MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY STATE UNIVERSITY
Educational and Research Institute of Business, Economics and Management
Department of International Economic Relations

BACHELOR'S DEGREE QUALIFICATION PAPER
Specialty 292 «International Economic Relations»

on the topic «UKRAINE'S DEBT SECURITY MANAGEMENT»

Student 4 Course ______________ Maria Yermak
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(group's code)

Qualifying Bachelor's paper contains the results of own research. The use of the ideas, results and texts of other authors has a link to the corresponding source

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Sumy, 2023

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TASKS FOR BACHELOR'S DEGREE QUALIFICATION PAPER

(specialty 292 "International Economic Relations")
student 4 course, group IE-92a.en
(course number) (group's code)
Maria Yermak
(student's full name)

1. The theme of the paper is «Ukraine's debt security management»

approved by the order of the university from 11/05/2023 № 0484-VI

2. The term of completed paper submission by the student is 01/06/2023

3. The purpose of the qualification paper is to develop theoretical fundamentals, improve scientific and methodological approaches, and develop practical recommendations for managing Ukraine`s debt security
4. The object of the research is the system of economic relations between the subjects of the financial system in the process of managing the debt security of the state
5. The subject of research is scientific and methodological bases and practical tools for managing Ukraine`s debt security
6. The qualification paper is carried out on materials of State Statistics Service of Ukraine, data of the Ministry of Finance of Ukraine, the National Bank of Ukraine, etc.
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Chapter 1 deals with: 1) Essence of public debt security; 2) Influencing factors of the state`s debt security; 3) Risks in the public debt management system

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Chapter 2 deals with: 1) Analysis of state and structure of public debt; 2) Calculation of the integral index of debt security

Chapter 3: Reforming of debt security management in Ukraine
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Chapter 3 deals with: Reforming of debt security management in Ukraine

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Chapter	Full name and position of the advisor	Date, signature	
		task issued	task accepted
1	Professor, Doctor of Economics Fedir Zhuravka	16.04.2023	16.04.2023
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ABSTRACT

on bachelor's degree qualification paper on the topic
«UKRAINE'S DEBT SECURITY MANAGEMENT»

student Maria Yermak
(full name)

The main content of the bachelor's degree qualification paper is presented on 33 pages, including references consisted of 30 used sources, which is placed on 5 pages. The paper contains 12 tables, 6 figures, as well as 10 apps that are presented on 16 pages.

The significant size of the public debt, the attraction of credit funds on unfavorable terms, along with their inefficient use, the suboptimal currency structure of public and publicly guaranteed debt, as well as unsatisfactory values of debt security indicators indicate an unstable debt situation in Ukraine, since debt security is an indispensable condition for preserving sovereignty, ensuring the normal functioning of any country and its progressive socio-economic development. All of the above determines the relevance of the topic of the qualification work.

The purpose of the bachelor's degree qualification paper is to develop theoretical fundamentals, improve scientific and methodological approaches, and develop practical recommendations for managing Ukraine`s debt security.

The purpose of the work is realized by performing the following tasks:

- ✓ to analyze the content of the concept of "debt security of the state";
- ✓ to identify factors affecting the state's debt security;
- ✓ to investigate the risks arising in the process of debt security managing;
- ✓ to assess the state and structure of the Ukraine`s public debt;
- ✓ to calculate and assess the integral indicator of the debt security index of Ukraine;
- ✓ to explore approaches to reform Ukraine`s debt security management system.

The following research methods were used in the work: analysis, synthesis, logical generalization, statistical analysis, comparative analysis, etc.

According to the results of the study the following conclusions are formulated:

1. The own definition of the concept "public debt security" was proposed. It is considered as an integral part of the financial and economic security of the state and which is characterized by the optimal level and structure of public debt, considering the cost of its servicing, in order to ensure the stability of the

country’s financial system and its financial sovereignty, and to maintain an appropriate level of solvency and credit rating.

2. In order to define the optimal strategy for public debt management, a system of influencing factors (both internal and external) was determined.
3. Risks in the public debt management system were classified as market risk, risk of debt prolongation, liquidity risk, credit risk, settlement risk and operational risk.
4. The analysis of state and structure of public debt in Ukraine during the period of 2012-2021 was performed. For a full assessment of debt security, the amount of total debt, as well as the shares of its internal and external components, are determined. A graphic analysis of the dynamics of the public debt volume has led to the conclusion that the debt situation in Ukraine is unstable and that the public debt has increased significantly in recent years.
5. The author calculated the integral indicator of debt security for the period 2011-2021. Based on the calculated annual values of the integral indicators, it was concluded that the debt burden is “critical”.

The obtained results can be used in the process of Ukraine`s public debt management.

Keywords: PUBLIC DEBT, PUBLIC DEBT MANAGEMENT, DEBT SECURITY, LOANS, UKRAINE.

The year of qualifying paper fulfillment is 2023.

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CONTENT

INTRODUCTION

The global financial system has undergone significant changes in recent years. Today, it is almost impossible to find a country that does not use debt. The country`s use of borrowed funds is caused by the lack of its own financial resources to cover the state budget deficit, implement projects, support the national currency, etc. If used efficiently, borrowed resources can be a positive factor in economic growth. However, an excessive and uncontrolled increase in debt obligations may negatively affect the country's economic independence and become a burden for the national economy. The significant size of the public debt, the attraction of credit funds on unfavorable terms, along with their inefficient use, the suboptimal currency structure of public and publicly guaranteed debt, as well as unsatisfactory values of debt security indicators indicate an unstable debt situation in Ukraine, since debt security is an indispensable condition for preserving sovereignty, ensuring the normal functioning of any country and its progressive socio-economic development. All of the above determines the relevance of the topic of the qualification work.

