

UDC 336.143

*Dmytro Konovalenko***FISCAL CONSOLIDATION AND ITS IMPACT ON THE UKRAINE'S ECONOMY***Дмитро Коноваленко***ФІСКАЛЬНА КОНСОЛІДАЦІЯ ТА ЇЇ ВПЛИВ НА ЕКОНОМІКУ УКРАЇНИ***Дмитрий Коноваленко***ФИСКАЛЬНАЯ КОНСОЛИДАЦИЯ И ЕЕ ВЛИЯНИЕ НА ЭКОНОМИКУ УКРАИНЫ**

The article is devoted to theoretical aspects of fiscal consolidation interpretation and practical aspects of determining the impact of fiscal consolidation on the economy of Ukraine. Estimation of the impact of fiscal consolidation on Ukraine's economy is considered in accordance with modern diagnostic tools of the state of general government sector. The analysis of actual and cyclically adjusted fiscal balances of the general government sector was completed and the fiscal impulse in Ukraine for 2010-2020 years was estimated. The article proposes improvement of the methodology for assessing the impact of fiscal consolidation on the Ukrainian economy.

Key words: *fiscal consolidation; general government sector; expenditure; general government debt; overall balance; stability of state's finances; fiscal impulse.*

Fig.: 2. Tabl.: 2. Bibl.: 14.

Стаття присвячена теоретичним аспектам інтерпретуванням фіскальної консолідації та практичним аспектам визначення впливу фіскальної консолідації на економіку України. Оцінка впливу фіскальної консолідації на економіку України розглянуто відповідно до сучасного інструментарію діагностики стану сектору загального державного управління. Здійснено аналіз фактичних та циклічно скоригованих фіскальних балансів сектору загального державного управління й оцінено фіскальний імпульс в Україні за 2010–2020 роки. Запропоновано вдосконалення методики оцінювання впливу фіскальної консолідації на економіку України.

Ключові слова: *фіскальна консолідація; сектор загального державного управління; загальні видатки; державний борг; підсумковий баланс; стійкість державних фінансів; фіскальний імпульс.*

Рис.: 2. Табл.: 2. Бібл.: 14.

Статья посвящена теоретическим аспектам интерпретации фискальной консолидации и практическим аспектам определения влияния фискальной консолидации на экономику Украины. Оценка влияния фискальной консолидации на экономику Украины рассмотрена в соответствии современного инструментария диагностики состояния сектора общего государственного управления. Осуществлен анализ фактических и циклически скорректированных фискальных балансов сектора общего государственного управления и оценен фискальный импульс Украины в 2010–2020 гг. Предложено усовершенствование методики оценки влияния фискальной консолидации на экономику Украины.

Ключевые слова: *фискальная консолидация; сектор общего государственного управления; общие расходы; государственный долг; общее сальдо; устойчивость государственных финансов; фискальный импульс.*

Рис.: 2. Табл.: 2. Библ.: 14.

JEL Classification: E62

Target setting. In order to maintain public finances sustainability, fiscal consolidation should represent a set of measures to optimize budget expenditures, structural reforms, an increase in income not only through changes in the tax system, but also with the use of the measures to stimulate the economy and business [1]. These results can be obtained by radical changes in budgetary regulation, introduction of new approaches to fiscal policy in the post-crisis period. Fiscal policy should focus primarily on solving the problems that arise when coordinating fiscal space.

In most developed countries, a key element of the post-crisis recovery programs was a solution aimed at increasing fiscal policy rigidity. Various approaches to achieving the objectives of fiscal sustainability were presented, including: institutional reforms in the fiscal sector, implementation of the budget consolidation programs, introduction of new fiscal rules, medium-term budget planning, etc. [2].

However, the fiscal policy mechanisms (within the framework of the fiscal consolidation program), are aimed at reducing public spending, which are considered a more effective tool in comparison with the measures to reform the tax system. But such changes in public spending should not lead to containment of economic growth, and evaluation of the mechanisms put in place becomes very relevant.

Actual scientific research and issues analysis. Refusal of most countries to maintain a high level of public spending on current tax revenues has attracted a lot of attention from reputable foreign and domestic scholars and governments in many countries on the issues of the fiscal con-

solidation policies. As in foreign scientific works and recommendations of international organizations and in domestic works, relating to the content of fiscal consolidation, its different definitions are proposed. In particular, OECD experts equate it with the state policy, aimed at reducing the deficit and accumulation of public debt [3]. It should be noted that at the same time, OECD experts do not mean a deficit of the state budget, but a deficit in the general government sector (GGS) as a whole. On the other hand, fiscal consolidation is to improve the budget balance by applying discretionary fiscal policy measures over a specified period (after which they are introduced). In this case, deficit reduction is displayed (as a rule, a structural or cyclically adjusted primary balance) on the background of continuous improvement [4]. At the same time, under the budget balance, structural balance of the GFS operation are understood [5].

