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## Article

# Fiscal consolidation effect in theory and practice

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## FISCAL CONSOLIDATION EFFECT IN THEORY AND PRACTICE

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### Abstract

*This paper focuses on the issues of fiscal policy and specific institutional mechanism represented by the fiscal consolidation that represent the powerful tools of preventing the debt crisis and strengthening fiscal discipline. The paper analyzes the cases of USA, Japan, and EU countries which implemented fiscal consolidation policy with a varying degree of success. The main value-added of our paper is the explanation and reasoning for the relevance of implementing fiscal policy in a crisis economy through “institutional arrangement” of fiscal rules into legal procedures of debt and fiscal strategy. The paper discusses the experience of Ukrainian fiscal consolidation based on up-date statistics and comes up with analytical results and discussions that might be interesting for both policy-makers and “big sharks” of the business community.*

**Key words:** fiscal policy, fiscal consolidation, fiscal rules, taxes, subsidies, budget.

**JEL Classification:** H12, G01

### Introduction

Almost 2 thousand years ago, Roman Empire faced a major financial crisis related to the price drops of land that led to the financial issues of many Roman families. Property owners obtained loans and bought land waiting for the prices to increase in the future. In order to solve the puzzle, Emperor Tiberius decided to save the failing investors by lending them three-year term interest-free loans from the state budget. The history does not report whether the landowners paid back their loans.

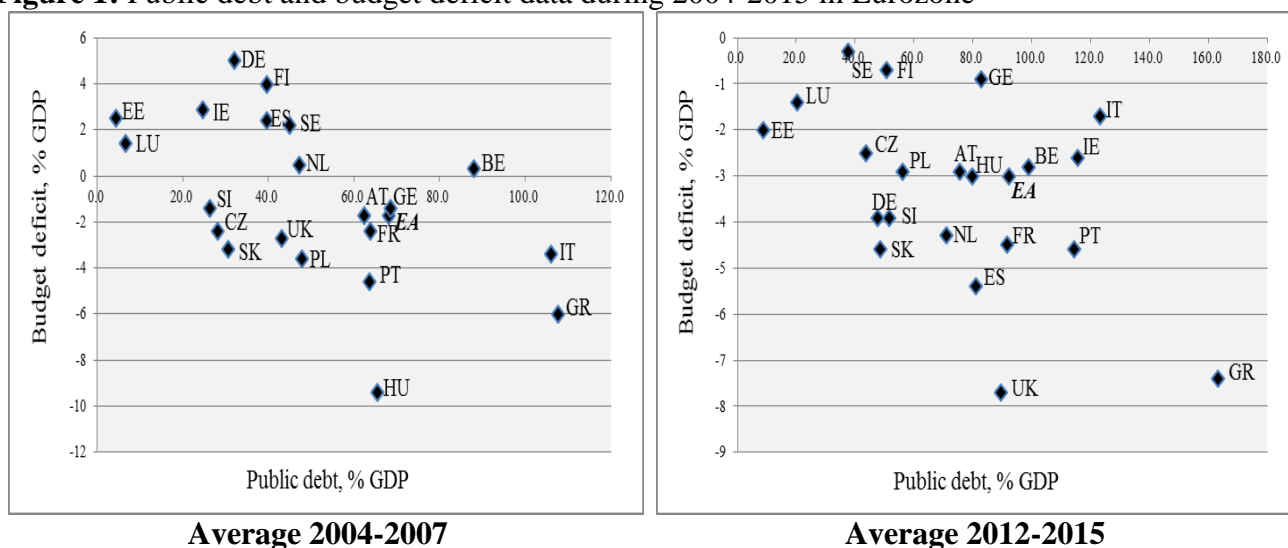
Nowadays, a feeling of “*déjà-vu*” is coming upon today’s investors. Global financial crisis in 2008-2009 was accompanied by an abrupt increase of budget deficit and sovereign debts. As a result, the majority of the Eurozone countries (and EU Member States) exceeded affordable criteria of “3-60” (deficit budget/national debt) (see Figure 1 that follows). Due to the insolvency in most of the OECD countries (as well as the emerging economies) which led to the increase of national expenses (including social transfers) by means of current tax revenues the governments turned their attention to fiscal consolidation policy as a powerful tool of preventing the debt crisis and strengthening the fiscal discipline.