The object of the qualification work is the system of economic relations between the subjects of the financial system in the process of managing the debt security of the state.

The subject of the study is the scientific and methodological bases and practical tools for managing Ukraine`s debt security.

The aim of the study is to develop theoretical fundamentals, improve scientific and methodological approaches, and develop practical recommendations for managing Ukraine`s debt security.

The stated goal necessitated the following tasks:

- ✓ to analyze the content of the concept of “debt security of the state”;
- ✓ to identify factors affecting the state's debt security;

- ✓ to investigate the risks arising in the process of debt security managing;
- ✓ to assess the state and structure of the Ukraine`s public debt;
- ✓ to calculate and assess the integral indicator of the debt security index of Ukraine;
- ✓ to explore approaches to reform Ukraine`s debt security management system.

The theoretical basis of the qualification work is the fundamental provisions of economic theory, theory of finance, money and credit, public finance, economic forecasting, econometrics, as well as scientific works on assessing the country's debt security. The following research methods were used in the work: analysis, synthesis, logical generalization, statistical analysis, comparative analysis, etc.

The information base of the work is grounded on legislative and regulatory acts of Ukraine, statistical materials of the State Statistics Service of Ukraine, data of the Ministry of Finance of Ukraine, the National Bank of Ukraine, the State Treasury Service of Ukraine, materials of the World Bank, the International Monetary Fund and the Organization for Economic Cooperation and Development, analytical reviews of the Bloomberg, scientific works of domestic and foreign scholars on the research issues

The qualification work consists of an introduction, 3 chapters, conclusions, and a list of references.

1. THEORETICAL BASES OF DEBT SECURITY MANAGEMENT

1.1. Essence of public debt security

The study of debt security is the subject of attention of key international financial institutions, such as the International Monetary Fund (IMF), the World Bank (WB), the Organization for Economic Cooperation and Development (OECD), and many scholars of different periods. In Ukraine, only the first steps are being taken to formalize the concept of "debt security", define its criteria, indicators, management methods and tools, and determinants of achieving it within the framework of maintaining the overall sustainability of public finance [2, 4].

The problems of debt security have traditionally attracted the attention of economists and management practitioners, as it is a critical component of macroeconomic stability and balanced development of public finances in a country.

Current research by domestic and foreign scholars focuses mainly on assessing the level of public debt, on the essence of the country's debt security, and on methodological approaches to the system of assessing its level and debt policy.

For example, V.P. Kudryashov [8], N.S. Pedchenko [12] and others studied the problems of forming the debt policy of the state and its correlation with the debt management, V. Sulzhenko [19] investigates public debt and debt security through the prism of budgetary sustainability; V.D. Bazylevych [3], I.O. Liutii [10] studied the mechanisms of public debt management.

The term "debt security of the country" is defined in the scientific literature in a broad and narrow sense. In the narrow sense, debt security – is the optimal ratio of its components, including debt service and repayment payments. In the broad sense, it is not only the amount of debt that ensures the stability of the country's socio-economic development and the best ratio between external and internal debt, but also the efficiency of using debt funds, their sufficiency to meet the country's priority socio-economic needs; a level of debt that does not pose threats to the country's financial system and the threat of losing sovereignty.

According to the Methodological Recommendations for Calculating the Level of Economic Security of Ukraine [15], the debt security of the state – is the level of internal and external debt, taking into account the cost of servicing it and the efficiency of using internal and external borrowings and the optimal ratio between them, sufficient to address socio-economic needs, which does not threaten the loss of sovereignty and the destruction of the domestic financial system.

However, to date, there is no consensus on this issue. Let us summarize the results of the research of different economists. Summarizing, we can distinguish the following characteristics of the interpretation of the concept of the "debt security" (Figure 1.1).

