“Features of the EU and Ukraine’s debt policy”

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Abstract
The world economic globalization determines the feasibility of rethinking fiscal system knowledge on the formation and implementation of debt policy in the countries with transformation and advanced economies. In order to improve the system of public administration, the proper level of financing of innovation-investment projects, the important task is to improve the effectiveness of debt policy instruments and to ensure the consistency of its components. This article describes the essence of debt policy. The features of formation and implementation of the EU and Ukraine's debt policy in the public administration system are defined in the context of institutional transformations. The authors assess the share of gross debt of the EU countries and the sovereign debt of Ukraine in GDP; conduct a regression analysis of the impact of public debt in GDP on real GDP growth in Ukraine. The article discusses the debt policy tasks, summarizes and systematizes the approaches to its implementation in different countries. The authors identify the features of public debt management strategies in terms of marginal indicators of the budget deficit, public debt, and instruments for improving the effectiveness of the public debt management system. The impact of debt policy on country's financial and economic security is substantiated.

INTRODUCTION
Theoretical and practical aspects of the formation and implementation of debt policy are studied in the scientific journals over the centuries. However, despite the abovementioned, the debate about their effectiveness and impact on macroeconomic stability and countries’ economic growth continues. These issues become especially important due to the financial and economic crisis, which adversely affected the dynamics of economic growth both in the countries with transformation and developed economies. Challenges to justify new approaches to public debt management as a stimulating tool for accelerating the economic growth and the rational use of borrowed financial resources, selecting the tools and forms of budget deficit financing have become important. At the same time, it is necessary to note that the significant increase of the public debt in countries with transformation economies is mainly due to the reduction of tax burden in connection with the fall in production volume and increasing tensions in the budgetary sphere. Loans are made to finance the budget deficit in the vast majority of countries. Thus, the research highlights the features of the formation and implementation of debt policy, studies the methods of public debt regulating and debt instruments, assesses the impact of public debt on macroeconomic processes both in countries with transition and developed economies.
1. LITERATURE REVIEW

In modern conditions, the priority of financial policy is to justify the instrument of stabilizing the public debt in order to promote its sustainability and maintain an acceptable level in the countries with transformational and advanced economies. The choice of appropriate instruments depends on many factors, among others, the peculiarities of monetary policy are important. In this case, the priority objectives of the public debt management strategy depend on the openness of the economy (Draksaite, 2014).

The economic nature of the debt is of particular obligation, which is identified according to the types of financial instruments used. In the general case, the debt is the aggregate of all liabilities that require the payment of interest and principal by the debtor to the creditor at a specific date in the future (International Monetary Fund, 2003).

The Keynesian theory of public finances has legal-ized the budget deficits and public debt to stimulate the economic growth. The main task of public debt, according to Keynes, was to stabilize the economic processes. At the same time, according to Ricardo, public debt indirectly reduces the personal income of households and consequently causes a decrease in fixed capital (Petty, Smith, Ricardo, Keynes, & Friedman, 2000). The Sargent-Wallace model estimates the macroeconomic implications of budget deficit financing methods: monetary issues and government bonds. The inflation rate may be much higher in terms of financing the budget deficit by increasing government debt, not monetary financing of budget deficit (Sargent & Wallace, 1987).

The essence of debt policy is the formation and implementation of public administration measures: debt servicing, repayment of their principal amount and interest payments, changes in terms of disbursed loans, construction of new loan conditions, debt volume and level monitoring, their comparison with public finance indicators, mutual relations with creditors regarding the regulation of old debt and the granting of new loans, debt restructuring and refinancing (Hominich & Savvina, 2014); the activities of public authorities aimed at managing public debt (Volynskaya, 2006).

Macro-level debt policy stability is disrupted due to increased systemic risk at the macro-level (Zhen, Weiwei, & Lijing, 2018). The need for a systematic approach to assessing public debt sustainability is justified. In a stochastic economy, the use of deterministic methods does not allow for debt effective assessment. Public debt sustainability assessment should be based on an integrated analysis of the factors that affect its sustainabil-ity (Draksaite, Snieska, Valodkiene, & Daunoriene, 2015). Effectiveness is determined by the validity of debt policy orientation borrowed resources in the development of certain economic sectors (Xinghe, Enxian, & Danting, 2019).