### Literature review

It can be shown that fiscal consolidation is actually a specific strategy of fiscal policy which is presented in the times of economic and financial crisis in the context of dealing with the consequences of the global turmoil. A hypothesis, on which fiscal policy is based, assumes

that its realization helps to significantly decrease impact of financial crisis on the state of public finances as well as to improve the developing trend of national economies in the long run.

**Figure 1:** Public debt and budget deficit data during 2004-2015 in Eurozone



**Source:** Own elaboration based on Economic Outlook, OECD (2016)

Fiscal consolidation problem in EU have been studied in works by Gobbin and Van Aarle (2001), Afonso et al., (2012), Alesina et al., (1998, 2006), Alesina and Ardagna (1998; 2010), Agnello and Sousa (2014), Agnello et al. (2016), Ardagna (2004), Blinder and Solow (1973), Giavazzi and Pagano (1995), Gupta et al. (2003), Josselin et al. (2012), Oates (2002) and many others.

But there are not so many resources about fiscal consolidation process in Ukraine. Between authors who discussed theoretical and practical aspects of Ukrainian fiscal consolidation we can mentioned Betliy and Kirchner (2013), Mitra and Poghosyan (2015), Adamyk (2016) and many others.

### Foreign experience of fiscal consolidation effect

Analysis of the international approaches to the fiscal consolidation allows you to point out a few early action directions of consolidating the public finances (Ahrend et al., 2006; Alesina, and Ardagna, 2010; Gupta et al., 2003; Lambertini et al., 2003):

- Assessment of budget deficit: period of fiscal consolidation begins when the budget deficit is reduced at least by 1% of GDP; period of fiscal consolidation begins when the budget deficit decreases by 1.5% of potential GDP for a one or two-year period, without any increase during both years; period of fiscal consolidation begins when the budget deficit is reduced at least by 2% of potential GDP for three-years period and does not increase in any of these three years
- Assessment of cyclically-adjusted primary budget (CAPB): period of fiscal consolidation begins when CAPB increase by at least 1% of potential GDP during the year; period of fiscal consolidation begins when CAPB increase at least by 2% of potential GDP during the year, or by 1.5% of GDP on average, over the next two years; period of fiscal consolidation begins when CAPB exceeds 3% of potential GDP over the three years.

Let us look at the example of Japan that has a developed economy and surely feels the need for medium-term fiscal consolidation program which is associated not only with the problems of refinancing public debt, which now exceeds 229,2% of GDP 2014, but the fact that at this level, its economy simply cannot grow. In Japan, both the business sector and the household sector are aware that at some time, sharp tax increases and cuts in social programs, for which already significantly fewer than in the EU, resources are allocated, are inevitable. However, no one knows for sure, when exactly will the government introduce this policy, therefore, this uncertainty was the main reason for high savings, low levels of private investment, capital flight and low economic expansion for almost twenty years.

In the USA, excessive anxiety by the provision of short-term growth develops foremost in the active use of monetary easing measures. Over the past decade, interest rates were maintained at low level, which stimulated the growth in private consumption (customer of the highest instance), and “irresponsible behavior” of banks and other financial market participants. Such growth in private consumption, accompanied by a rapid increase in debts of American households, provided the economic growth of the U.S. economy. The level of private savings dropped to zero, and inflation remained relatively low due to the impact of external factors (such as “surge” of cheap foreign goods). This model of economic growth can be called “model of borrowed growth” (borrowed from the future).

The financial crisis led to a decrease in budget revenues, increase of budget deficits and sovereign debt of the USA, which has already exceeded the critical rate of 104,2% of GDP 2014. The need for large-scale fiscal consolidation became apparent, what inevitably resulted in expectations of American society for taxes increase and reduce of social spending. Thus, American households under condition of accumulation of debt, considerably restrict their level of consumption. Therefore, in the absence of an effective and convincing medium-term program of fiscal consolidation, measures of stimulus spending will not lead to sustainable economic growth in the United States.

The fiscal situation in Europe is somewhat better than in the U.S. and Japan. The level of public debt in most European countries is significantly lower (e.g. 6,0% of GDP in Estonia, 18,4% in Luxemburg, 39,3% in Norway, 43,9% in Czech Republic, 44,0% in Sweden, 47,2% in Denmark, 52,4% in Switzerland, 53,8% in Poland, 61,2% in Finland, data 2014), and the level of social commitment – is higher. However, large-scale programs of assistance to peripheral euro-zone countries (Greece, Portugal, Ireland) on contrary to the principles of Maastricht Treaty, which assumes that each member state of EU takes the full and individual responsibility in public sector, actualize the issue of the constitutional structure of the EU. Even today, peripheral euro-zone countries which receive financial assistance find themselves, de facto, in the situation of limited budgetary sovereignty. And the decision to create a European Financial Stabilization Mechanism, means further centralization of fiscal resources at the supranational level.