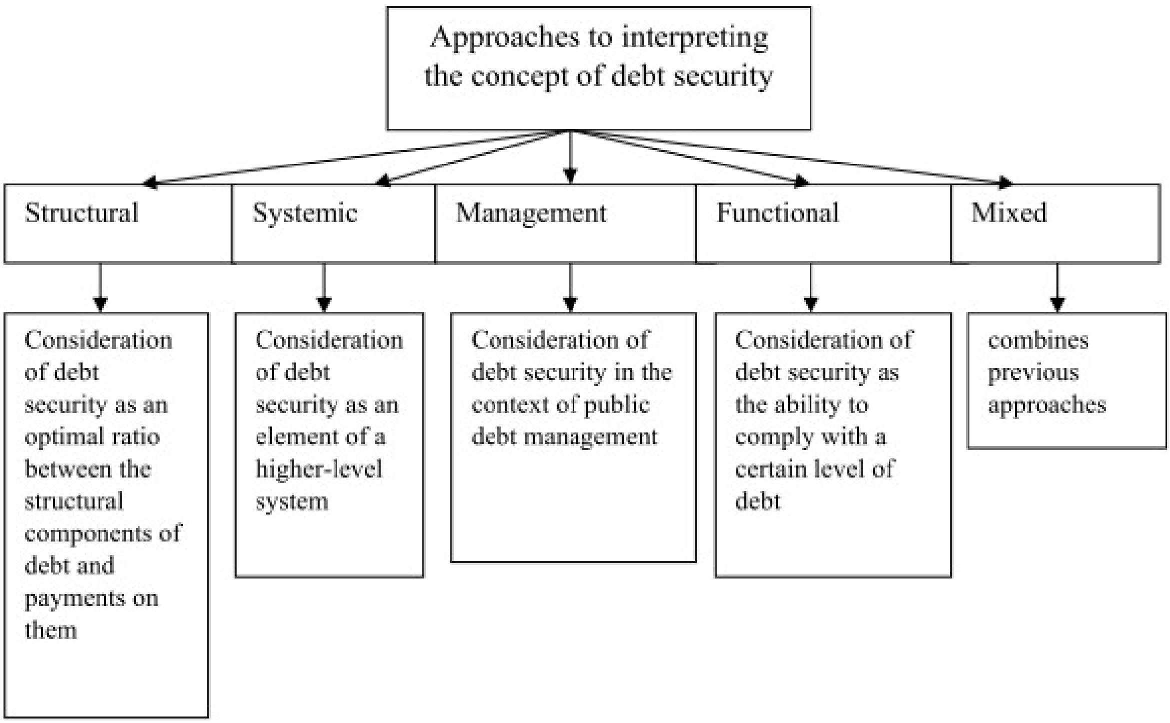

Figure 1.1 – Approaches to interpreting the concept of debt security

Source: compiled by the author on the basis of [2,4]

Thus, having summarized the approaches, we offer our own definition of the “public debt security”, which is proposed to be considered as an integral part of the financial and economic security of the state and which is characterized by the optimal level and structure of public debt, considering the cost of its servicing, in order to ensure the stability of the country’s financial system and its financial sovereignty, and to maintain an appropriate level of solvency and credit rating.

1.2. Influencing factors of the state’s debt security

In determining the optimal strategy for public debt management, a system of influencing factors plays a significant role. They directly affect the level and dynamics of the state’s debt security (Figure 1.2).

Figure 1.2 provides a list of key factors affecting the state`s debt security, but it should be noted that this list is not complete.

An important role in ensuring the country`s debt security is played by: the amount of debt and its components; the established macroeconomic policy of the state; the institutional capacity of state structures to work effectively; the reputation of the state as a borrower and its` credit rating; the availability of a full-fledged regulatory framework for the process of forming debt obligations and using borrowed funds; the availability of an effective mechanism for managing public debt; compliance of the received credit support with the terms and amount provided for by budget parameters; etc.

Considering direct and immediate connection between the state budget deficit and the amount of public debt, in the context of studying the factors that determine the debt security of the state, it is worth paying attention to the opinion of N.V. Chub [3] on the formation of a “debt spiral” in the absence of an adequate public debt management system and a balanced debt policy due to the chronic imbalance of the state budget.

Figure 1.2 – Factors influencing the public debt security

Source compiled by the author on the basis of [1,4]

It is also necessary to take into account the structural and cyclical components of the state budget balance. The balance of payments and trade balances are factors of the availability of currency in the country sufficient to make external payments, as well as in determining the exchange rates, the dynamics of which also affects external security.

In addition, political instability is a factor of debt security. Even if the macroeconomic situation in a country is stable, it creates uncertainty about the government's intentions to fulfill its debt obligations. Many scholars point out that political risk depends on the country's legal system, constitutional order, judicial system, protection of investors` and creditors` rights, efficiency of the state apparatus, level of corruption, etc. An important factor, as already mentioned, is the state of global capital markets, which is characterized by the level of liquidity and stability.

It should also be noted that the factors of internal and external debt security are intertwined, given the interchangeability of borrowing sources: internal borrowings can be used to repay external obligations; external borrowings can be used to make internal payments. It is undisputable that the presence of a state budget surplus as a source of debt repayment automatically means an improvement in debt security. In this case, there is no need for new borrowings (at least for the amount of the surplus), and the public debt tends to decrease.

A significant drawback of the standard procedure for assessing debt sustainability is the difficulty of taking into account the complex and inverse relationships between the indicators that underlie different scenarios. For example, when forecasting the ratio of public debt to GDP, it is impossible to reliably assess the impact of the debt burden on GDP and fully account for bilateral relationships.

1.3. Risks in the public debt management system

The key objective of public debt management is to meet the financing needs of the government while minimizing debt service payments in the medium and long term and ensuring an acceptable level of risk. The risk management strategy becomes crucial in establishing safe debt structures and is crucial given the serious macroeconomic and reputational consequences of defaulting on government obligations and the impact on the growth of future debt service costs. These costs even include the insolvency of enterprises and banks, as well as a decline in long-term credibility and the government`s ability to mobilize domestic and external resources to overcome the debt crisis. The risks that should be included in the development of strategic decisions on public debt management include the following: market, credit, operational, settlement, liquidity, and prolongation risks. Their key characteristics are shown in Table 1.1.