In today’s society, the vast majority of the countries with transformational and advanced economies are characterized by high levels of debt and low economic growth. In order to curb the rise in debt levels, the priority areas are the implementation of a monetary policy that responds to household debt and macroprudential policies. It is to reduce the borrowing limit ratio to its value (Turdaliev & Zhang, 2019).

The impact of monetary policy on the yield of government bonds and their fundamental determinants has gained considerable attention. Alternative monetary policy measures affect the pricing risk not only directly but also indirectly by changing the banking risk (Afonso, Arghyrou, Gadea, & Kontonikas, 2018).

In order to increase the effectiveness of debt policy in the EU countries, the European Central Bank has developed the Open Currency Transactions Program. The European Central Bank purchases on the secondary, sovereign bond markets issued by the EU Member States. The purpose of the program is to prevent short-term bond divergences in all the EU member states (ECB, 2012).

The dynamic growth of debt does not contribute to increased production. In order to improve the effectiveness of debt policy, it is necessary to ensure a nominal interest rate increase, creating the conditions where the money supply is predomi-nantly exogenous (Ascari & Rankin, 2013).

Government debt management approaches are changing; in particular, an optimal debt manage-
ment strategy in the context of a need to increase the government spending is the issuance of government securities in the short term. In the economic literature, most approaches to debt management provide that with a significant level of public debt, optimum policies should be based on the issue of long-term government bonds (Bouakez, Oikonomou, & Priftis, 2018).

Increased levels of sovereign debt raise concerns about its impact on long-term economic growth (Croce, Nguyen, Raymond, & Schmid, 2019). Public debt can accelerate the economic growth by boosting the supply of liquid assets. It is the internal debt, not the external one, that has a more positive impact on the development of economic sectors (Grobéty, 2018). Public authorities are obliged to balance their budgets in an interbalanced manner, setting the present value of the debt equal to the reduced amount of expected future surpluses (Chen & Wu, 2018).

The growing level of debt in the countries with transformational economies indicates the inefficient financial assets accumulated in the household sector and the inefficient real assets accumulated in the enterprise sector (Nakamura, 2017).

The methodology for compiling the government debt statistics in the vast majority of the countries is based on the recommendations of the International Monetary Fund, the World Bank and other international organizations, corresponds to the basic principles of the UN System of National Accounts (UNSD, 2008) and balance of payments statistics (International Monetary Fund, 2009).

2. RESULTS

In terms of increasing globalization, an important objective is to improve the credit rating of the country to attract foreign investment. This contributes to the liberalization of the currency regime, macroeconomic stability, and accelerated economic growth. Financial policies, including debt policy, aim at improving the credit rating of the countries and increase the degree of economic openness. This implies the implementation of effective measures to ensure the proper level of financial and economic security, and create the conditions for the development of financial markets, including the stock market.

The experience of the countries with advanced economies indicates that the implementation of justified debt policy is a significant factor in ensuring the country’s macroeconomic stability. Every country, based on financial capacity, degree of development of the domestic capital market, defines its strategic objectives of debt policy. In addition, there are certain uniform rules on the justified level of public debt. According to the “Stability and Growth Pact” and “Procedure for Harmonization of Key Macroeconomic Indicators of Economic Development of Eurasian Economic Community Member States,” public debt not exceeding 60% and 80% of GDP, respectively, is reasonable (European Commission, 2011; The Treaty on the Eurasian Economic Union justifies the level of public sector debt, which does not exceed 50% of GDP (Legislation of the CIS countries, 2014). According to the World Bank’s classification, the countries with excessive levels of debt are countries where in recent years, the share of public debt to GDP was over 80% (debt level is considered moderate if the figure is in the range from 18% to 80%) or the ratio of government debt to exports exceeded 220% (debt level is considered moderate if the figure is from 132% to 220%) (World Bank official website). These standards are reviewed in every country according to its institutional capacity and economic situation.

In modern conditions, the growth of the level of public debt both in nominal value and its share in GDP is observed both in the countries with transformational and advanced economies. In recent years, public debt in the European Union has grown significantly. The gross debt of the general government of the EU countries (28) increased in absolute terms from EUR 7,557.7 billion in 2007 to EUR 12,789.1 billion in 2018, towards to GDP from 58.1% to 80.4%. The largest increase in debt in absolute terms in 2018 compared to 2007 is observed in the following countries: the United Kingdom – EUR 1,177.5 billion, France – EUR 1,062.4 billion, Spain – EUR 788.6 billion, Italy – EUR 702.9 billion, and Germany – EUR 469.4 billion. The smallest increase in debt in absolute terms in 2018 compared to 2007 is observed in the following countries: Estonia – EUR 1.6 billion, Malta – EUR 2.1
billion, Bulgaria – EUR 7.2 billion, Latvia – EUR 8.8 billion, and Luxembourg – EUR 9.7 billion.