Some scholars are trying to specify the definition of fiscal consolidation. In particular, S. Barrios, S. Langedijk and L. Pench believe that fiscal consolidation is to improve the cyclically-adjusted primary balance: within 1 year – not less than 1,5%, within 3 years – in case if each year such balance is not worsened more than 0,5 % GDP (smooth consolidation). In this approach, annual consolidation is seen as an episode [6].

Thus, we can conclude that fiscal consolidation in most cases is reduced to a deficit in the general government sector and the debt accumulated within this sector. However, this approach can be considered a bit simplistic, since attention is drawn to the intermediate results rather than to the final benchmarks. In point of view of the domestic scholar V. Kudryashov, fiscal consolidation should be regarded as a system for reforming the fiscal sphere, aimed at increasing the sustainability of public finances [7]. Directions of its realization include deficit reduction of the GGS reducing the volumes and improving the structure of public debt. At the same time, the process should not be accompanied by an increase in negative impacts on the main macroeconomic indicators of the country's development (GDP growth rate, tax burden, consumption level, size of solvent demand, inflation rate, etc.).

Uninvestigated parts of general issue defining. Despite numerous scientific works, the issue of fiscal consolidation needs to be improved in the area of assessing the impact of such policies on the country's economy.

Purpose of the article. Main purpose of this work is to determine the content of fiscal consolidation, assess its impact on the Ukrainian economy and ensure the sustainability of public finances in the permanent crisis conditions.

Statement of the basic material. Financial consolidation as a special type of macroeconomic policy is aimed at maintaining a budget balance that stabilizes budget deficit and public debt at a certain level [8].

In order to implement fiscal consolidation programs, extensive institutional transformations are used in foreign countries. In particular, the EU introduced new Fiscal rules within the framework of the Stability and Growth Pact, aimed primarily at limiting public debt in the member countries and preventing structural deficits. All these countries monitor such indicators by providing information to the European Commission (within the framework of the European semester). In March 2012, 25 EU members signed an agreement on stability, coordination and governance, or the fiscal pact. The EU countries decided to introduce unified budgetary rules at the level of the national legal systems, including constitutional ones [9].

The fiscal consolidation policy is also being implemented in Ukraine. Prior to its introduction, during the economic crisis, there was a sharp deterioration in the state of public finances. Starting from 2010, there is a gradual decrease in the expenditures of the GGS. Repressive effect of the GGS expenditures and a gradual increase on the revenue part allowed somewhat to reduce the deficit of the overall balance of the GGS to 2.2 % of GDP in 2016, (from 6.5 % in 2010) (Fig. 1, Table 1).