Table 1. Risks in the public debt management system

Type of risk	Essence	Consequences
Market risk	Price changes (interest rates, exchange rates, etc.)	Increased debt service costs
Risk of prolongation	Inability to extend debt obligations or extend them on worse terms	Inability to raise new debt. Increased debt service costs
Liquidity risk	Impossibility/restricted sale of government securities	Increased transaction costs. Decrease in the balance of liquid assets
Credit risk	Failure to fulfill obligations in a timely manner and in full	Investors` distrust. Limited scope for future borrowings
Settlement risk	Late settlement (except for default)	Reputational losses. Penalties
Operational risk	Transaction errors, inadequate internal control systems	Reputational losses. Penalties

Market risk refers to risks associated with price movements, such as interest rates, foreign exchange rates, and commodity prices. For both local and foreign currency public debt, changes in interest rates affect debt service costs for new issues, when fixed rate debt is refinanced for a new term, and for floating rate debt at each rate fixing date according to the fixing schedule. Floating-rate debt is generally considered to be more risky than long-term fixed-rate debt, even if the cost of servicing long-term debt is higher. However, an excessive concentration of debt in long-term fixed-rate debt can also be risky, as future financing needs are uncertain and the presence of significant debt requires servicing. In addition, future changes in interest rates may make existing debt relatively costly to service if low-cost borrowing is available on the market [ ]. Debt denominated in foreign currency also increases the volatility of its servicing costs in local currency, due to unpredictable exchange rates fluctuations. Government bonds with embedded put options, which allow investors to call such securities for early redemption, may increase the level of market and rollover risks.

Prolongation risk is defined as the risk that debt will have to be extended if the cost of servicing it increases or, in extreme cases, it will not be possible to extend it at all. If this risk is viewed from the perspective of rising interest rates, it can be considered a subtype of market risk. However, since the inability to roll over debt and/or a significant increase in debt service costs can lead to or exacerbate a debt crisis and thus cause real economic losses, rollover risk should be considered separately. Managing this risk is particularly important for developing countries [12].

There are two types of liquidity risk. One relates to transaction costs that investors face when trying to sell debt instruments when the number of potential buyers has decreased significantly or because of insufficient trading volumes in the market as a whole. This risk is particularly relevant in cases where public debt management involves the management of liquid assets. Another type of liquidity risk relates to situations where the volume of liquid assets of the borrower (the government in our case) decreases as a result of unexpected payments and/or possible difficulties in raising funds through short-term borrowing.

Credit risk is associated with the failure of borrowers to fulfill their obligations in a timely manner and in full, including repayment of both principal and interest. This risk is particularly relevant in cases where public debt management involves the management of liquid assets. It may also be relevant to the acceptance of bids at auctions for government-issued securities and for contingent liabilities and derivative contracts.

Settlement default risk refers to the potential losses that the state, as a counterparty, may suffer as a result of untimely settlements (or their complete failure) with counterparties for any reason other than default.

Operational risk includes a list of different subtypes of risk, such as errors in transactions at various stages of their execution; discrepancies or failures in the internal control system; reputational risk; legal risk; security breaches or natural disasters that require the use of liquidity reserves to deal with their consequences.

2. ASSESSMENT OF THE DEBT SECURITY IN UKRAINE

2.1 Analysis of state and structure of public debt

The most painful problem of Ukraine's financial system in recent years has been the critical state of public debt, as the growth of the debt burden to threatening levels, excessive borrowing on insufficiently favorable terms, and inefficient use of funds contribute to the vulnerability of the economy and significantly slow down the country's development.

An analysis of the public debt shows that its structure is dominated by external debt – 62% of the total, 58% of the direct debt and 92% of publicly guaranteed debt as of January 1, 2022 (Figure 2.1).