The largest increase in debt to GDP in 2018 compared to 2007 is observed in the following countries: Greece – 78.10 percentage points, Spain – 61.80 percentage points, Portugal – 49.50 percentage points, Slovenia – 47.60 percentage points, and Cyprus – 46.60 percentage points. Debt reduction in GDP in 2018 compared to 2007 is noted in the following countries: Malta – 16.50 percentage points, Germany – 2.10 percentage points, Sweden – 0.40 percentage points (Table 1).

Based on these data, it is appropriate to note the relationship between the level of growth of debt and features of the institutional environment of fiscal sector, the level of socio-economic development. The lowest level of borrowing to finance budget deficits involves the countries that are at the stage of dynamically active development. At the same time, debt management in the EU is based on a comparison of alternatives capabilities, and features of unified standards achieve the threshold level of public debt.

An important method of ensuring the efficiency of debt policy in the EU is considered to be fiscal consolidation, which includes the measures aimed at reducing the debt and flexibility of their structure. Along with this, in most EU countries, fiscal consolidation is relative because of the characteristics of the institutional environment of the fiscal sector.

The main tasks of the EU debt policy are: restructuring public debt on acceptable terms; improve-

| Table 1. The share of gross debt in GDP, % |
|----------------------------------------|
| **Country/period**                     | **2007–2009** | **2010–2012** | **2013–2015** | **2016–2018** | **2007–2018** |
| -------------------------------------- |---------------|---------------|---------------|---------------|---------------|
| Euro area (19 countries)              | 71.90         | 88.03         | 92.07         | 87.90         | 84.98         |
| Euro area (18 countries)              | 72.10         | 88.20         | 92.27         | 88.07         | 85.16         |
| EU (28 countries)                     | 64.47         | 82.00         | 86.07         | 82.10         | 78.66         |
| EU (27 countries)                     | 64.53         | 82.03         | 86.07         | 82.13         | 78.69         |
| Belgium                               | 93.57         | 102.87        | 105.90        | 102.23        | 101.14        |
| Bulgaria                              | 14.33         | 15.77         | 23.40         | 25.63         | 19.78         |
| Czech Republic                        | 29.80         | 40.57         | 42.37         | 34.70         | 36.86         |
| Denmark                               | 33.60         | 44.53         | 42.70         | 35.63         | 39.12         |
| Germany                               | 67.50         | 81.10         | 75.50         | 65.47         | 72.39         |
| Estonia                               | 5.17          | 7.50          | 10.27         | 9.30          | 8.06          |
| Ireland                               | 42.60         | 105.67        | 100.33        | 68.43         | 79.26         |
| Greece                                | 113.07        | 159.30        | 177.40        | 178.63        | 157.10        |
| Spain                                 | 42.93         | 72.23         | 98.60         | 98.47         | 78.06         |
| France                                | 72.10         | 87.90         | 94.63         | 98.27         | 88.23         |
| Croatia                               | 41.80         | 64.10         | 83.43         | 77.93         | 66.82         |
| Italy                                 | 108.87        | 121.80        | 134.37        | 134.57        | 124.90        |
| Cyprus                                | 51.30         | 67.53         | 106.90        | 99.30         | 81.26         |
| Latvia                                | 20.77         | 44.00         | 39.00         | 38.40         | 35.54         |
| Lithuania                             | 19.50         | 37.77         | 40.67         | 37.77         | 33.93         |
| Luxembourg                            | 12.77         | 20.17         | 22.80         | 21.13         | 19.22         |
| Hungary                               | 71.87         | 79.97         | 76.73         | 72.87         | 75.36         |
| Malta                                 | 64.17         | 68.47         | 63.20         | 50.53         | 61.59         |
| The Netherlands                       | 51.50         | 62.37         | 66.70         | 57.07         | 59.41         |
| Austria                               | 71.20         | 82.33         | 83.40         | 78.40         | 78.83         |
| Poland                                | 46.63         | 53.63         | 52.47         | 51.23         | 50.99         |
| Portugal                              | 78.70         | 114.53        | 131.83        | 126.57        | 112.91        |
| Romania                               | 15.33         | 33.53         | 38.20         | 35.80         | 30.72         |
| Slovenia                              | 26.37         | 46.13         | 77.63         | 74.40         | 56.13         |
| Slovakia                              | 31.77         | 45.43         | 53.37         | 50.90         | 45.37         |
| Finland                               | 36.00         | 49.60         | 59.67         | 60.83         | 51.53         |
| Sweden                                | 39.27         | 37.73         | 43.20         | 40.60         | 40.20         |
| The United Kingdom                    | 51.40         | 79.30         | 85.77         | 86.30         | 75.69         |