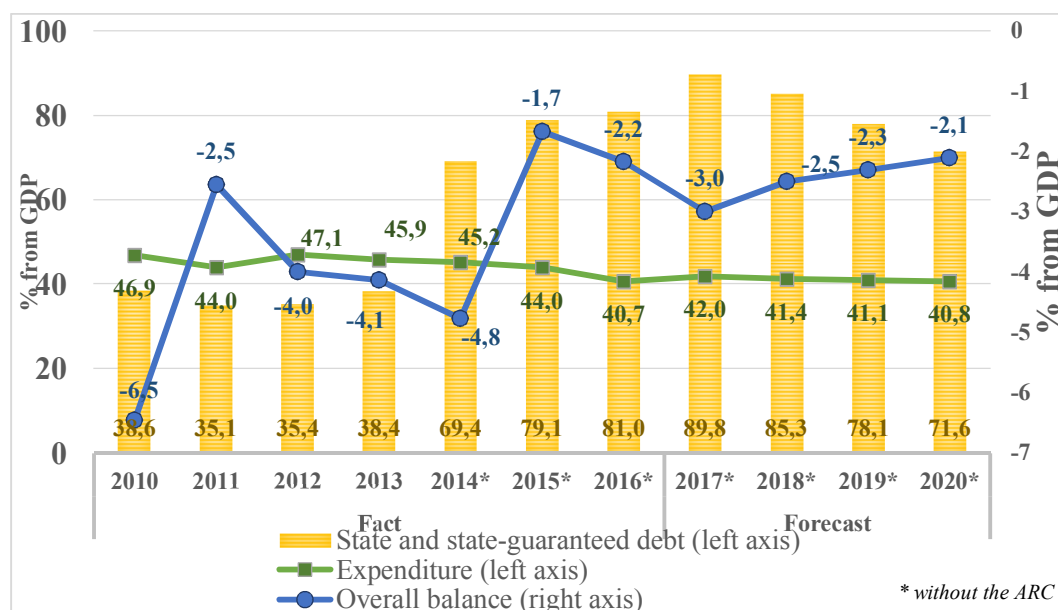


Fig. 1. Cumulative debt and expenditure of the GGS in 2010–2020

Source: built on the basis of [10].

But despite slight improvement in the overall balance of the GGS, the issue of updating fiscal policy is still a topical issue. The EU experience is to develop fiscal consolidation programs, definition of the mechanisms for its implementation, structural reforms (introduction of the fiscal rules, restoration of the financial sector, transparency increasing of the tax operations, etc.). Particular issues that are very important for our country should be government debt management and changes in the monetary policy to support economic growth.

Since 2014, by analyzing the current trends in Ukraine, it is very difficult to determine the limits of impact of the fiscal consolidation policies and influence of the geopolitical situation in the country. So, in spite of this, the level of the GGS deficit in 2014 reached -4.8 % of GDP. In Ukraine, the issue of financing the deficit was first and foremost due to the external sources of financing. In line with this problem, in 2014 there was a complicated geopolitical situation and the level of Ukraine's debt in 2014 rose to 69.4 % of GDP (Fig. 1). In 2016, a "trade blockade" was established in Ukraine, which according to the IMF would lead to an increase in both the overall balance of the GGS (to -3.0 % of GDP in 2017) and the total debt of the country (to level 89.8 % in 2017).

It should be noted that over the entire period of observations, the actual overall balance of the GGS of Ukraine was negative. At the same time, the primary overall balance of the GGS of Ukraine had a negative impact in 2010-2014, and the average deficit was -2.2 % of GDP. In Recent years, the primary balance has been positive (+ 2.8% of GDP in 2015 and +1.2 in 2016), however, such a high positive level is due solely to an increase in the volume of the debt servicing, which in 2015–2016 amounted to more than 4,0% of GDP. That is, we can say that there was not so much the consolidation of public spending, but their redistribution, where there was a reduction of the public functional expenditures due to an increase in interest expense on servicing the public debt.

Looking at this, it is very difficult to assess the impact of fiscal consolidation, therefore, it is proposed to consider an alternative version of evaluation of the fiscal consolidation policy.

According to T. Dernberg's approach, the indicator characterizing the impact of the fiscal policy is a relative level (in % of potential GDP) of the deficit of the cyclically-adjusted balance (which is also called «fiscal impact», or «fiscal stance»). An indicator that measures the direction and intensity of the fiscal policy is a fiscal impulse (formula 1), which is calculated as an increase (decrease) of the indicated balance in comparison with the previous (or basic)

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fiscal year [11]. Thus, this assessment shows how political decisions of the government affect the economic crisis (improve the economic situation or deepen the crisis).

$$FI = FI_0 - FS = \left[R_0 \left(\frac{Y_{p0}}{Y_0} \right)^{\gamma_r} - G_0 \left(\frac{Y_{p0}}{Y_0} \right)^{\gamma_g} \right] - \left[R \left(\frac{Y_p}{Y} \right)^{\gamma_r} - G \left(\frac{Y_p}{Y} \right)^{\gamma_g} \right], \quad (1)$$

where FI – fiscal impulse;

FS – fiscal stance ;

R – government revenues;

G – government expenditures;

Y – actual GDP;

Y_p – potential GDP;

γ_r – elasticity of state revenues to GDP;

γ_g – elasticity of state expenditures to GDP;

0 – base year index.

Consequently, positive value of the fiscal impulse means that the current policy is expansive, negative - restrictive. In more detail, the issue of the fiscal impulse assessment was considered in the works of I. Bohdan, T. Yara and D. Konovalenko [12; 13].

Dynamics of the actual operation of the GGS and the fiscal impulse in Ukraine is presented in Table 1.