The success of the policy of fiscal consolidation depends on a number of factors that can be grouped into four key groups (Фіскальна консолідація, 2013): 1) the structure and terms of fiscal consolidation; 2) political and institutional factors; 3) monetary factors; 4) rational expectations. The main economic consequences of implementing the fiscal consolidation is that the consolidation of 1,0% of GDP generally leads to the lose of GDP by 0,5% over two years, to the raising of unemployment rate by about 0,3%, to the decrease in aggregate domestic demand by about 1,0% and to the depreciation of the national currency by 1,1%.

The most successful examples of carrying out the fiscal consolidation can be considered in the experience of Ireland in 1987-1989 and Canada and Sweden in 1994-1998 (see Table 1 that follows).

**Table 1:** Results of fiscal consolidation policy in some countries

Country and period	Balance budget, % GDP		Decreasing spending / increasing taxes	Peculiarities
	year before fiscal consolidation program	year after fiscal consolidation program		
Ireland 1987-1989	-9,8	-3,0	65 / 35	Reduction of public sector size to 14%, freezing of salaries and subsidies
Canada 1994-1998	-6,0	+1,2	60 / 40	Reduction of public officials to 15%
Sweden 1994-1998	-11,0	+3,8	55 / 45	Three years limitations of all governmental bodies public spending

**Source:** Crisis: new round (2010)

Some countries demonstrate not really effective fiscal consolidation policy, for example:

- Greece, where was planned the reduce the budget deficit over the 2009-2014 from 13,6 to 3,0% of GDP by means of “freezing” the civil servants’ salaries up to 2014 and pensions up to 2012, and the increase of VAT from 21 to 23%, also the increase in excises of gasoline, tobacco and alcohol by 10,0%, with the projected reduction of GDP by 3,8-5,0%. But in 2014 budget deficit in Greece was around 7,7%;
- Spain, where was planned the reduce the budget deficit over the 2009-2014 from 11,2 to 5,3% of GDP by means of lowering salaries of civil servants by 5,0% in 2010, and “freeze” of their salaries in 2011, also the cuts in public spending on 15 billion euro, with the projected reduction of GDP by 0,5-1,0%. But in 2014 budget deficit in Spain was around 15,3%.

In the context of tax policy, main reforms of fiscal consolidation of 2006-2014, concerned, mainly, tax relief: self-charging was implemented in Argentina, Egypt, Canada, China, Turkey, Sri Lanka, which significantly increased the level of trust between taxpayers and tax authorities; the permission to file the “electronic declarations” and paying taxes via the Internet was received by taxpayers in Australia, India, Colombia, Lithuania, Singapore, Tunisia, what eliminated the problem of loss of time for dialogue with the taxman; simplified tax system effectively earned in the UK, Hong Kong, China, Macedonia, Morocco.

It should be noted that in many European countries and the USA and Canada during the 1995-2014, were observed major changes in ratio of consolidated income and expenditure in GDP on the level of public administration. Thus, in most countries, means the gradual reduction in the role of the central government while increasing role of subnational governments in matters of forming the revenue of the budget (except of Denmark, Germany, Luxembourg, Switzerland, Italy, Estonia, Hungary). Regarding the responsibilities in spending area, gradually growing role of both central and subnational governments took place in Europe, demonstrating the Wagner law, not only in terms of economic growth, but the economic recession – in fact the growth of public spending in GDP never slowed down even in times of financial crisis. The falling of government revenues in periods of economic recession with the simultaneous increase of expenses for social benefits and social assistance resulted in an increase of the budget deficits, however was compensated by the massive government borrowing, which caused debt crisis of the early twenty-first century in most countries of the EU. For example, if in Estonia, Latvia, Lithuania, Hungary, Ireland, Portugal, Greece, Czech Republic governments choose the way of the growth of the base rate of VAT, in the UK,

Luxembourg, Ukraine, on the contrary – choose the way of its reduction. A similar situation is observed with corporate taxation, as if in Lithuania, Ireland, Hungary, where is an increasing income tax rate for businesses, while in Sweden, Luxembourg, Portugal – it is reduced.