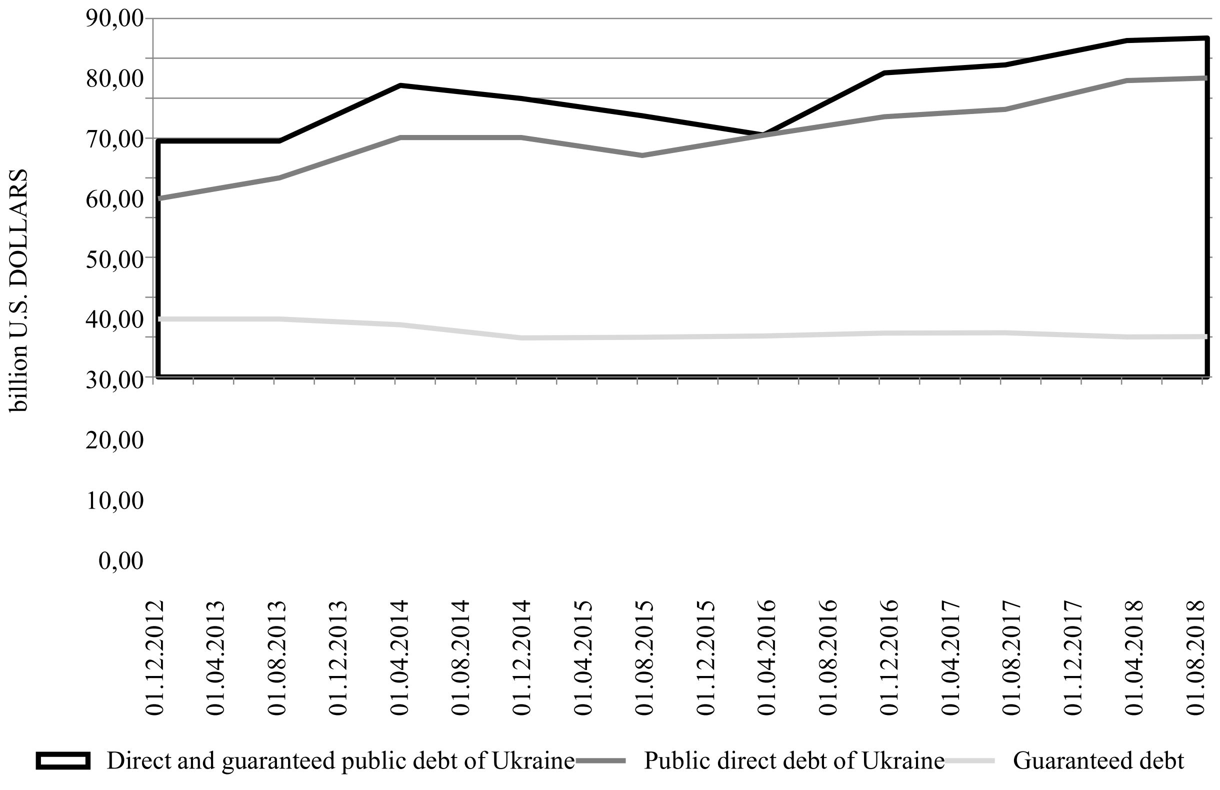

Figure 2.1 – Dynamics of the total public debt, billion USD

Source: compiled by the author based on data from the Ministry of Finance of Ukraine

The following factors contributed to the growth of public debt during the analyzed period:

- ✓ a deep economic recession;
- ✓ a severe political crisis and military conflict;
- ✓ binding social and other obligations of the state, even in the face of economic instability (primarily, meeting the energy needs of the population, fulfilling pension obligations, etc.;)
- ✓ providing budgetary support to state-owned enterprises and banks (in particular, JSC Oschadbank, JSC Ukreximbank, Naftogaz of Ukraine, and the Deposit Guarantee Fund). For example, in 2014, the deficit of Naftogaz of Ukraine, which was financed mainly by public borrowing in the absence of other sources, amounted to 5.7% of GDP, and the total deficit (balance) of the general government sector and Naftogaz of Ukraine amounted to about 10.3% of GDP;
- ✓ financing of the significant state budget deficit, which was formed under the influence of a significant increase in defense spending and debt service, through public borrowing;
- ✓ fighting the COVID-19 pandemic [109].

The currencies` structure of the total public debt and its changes over the last five years is shown in Figure 2.2. As can be seen from Figure 2.2, as of January 1, 2022, the prevailing currency in the structure of public debt is the US dollar. The share of debt in hryvnia is quite significant - 33.12% and SDRs (IMF special drawing rights) - 15.34%. A decrease in the share of debt in foreign currency means a reduction in debt service expenditures (in foreign currency).

An analysis of the structure of public debt by creditor groups (see Figure 2.3) showed that holders of domestic government bonds are the largest creditors (37.60%). as of August 2020, treasury bonds with different maturities (12-month to 15-year domestic government bonds), as well as bonds of state-owned enterprises (PJSC JSB Ukrgasbank, Ukravtodor, etc.) are in circulation on the domestic market.

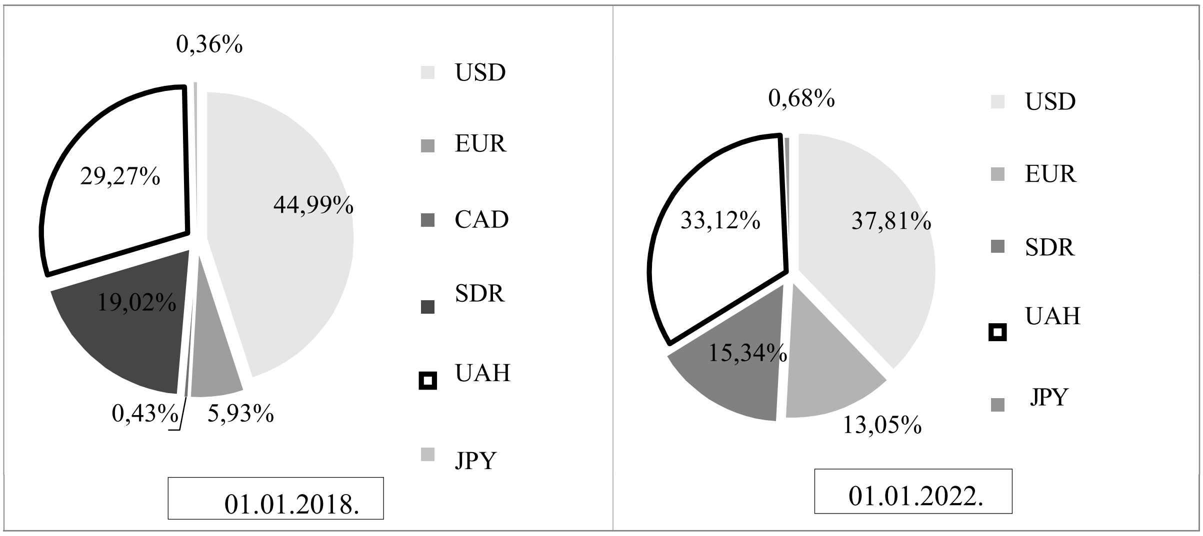

Figure 2.2 – Currency structure of the public and publicly guaranteed debt of Ukraine

Source: compiled by the author based on data from the Ministry of Finance of Ukraine

The total amount of debt on securities issued in the domestic market amounted to UAH 879.16 billion (USD 32 billion in equivalent).