Table 1

Operations of the general government sector in 2010–2016

Indicator	2010	2011	2012	2013	2014*	2015*	2016*
UAH bln							
Total revenue	453,1	559,7	629	636,4	642	842,4	919,4
Expenditure	525,4	594,1	687,2	699,2	717,6	875,5	971,1
including interest on the debt servicing	17,5	25,4	26,7	35,9	52,5	88,5	97,7
Overall balance (deficit "-")	-72,3	-34,4	-58,3	-62,8	-75,6	-33,2	-51,7
Primary overall balance	-54,8	-9	-31,5	-26,9	-23,1	55,3	46
% from GDP							
Total revenue	40,4	41,5	43,1	41,8	40,5	42,4	38,6
Expenditure	46,9	44	47,1	45,9	45,2	44	40,7
including interest on the debt servicing	1,6	1,9	1,8	2,4	3,3	4,4	4,1
Overall balance	-6,5	-2,5	-4	-4,1	-4,8	-1,7	-2,2
Primary overall balance	-4,9	-0,7	-2,2	-1,8	-1,5	2,8	1,9
prices of 2010, UAH bln							
Total revenue	453,1	490,2	510,1	494,8	431,2	407,4	379,6
Expenditure	525,4	520,3	557,4	543,7	482,0	423,5	400,9
including interest on the debt servicing	17,5	22,2	21,7	27,9	35,3	42,8	40,3
Overall balance	-72,3	-30,1	-47,3	-48,8	-50,8	-16,0	-21,3
Primary overall balance	-54,8	-7,9	-25,6	-20,9	-15,5	26,8	19,0
cyclically adjusted indicators, prices of 2010, UAH bln							
Volume of cyclical adjustment of revenue	22,5	-2,7	-0,6	6,6	12,7	25,7	13,4
Cyclically adjusted revenue	475,6	487,5	509,6	501,5	444,0	433,2	393,0
Cyclically adjusted overall balance	-49,8	-32,8	-47,8	-42,2	-38,1	9,7	-7,9
Cyclically adjusted primary overall balance	-32,3	-10,6	-26,1	-14,3	-2,8	52,5	32,4
% from potential GDP							
Volume of cyclical adjustment of revenue	1,9	-0,2	0,0	0,6	1,2	2,5	1,3
Cyclically adjusted revenue	40,6	41,5	43,1	41,8	40,6	42,6	38,7
Cyclically adjusted overall balance	-4,3	-2,8	-4,0	-3,5	-3,5	1,0	-0,8
Cyclically adjusted primary overall balance	-2,8	-0,9	-2,2	-1,2	-0,3	5,2	3,2
Fiscal impulse (+ expansive policy)	2,3	-1,9	1,3	-1,0	-0,9	-5,4	2,0
For reference							
Nominal GDP (UAH bln)	1120,6	1349,2	1459,1	1522,7	1586,9	1988,5	2383,2
Actual GDP (prices of 2010, UAH bln)	1120,6	1181,6	1183,4	1183,9	1066,0	961,8	983,9
Potential GDP (prices of 2010, UAH bln)	1170,9	1175,7	1182,2	1198,3	1094,5	1016,7	1015,4
GDP deflator (2010 = 100)	100,0	114,2	123,3	128,6	148,9	206,7	242,2
GDP gap, % of potential GDP	-4,3	0,5	0,1	-1,2	-2,6	-5,4	-3,1
Average elasticity of revenues to GDP	1,103	1,103	1,103	1,103	1,103	1,103	1,103

* Excluding the temporarily occupied territory of the ARC and part of the area of the anti-terrorist operation.

Source: built on the basis of [10; 11; 12; 13].

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Having analyzed the fiscal impulse it can be noted, it can be argued that (Fig. 2):

- in the period from 2010 to 2011, the government conducted the countercyclical policy, when the fiscal impulse was within + 2.3 % of potential GDP (supportive policy with a negative GDP gap of -4.3 % of potential GDP) and -1.9 % of potential GDP (restraining policy at the GDP gap + 0.5 % of potential GDP), respectively

-the fiscal policy in 2012-2015 was restrictively pro-cyclical (with a maximal pro-cyclical impact in 2015, where the fiscal impulse reached -5.4 % of potential GDP). Taking into account the fact that for the specified years there was a significant drop in the actual GDP, and the gap in GDP increased almost three times, actions of the government can be called "strictly pro-cyclical", as they provoked a progressive reduction of so low domestic demand with inevitable long-term effects.

