджетної та боргової політики України [Електронний ресурс]. – Режим доступу: <http://commons.com.ua/ru/byudzhzet-ta-borgova-politika-ukrayiny/>
14. Національний банк України [Електронний ресурс]. – Режим доступу: <http://www.bank.gov.ua>.
15. Мелих, О. Ю. Дефіцит державного бюджету як індикатор боргової безпеки України [Текст] / О. Ю. Мелих // *Ефективна економіка*. – 2016. – № 4. – С. 66–74.

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References

1. Allen, W., & Wood, G. (2006). Defining and achieving financial stability. *Journal of Financial Stability*, 2(2), 152–172.
2. Petroshhuk, O. (2012). *Napriamy pidvyschennia rivnia borhovoї bezpeky Ukraїny*. Available at: <http://naub.ua.edu.ua/2012/napryamy-pidvyschennya-rivnya-borhovoji-bezpeky-ukrajiny>
3. Los, V. V., & Usyk, V. I. (2015). Teoretychni osnovy upravlinnia borhovoї bezpekoїu. *Molodyi vchenyi*, 2(17), 153–156.
4. Omelchenko, L. S., & Sumina, I. V. (2012). Borhova bezpeka Ukraїny ta analiz yїi suchasnoho stanu. *Zbirnyk naukovykh prats Natsionalnoho universytetu derzhavnoi podatkovoi sluzhby Ukraїny*, 1, 309–320.
5. Londar, S., & Tymoshenko, O. (2009). *Finansy*. Vinnytsia: Nova knyha.
6. Slavkova, A. A., & Protsenko, A. V. (2014). Borhova bezpeka Ukraїny: suchasnyi stan, problemy ta perspektyvy. *Visnyk Odeskoho Natsionalnoho universytetu. Seriiia Ekonomika*, 19(1(2)), 137–141.
7. Makar, O. P. (2012). Zmitsnennia borhovoї bezpeky – peredumovy ekonomichnoho zrostannia v Ukraїni. *Naukovyi visnyk NLTU Ukraїny*, 22.12, 288–292.
8. *Ministerstvo finansiv Ukraїny*. Available at: <http://www.minfin.gov.ua>
9. *Derzhavna kaznacheiska sluzhba Ukraїny*. Available at: <http://www.treasury.gov.ua>
10. *Derzhavna sluzhba statystyky Ukraїny*. Available at: <http://www.ukrstat.gov.ua>
11. Londar, L. (2015). Otsinka stanu derzhavnogo borhu ta kliuchovi napriamy pidvyschennia rivnia borhovoї bezpeky Ukraїny. *Viddil finansovoї bezpeky*, 69, 1–13.
12. Rukh, M. (2015). *Ukraїna voshla v troiku blizkikh k defoltu stran*. Available at: <http://uapress.info/ru/news/show/90888>
13. Odosii, O. (2015). *Vzajemoviazok biudzhetnoi ta borhovoї polityky Ukraїny*. Available at: <http://commons.com.ua/ru/byudzhzet-ta-borgova-politika-ukrayiny>
14. *Natsionalnyi bank Ukraїny*. Available at: <http://www.bank.gov.ua>
15. Melykh, O. Yu. (2016). Defitsyt derzhavnogo biudzhetu yak indyikator borhovoї bezpeky Ukraїny. *Efektivna ekonomika*, 4, 66–74.

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