The share of holders of government securities on the foreign market in the total structure of public debt corresponds to 28.63% and reflects the debt on government bonds.

As of January 1, 2022, the following international financial organizations (IFOs) are the main creditors of Ukraine:

- ✓ International Monetary Fund (UAH 358.66 billion / USD 13.05 billion);
- ✓ International Bank for Reconstruction and Development (UAH 146.69 billion / USD 5.34 billion).
- ✓ Loans from IFIs account for 28.49% of the total public debt, which amounts to UAH 666.15 billion.

Among the top priority creditors – foreign commercial banks (or other financial institutions) – are the China Development Bank, the Export-Import Bank of Korea, Deutsche Bank AG, etc. Their share in the total structure corresponds to 3.19% or UAH 74.59 billion (USD 3.05 billion in equivalent).

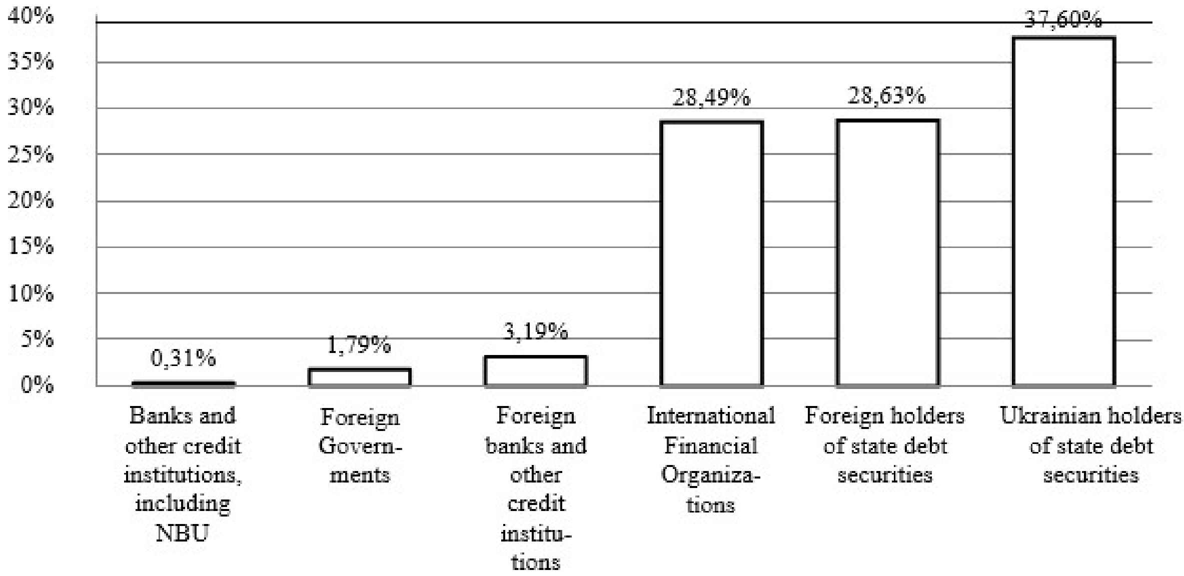

Figure 2.3 – Structure of Ukraine`s public and publicly guaranteed debt by creditor groups as of January 1, 2022

Source: compiled by the author based on data from the Ministry of Finance of Ukraine

The list of foreign governments who credited Ukraine mostly includes: Japan, Germany, RF and the United States. The total amount of such loans is UAH 41.85 billion (USD 2.71 billion in equivalent).

2.2 Calculation of the integral indicator of debt security

In order to assess the state of economic security in foreign and domestic practice, scientists use integral coefficients of economic security, as well as thresholds of individual indicators. To assess the economic security of the state, thresholds of quantitative and qualitative indicators of the country's development are important, and failure to comply with them leads to the formation of negative, destructive trends in the economy. It should be emphasized that a high degree of economic security is achieved when the entire set of indicators is within the permissible limits of their thresholds.

The legal basis for determining the integral indicator of both economic security and its components (in particular, debt security) is the "Methodological Recommendations for Calculating the Level of Economic Security of Ukraine" [ ], which contains a number of indicators used to assess debt security as part of the state's economic security. For each indicator, there are ranges of change: small, medium and critical.

The process of determining the integral indicator can be shown in Fig. 2.4.

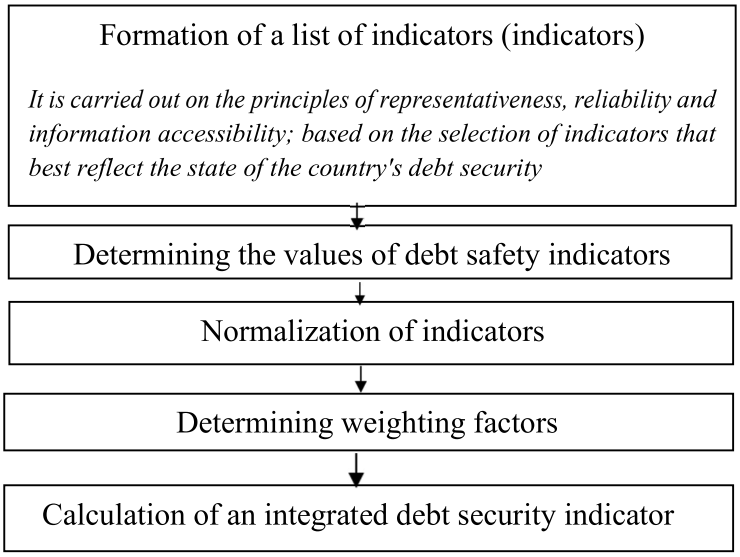

Figure 2.4 – Stages of determining the integral indicator of the country's debt security