-in 2016, the fiscal policy gained signs of counter-cyclicity, the fiscal impulse amounted to 2.0 % of potential GDP, which contributed to the recovery of economic growth (real GDP grew by 2.3 % against the previous year). However, given the negative GDP gap of -3.1 %, it is too early to talk about macroeconomic stabilization.

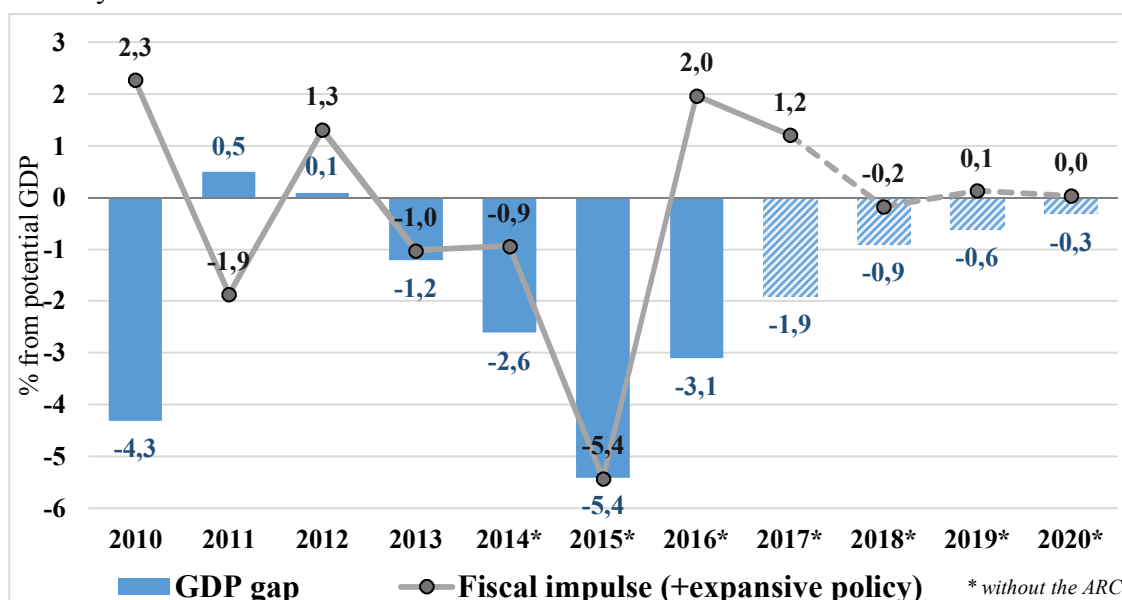


Fig. 2. GDP gap and fiscal impulse in 2010-2020

Source: built on the basis of [10; 11; 12; 13; 14].

Restrictive fiscal policy of 2014-2015 will have negative long-term consequences for the future, influencing the length of the period of macroeconomic stabilization, because as a result of the dramatic reduction in demand, there have been destructive changes in the economy, for correction of which it is necessary to restore sustainable rates of real economic growth, but this is not possible now, due to the lack of effective influence of the fiscal policy on the development of the industrial and social potential of the economy.

If we consider projected measures of the fiscal policy agreed with the IMF, we can say that possible recovery of economic growth in 2017 may be somewhat slowed down in connection with the introduction of a complete cargo blockade of the uncontrolled by the Ukrainian authorities of the occupied regions of Donetsk and Luhansk Oblasts (ORDLO). According to the IMF, the risk of a slowdown in real GDP growth directly from the blockade of the ORDLO could reach 0.9 percentage points (to 2.0% of real GDP growth before the previous year). However, it is predicted that the negative effect of the blockade will be offset by other factors, first of all - more favorable price conditions on the foreign markets for the Ukrainian export goods (metals, iron ore, grain), than predicted earlier. It is expected that by the end of 2017,

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enterprises in the territory under the control of Ukraine will be able to reorient to the alternative sources of raw materials and energy resources and next year they will be able to reach sufficient capacity utilization [16].

It should be noted that starting from 2017, it is expected that the direct state financial support to Naftogaz will be halted, which will ease the burden on the country's budget. As a consequence, by 2020, reduction of external financing of the deficit of the overall balance of the GGS and reduction of the relative level of aggregate debt is predicted, which by 2020 will be reduced by more than 18% of GDP, but still will be more than 60 % of GDP (Table 2). It is anticipated that this will be achieved by continued growth of the economy and a moderate devaluation of the national currency, which will reduce additional financing needs necessary to balance the current budget, as well as create favorable conditions for servicing the existing debt (especially external one).