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ment of the instruments of the securities market; improving the efficiency of the process and mechanisms of lending; improving the public debt management model, which involves minimizing the maintenance costs and improving the efficiency of debt management tools risks; optimization of the structure of the debt portfolio, particularly through its stress testing; ensuring the coordination of public administration bodies in the process of public debt management; strengthening of restrictive measures in case of exceeding the thresholds based on the structure of the national debt, forecasting the dynamics of macroeconomic indicators, indicators of fiscal sustainability; improving the system of information exchange between public authorities responsible for managing public debt, in particular by creating an integrated electronic database; systematic monitoring and assessment of the state debt based on the definition of sound indicators.

The stated tasks of debt policy are solved in the context of debt strategies implementation, which aims at ensuring the proper level of financial and economic security of the country, in particular by reducing the share of external borrowing and increasing domestic ones.

At the same time, at this stage, there is an increase in the level of external debt, especially in the countries with transformational economies. In particular, public debt in Ukraine increased in absolute terms from UAH 88.7 billion in 2007 to UAH 2168.3 billion in 2018, towards to GDP from 12.31% to 60.94%. At the same time, on average, over the period 2007–2018, the share of internal and external government debt in GDP was 17.89% and 30.63%, respectively (Table 2).

Insufficient level of development of debt instruments, a significant share of external debt and restructured liabilities in the structure of government borrowing, domination in the structure of government borrowings of non-market debt, effective management of which is difficult make it impossible to ensure an effective impact of the debt policy of Ukraine on the economic growth. Increasing the share of Ukraine’s public debt in GDP by one percentage point over the period 2007–2018 leads to a decrease in real GDP growth of 0.09 percentage points. The results of the dependence are expressed by the equation \( y = 4.01 - 0.09x \).

Accordingly, there are currently several issues in the countries with advanced and transformational economies the need to be addressed to improve the effectiveness of debt policy. The rapid growth of external public debt exacerbates the vulnerability of countries as a result of the worsening situation in international financial markets. And, accordingly, the currency risk increases. To reduce

### Table 2. The share of Ukraine’s public debt in GDP, %

| Period      | Total share of public debt in GDP, % | Share of domestic public debt in GDP, % | Share of external public debt in GDP, % |
|-------------|--------------------------------------|----------------------------------------|----------------------------------------|
| 2007        | 12.31                                | 2.61                                   | 9.70                                   |
| 2008        | 19.98                                | 4.92                                   | 15.06                                  |
| 2009        | 34.81                                | 11.51                                  | 23.30                                  |
| 2007–2009   | 22.37                                | 6.35                                   | 16.02                                  |
| 2010        | 39.93                                | 14.37                                  | 25.56                                  |
| 2011        | 36.34                                | 13.35                                  | 23.00                                  |
| 2012        | 36.53                                | 14.63                                  | 21.90                                  |
| 2010–2012   | 37.60                                | 14.12                                  | 23.48                                  |
| 2013        | 40.19                                | 19.53                                  | 20.67                                  |
| 2014        | 69.37                                | 30.81                                  | 38.56                                  |
| 2015        | 79.04                                | 26.63                                  | 52.42                                  |
| 2013–2015   | 62.87                                | 25.65                                  | 37.22                                  |
| 2016        | 80.97                                | 28.94                                  | 52.03                                  |
| 2017        | 71.80                                | 25.70                                  | 46.10                                  |
| 2018        | 60.94                                | 21.68                                  | 39.26                                  |
| 2016–2018   | 71.24                                | 25.44                                  | 45.80                                  |
| 2007–2018   | 48.52                                | 17.89                                  | 30.63                                  |

Source: Based on the data from [Ministry of Finance of Ukraine – https://minfin.gov.ua].
it, a systematic assessment of economic and political factors that can influence the exchange rates of the currency structure of the national debt, as well as the constant review of limits on the currency position, are carried out. The insignificant level of diversification of the monetary structure of the national debt leads to an increase in the risk of financial losses as a result of significant fluctuations in the exchange rates. It consequently causes a decrease in the countries’ financial and economic security levels. At the same time, world experience shows that short-term foreign currency liabilities, in particular, the banking sector, represent the most significant currency risk. In the context of the regulation of external government debt, the setting of short-term foreign currency liquidity limits by banking institutions plays a significant role.