Considering the international experience of forming of indicators list for determining the debt security of the state, we will cluster and further assess the relevant indicators, which, unlike those provided in the Methodological Recommendations, most fully reflect the state of debt security of Ukraine. This will allow us to analyze the main potential threats and sources of instability, predict their future dynamics and calculate the integral debt security index. It should be noted that the assessment of these indicators is based on a comparison of actual values in Ukraine with the thresholds. The proposed analytical toolkit can be used to cover all potential sources of risks (threats) to debt security, taking into account the existing interrelationships between them, to quantify the relevant risks and to display them visually.

The next step in calculating the integral indicator is to determine the weighting factors, which are usually calculated using expert evaluations.

To calculate the integral indicator of Ukraine's debt security, we will use equivalent values of the weighting coefficients – 0.07, for each of the selected (fourteen) indicators. This method is applied based on the idea that each indicator has an equal impact on the overall assessment of the state's debt security.

The results obtained can be interpreted using the normalized values of the integral index shown in Table 2.1.

Table 2.1 – Levels of debt security

No	The value of the integral index	The state of debt security
1	0-0,19	Critical
2	0,20-0,39	Dangerous
3	0,40-0,59	Unsatisfactory
4	0,60-0,79	Satisfactory
5	0,80-1,00	Optimal

Thus, the values of the risk level indicators can be divided as follows:

- ✓ low risk (the value of the indicator is from 1 to 0.8) – the country's debt indicators are below the thresholds.
- ✓ medium risk (the value of the integral indicator ranges from 0.79 to 0.6): only a few (no more than 2) indicators exceed the threshold level, but actualand forecast values are within acceptable limits.

- ✓ high risk (the value of the integral indicator ranges from 0.59 to 0.4): 3 or more debt indicators exceed the threshold level, but the country is not yet facing problems with fulfilling its debt obligations.
- ✓ extremely high risk, pre-crisis state (integral indicator values between 0.39 and 0): threats to debt security are noted both in terms of the level of public debt, its structure, and the cost of debt service, with several debt indicators exceeding the threshold.

According to the selected indicators, the values of integral indicators of debt security from 2011 to 2021 were calculated (Table 2.2).

Table 2.2 – Values of the integral indicator of Ukraine's debt security for 2011-2021.

Year	The value of the integrated debt security index, %.	The state of debt security
2011	0,21	Dangerous
2012	0,47	Unsatisfactory
2013	0,44	Unsatisfactory
2014	0,36	Dangerous
2015	0,33	Dangerous
2016	0,24	Dangerous
2017	0,29	Dangerous
2018	0,32	Dangerous
2019	0,34	Dangerous
2020	0,36	Dangerous
2021	0,38	Dangerous

Figure 2.5 shows a petal chart that summarizes the results of the assessment of debt security and debt risks in Ukraine for the period 2011-2021. The closer to the center of the chart the mark is, the higher the threat of destabilization of the debt burden in the respective area.

The main essence of the methodology for assessing the integrated debt security indicator is to evaluate the level of the country's debt security in a given period of time with a single generalized indicator. Indeed, all threats and destabilizing factors measured by individual debt security indicators deserve separate consideration.

However, their interconnected impact ensures the overall result and makes it possible to assess the overall level of debt security.

Figure 2.5 – Integral debt security indicator in 2011-2021

Based on the results of the calculations, Ukraine's integrated debt risk indicator at the beginning of 2022 was 0.38, which automatically places our country into the high-risk group.

3. REFORMING OF DEBT SECURITY MANAGEMENT IN UKRAINE

In today's environment, public debt is not only an economic instrument, but also a financial one, with the help of which the government creates a social circle with material interests aimed at strengthening the state, and the effective implementation of the debt function can ensure financial, economic and political stability of the country. Large volumes of public debt with a significant foreign currency component in its overall structure, excessive pressure on the state budget from peak debt payments, limited access to external sources of financing, caused primarily by uncertainty about the continuation of credit assistance from the IMF and other international donors, in the absence of effective tools for managing public borrowing, a comprehensive system for assessing and analyzing debt risks, lead to a decrease in the financial stability of the state.

The solution to these problems requires a set of measures, in particular, in the process of formulating and implementing the public debt policy, such as:

- ✓ introducing a system of early warning of crisis phenomena, which provides for the mandatory calculation of debt security indicators and assessment of the impact of economic development factors on public debt on a regular basis;
- ✓ increasing the share of the domestic debt instruments in the overall structure of budget deficit financing by encouraging domestic investors (individuals and legal entities) to buy government bonds, which will help mitigating exchange risks;
- ✓ limiting the share of floating-rate liabilities and short-term debt in the overall
- ✓ structure of external public debt;
- ✓ diversifying of sources of domestic borrowing by stimulating the development of the domestic stock market, in particular, ensuring the functioning of the derivatives market, regulating the activities of intermediaries (agents, brokers) and strengthening responsibility for their actions;

- ✓ expanding the capabilities of the insurance market, etc.