Table 2

Forecast of the operation of the general government sector in 2017–2020

Indicator	2017*	2018*	2019*	2020*
1	2	3	4	5
UAH bln				
Total revenue	1065,5	1194,5	1325,8	1458,8
Expenditure	1147,4	1370,8	1556,9	1743,4
including interest on the debt servicing	114,4	131,5	139,2	149,0
Overall balance	-81,9	-176,3	-231,1	-284,6
Primary overall balance	32,5	-44,8	-91,9	-135,6
% from GDP				
Total revenue	39,0	38,9	38,8	38,7
Expenditure	42,0	44,6	45,5	46,2
including interest on the debt servicing	4,2	4,3	4,1	3,9
Overall balance	-3,0	-5,7	-6,8	-7,5
Primary overall balance	1,2	-1,5	-2,7	-3,6
prices of 2010, UAH bln				
Total revenue	391,1	402,5	415,4	431,1
Expenditure	421,2	461,9	487,9	515,2
including interest on the debt servicing	42,0	44,3	43,6	44,0
Overall balance	-30,1	-59,4	-72,4	-84,1
Primary overall balance	11,9	-15,1	-28,8	-40,1
cyclically adjusted indicators, prices of 2010, UAH bln				
Volume of cyclical adjustment of revenue	8,4	4,0	2,8	1,4
Cyclically adjusted revenue	399,5	406,5	418,2	432,5
Cyclically adjusted overall balance	-21,7	-55,4	-69,6	-82,7
Cyclically adjusted primary overall balance	20,3	-11,1	-26,0	-38,6
% from potential GDP				
Volume of cyclical adjustment of revenue	0,8	0,4	0,3	0,1
Cyclically adjusted revenue	39,0	38,9	38,8	38,7
Cyclically adjusted overall balance	-2,1	-5,3	-6,5	-7,4
Cyclically adjusted primary overall balance	2,0	-1,1	-2,4	-3,5
Fiscal impulse (+ expansive policy)	1,2	3,0	1,4	1,0
For reference				
Nominal GDP (UAH bln)	2734,0	3074,0	3421,0	3773,0
Actual GDP (prices of 2010, UAH bln)	1003,6	1035,7	1072,0	1114,9
Potential GDP (prices of 2010, UAH bln)	1023,1	1045,1	1078,5	1118,2
GDP deflator (2010 = 100)	272,4	296,8	319,1	338,4
GDP gap, % of potential GDP	-1,9	-0,9	-0,6	-0,3
Average elasticity of revenues to GDP	1,103	1,103	1,103	1,103

* Excluding the temporarily occupied territory of the ARC and part of the area of the anti-terrorist operation.

Source: built on the basis of [10; 11; 12; 13; 14].

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In turn, in the framework of the scenario conditions laid down in the memorandum of the IMF, a gradual reduction of the GDP gap is projected: from -3.1 % in 2016 to -0.3 % in 2020. Cyclically adjusted balance of the GGS will gradually decline to 2.0 % of GDP in 2020. But it should also be noted that the expected fiscal impulse since 2018 will have the signs of the neutral fiscal policy (when the fiscal impulse fluctuates around 0), with still negative GDP gap, which in the long run could have negative consequences.

Conclusions and prepositions. In modern scientific literature, there was no unity of views on the interpretation of the importance of fiscal consolidation, which would generalize the etymological nuances of this concept.

The study confirmed that fiscal consolidation as a system of the discretionary fiscal measures to improve the fiscal balance requires continuous in-depth study, especially in terms of its impact on the country's economy.

As calculations have shown, in spite of the planned consolidation in 2017-2020, it is expected that the state fiscal policy will also have a moderate stimulating effect on the economy (cumulative fiscal impulse will be positive), which will reduce the negative gap between potential and actual GDP. As a consequence, in the forecast period a reduction in the relative level of aggregate debt is expected, which will contribute to increasing the fiscal sustainability of the GGS.

Proposed methods for fiscal consolidation evaluation, by evaluating the fiscal impulse, can help in carrying out qualitative diagnostics of the public finances state of Ukraine, drawing up medium-term fiscal forecasts, assessment of the impact of the GGS operations on the overall balance and the economy, application of which now requires modern methods of fiscal diagnostics.

As an addition to these methods can become an assessment not only of the cyclical indicators, but also of structural ones, which have already been introduced in the EU countries, limit values of which were approved in the form of the fiscal rules, which should become an effective regulator of the macroeconomic situation.

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