The priority of the foreign and domestic debt management tasks depends on the level of institutional capacity of the countries. Increasing public external debt causes a negative impact not only on the internal economic environment but also on the country’s financial and economic security. To ensure the financial and economic security of the country, it is advisable to establish an effective system of public debt management, which allows keeping external public debt at an economically and security level in the medium and long term.

Thus, the external borrowing in foreign currency increases the susceptibility to increased currency risk, lending these funds by providing the loans to borrowers who do not have their sources of foreign exchange. This increases bank credit risk, and the imbalance in terms of assets placed and liabilities attracted has a negative impact on the level of currency liquidity of national banks.

In many countries with transformational economies, issues relating to the guaranteed debt are outstanding. Because there is an insufficient level of efficiency of the system of state control over the financial condition of economic entities whose debt is covered by state guarantees. The measures defined by regulatory documents to minimize the risks of the occurrence of obligations under state guarantees do not allow for the timely implementation of effective measures for managing these obligations.

3. DISCUSSION

Activation of globalization leads to the growing influence of exogenous factors on the financial and budget sphere, despite the variety of different vectors debt policy, to some extent, standardized financial instruments for public debt management applied in the countries with transition and developed economies. The issue of positive or negative impact of public debt on macroeconomic stability and economic growth remains debatable (Kameda, 2014; Taylor, Proaño, Carvalho, & Nelson, 2012). Bashar, Bhattacharya, and Wohar (2017), Combes, Minea, and Sow (2017) determine the need to implement procyclical and anti-cyclical debt policy at a significant level of public debt.

Thus, each country, based on the institutional capacity of the financial and budgetary sector, should independently determine the vectors of debt policy; improve the methodology of public debt management, taking into account the risks arising in the process of procyclical and countercyclical debt policy. Thus, the amount of payments related to servicing the public debt is the main factor that determines the validity of implementing pro-cyclical debt policy. Thus, the increasing demands on the stability and sustainability of public finances, strengthening financial and economic crisis processes actualize the development of new approaches to the management of public debt.

CONCLUSION

The conducted research makes it possible to determine that debt policy is a dynamic, adaptive system of goals, principles, directions, and tasks of public authorities in the sphere of public debt management to internal and external changes of the economic environment, financial and budgetary transformations, aimed at ensuring the acceleration of economic growth. The study of debt policy features in the EU and Ukraine shows the establishment of guidelines for the development of the financial instruments in the
public debt management system based on the integration and unification of its principles. However, the system of public debt management has its specification in each country, which is due to the features of the institutional environment development for the financial sector and the level of countries’ social and economic development.

We proved that currently the immediate measures of debt policy are rationale and setting optimal parameters of public debt and its architectonics; enhancing the flexibility and minimizing the debt risk management; ensuring the coherence of actions of public authorities in the process of public debt management; improving the efficiency of debt assessment and monitoring. That is why the formation and implementation of debt policy should be carried out through the integration of instruments: defining public debt thresholds for the short, medium and long term; assessing the risks of public debt and financial and debt security indicators of the country; coordinating the activities of public authorities in the process of forming and implementing the debt policy; monitoring and evaluation of debt, its architectonics.

Given the significant transformation processes in a globalized economy, it is appropriate to enhance the transparency in the development of the debt policy. This will provide an opportunity for coordination of decisions in the process of its formation with the decisions in the process of its implementation. At the same time, goals, principles, directions, problem debt policy should be determined by allowing for the implementation of all components of financial policy. This implies the need to reform the public finance system to increase the transparency and openness of public authorities’ activities, especially in the countries with transformational economies.

Limited financial resources will always determine the need for updating the change in debt policy vectors in terms of the possibility of implementing the alternative ways of attracting and directing the debt borrowing in the development of economy’s priority sectors. Therefore, future research should be carried out in the direction of finding the alternative approaches to the methodology of public debt management, the formation and implementation of debt policy, taking into account the dynamic and cyclical nature of economic processes.

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