Ukraine's economy was hit hard by the global financial crisis, with real GDP contracting by almost 15% in 2009. To stabilize the situation, the authorities entered into a Stand-By Arrangement with the IMF in late 2008. A second agreement was signed in 2010, with fiscal sustainability as the main goal of the program. Since then, this topic has been one of the main economic policy topics during the negotiations between the IMF and the Ukrainian government in 2012 and 2013, as well as during all meetings on the possibility of agreeing on a new IMF program.

In order to realize the goals of countering debt threats, the economic security system should:

- ✓ create certain conditions under which certain facts of borrowing will not only be economically justified, financially unburdensome, but also create prerequisites for economic growth and development of the object of investment and lending; since inefficient attraction and use of credit resources creates the basis for its excessive accumulation, burdensome servicing, financial dependence, which is a threat to financial security.
- ✓ reduce the risks associated with public borrowing (exchange risks; liquidity risks - the inability to refinance or repay debt due to lack of cash; interest rate risks - the risks of unfavorable changes in the interest rate on borrowed funds; deflationary and inflationary risks, political and investment risks - the inability to transform credit (borrowed) resources into investment capital);
- ✓ ensure a balance between domestic and foreign debt, long-term, short-term and medium-term debt that will allow for an efficient distribution of debt repayment over time and space, which will avoid periods of maximum repayment and financially weaken the public finance system.

In order to achieve these goals of overcoming the excessive debt burden, Ukraine should solve a number of regulatory, methodological, organizational, and information issues and ensure their compliance with international principles.

Among the problems of information support (Table 3.1), it is necessary to reform the current Public Debt Management Strategy and the practice of disclosing information on the state of public debt in terms of introducing international standards in the field of public debt performance audit, developing systems for assessing, monitoring and forecasting debt security, and increasing transparency and completeness of disclosure of information on the level of public debt obligations.

Table 3.1 - Problems of information and methodological support for the development of the debt security management system in Ukraine

Direction	Key issues
1. Underdeveloped system of debt security assessment	1. Ukraine's debt sustainability is not assessed. The calculation of certain debt security indicators is not carried out systematically
2. Significant time lags, lack of transparency, and incomplete data on the state debt	2. Ensuring that data on public and publicly guaranteed debt, quasi-fiscal operations, and local government loans are published in an integrated database in a complete and timely manner
3. Absence of a monitoring and forecasting system of debt sustainability	3. The underdevelopment of these systems does not allow for timely identification and response to macroeconomic shocks and the impact of destabilizing factors on the level of public debt and its security
4. No methodology for assessing the impact of factors on debt security over different time horizons	4. The development of methodology, principles, procedures, and reporting forms for assessing short-, medium-, and long-term debt security is a trend in developed countries and should be implemented in Ukraine
5. Failure to take into account the best international practices of accounting for the state budget balance and operations	5. The need to implement a budget accounting system based on accrual basis of accounting in order to establish a high-quality and complete system of accounting for the financial position of the state, its assets and liabilities

Along with the information problems, which include the lack of the necessary systems for monitoring, evaluating, forecasting, and disclosing information on debt sustainability, the problems associated with creating a methodological framework for generating information on its indicators are becoming increasingly important.

To a great extent, these problems are concentrated in the failure to take into account international experience, statistics and disclosure (IMF, World Bank) regarding the state`s debt obligations.

Moreover, the measures to increase the level of debt security should include:

- ✓ adoption of the Law "On the State Debt of Ukraine", which will outline the main provisions of the state`s internal and external debt at the legislative level;
- ✓ development and justification of a strategy for the conduct and allocation of involved financial resources by the state;
- ✓ effective replacement of some sources of borrowing with others;
- ✓ pursuing a coordinated public debt management policy;
- ✓ monitoring and adjusting of managerial decisions related to debt security management in the system of ensuring the economic security of the state.

CONCLUSIONS

This qualification work is devoted to the study of the concept of debt security of the country, since one of the most pressing problems at the current stage of Ukraine's development is the excessive increase in public debt, which has a number of negative consequences for the country's financial system. Special attention is paid to the development of an effective system for debt security assessing and managing.

The work develops theoretical essentials, improves scientific and methodological approaches, and makes practical recommendations for managing Ukraine's debt security.

The main conclusions are as follows:

1. The approaches to interpreting the concept of debt security are systematized. They are structural, systemic, management, functional and mixed.
2. The own definition of the concept "public debt security" was proposed. It is considered as an integral part of the financial and economic security of the state and which is characterized by the optimal level and structure of public debt, considering the cost of its servicing, in order to ensure the stability of the country's financial system and its financial sovereignty, and to maintain an appropriate level of solvency and credit rating.
3. In order to define the optimal strategy for public debt management, a system of influencing factors (both internal and external) was determined.
4. Risks in the public debt management system were classified as market risk, risk of debt prolongation, liquidity risk, credit risk, settlement risk and operational risk.
5. The analysis of state and structure of public debt in Ukraine during the period of 2012-2021 was performed. For a full assessment of debt security, the amount of total debt, as well as the shares of its internal and external components, are determined. A graphic analysis of the dynamics of the public debt volume has led to the

conclusion that the debt situation in Ukraine is unstable and that the public debt has increased significantly in recent years.

6. The author calculated the integral indicator of debt security for the period 2011-2021. Based on the calculated annual values of the integral indicators, it was concluded that the debt burden is “critical”.
7. Last section provides approaches concerning the reforming of debt security management in Ukraine.

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