Concerning income taxation, then in this direction, governments of almost all European countries are unanimous – the increase of the non-taxable income of citizen is aimed at: the defense of the poorest; the increase of the tax burden on people with high income, “threshold” of which is determined separately by each country depending on the macroeconomic situation; for the decrease of tax rate for people with low income (e.g. Austria, Spain, Portugal, Greece, Finland, Slovakia, Ireland, Hungary, Germany, Great Britain, Latvia, Lithuania, France, Denmark, Poland, Sweden).

In the context of social transfers most of Europe is now focused on the substantial savings of public funds associated not only with large budget deficits and accumulated debt, but also the stimulation of economic growth (opting for economic efficiency, not social justice). In Austria, Germany, Luxembourg, the Netherlands, Spain, for example, are progressing the reduction of payments for child care and benefits for large families, in Romania, Portugal, Netherlands, Italy, Spain, Greece, the Czech Republic – the reduction of wages in the public sector and pensions. Only Finland and Ukraine show the tendency to increase social transfers (pensions and child care), and Italy has implemented the policy of housing loans and release the owners of the “first home” from paying municipal estate tax.

In general, the issue of social transfers and taxes, wages more than ever become a powerful tool for social dialogue, which significantly deformed labor market and led to a situation where the level of wages in different sectors of the economy is determined by the capacity of the trade union movement, rather than level of economic efficiency and education of employees. This situation is not only against the state in terms of the need in increase of the social benefits, that are not supported by economic growth, but also against individuals and entities who are accustomed to parasite on numerous privileges, subsidies and grants that in times of the economic recession has either to reduce or increase government borrowing, what in the same way reflects negatively on the economic actors at the standards of well-being in the future.

Among the factors that could negatively impact the effectiveness of fiscal consolidation in European countries, a special place takes the demographic transition and the “pension crisis”, particularly because of the population ageing, burden on the state social funds increases, requiring substantial cuts in the social programs, however this is the most powerful tool which evokes resistance of the community.

Thus, since the late 1950s in Europe has began the so-called “ageing revolution” or silver economy – a dramatic decline in the quantitative composition of the family with a simultaneous increase in life expectancy, leading to an increase in the proportion of elderly in the sex-age structure of the population. It is alleged that during the period of 1955-2010, the average life expectancy in developed countries increased by 11,1 years, whereas in developing countries – for 26 years. At the same time, the fertility has reduced: in developed countries – from 2,82 to 1,64; in developing countries – from 5,92 to 2,46. This leads both to an increase in the demand for long-term health care and pensions, and to the reduced number of potential taxpayers. Due to the projections of foreign analysts, the population reaching over 60 years by 2050 will be higher than 30% in developed countries (such as Japan, Italy, Germany), and more than 20% in developing countries (e.g. Ukraine, Georgia, Belarus, Armenia, Romania, Bulgaria).

During the next few decades, the share of global population aged 60 or more is likely to rise to historically unprecedented levels. According to the latest estimates, by 2050 there will be 2 billion people aged over 60 (22% of world population). In 2050, world population is projected to be 3.7 times bigger than it was in 1950 (The Ageing Population).

In many European countries budget expenses on provision of pensions and financing of unemployment benefits have reached critical level, exceeding volume of financing of development of the human capital (public health services, formation, culture) several times. For example, in UK financings of provision of pensions and unemployment benefits makes more than 23% of the general expenses for public sector (£129,438 million). Today the country shows the most pension rupture (pensions gap) on the person in a year among the European states – €12300, whereas Denmark – €11600, Ireland – €9100, France – €7900, Spain – €7000, Czech – €4600, Romania – €3600, Poland – €3400, Italy – €3100, Lithuania – €3000, Hungary – €1900, Russia – €1800. According to calculations of the UK economists, some persons should increase private savings to €12000 in a year for “closing” of pension rupture.

Let us try to explain “the roots” of the problems inherent in the system of pensions provision, from the historical point of view. The author of term “pension” was J. Caesar who has implemented this kind of the state help only for military men (Julius Caesar). Considerably after pension became the form of compensation for certain achievements before the state, as always, private savings and children, who kept their parents, were the ways of protection of citizens in an old age. Sometimes in the system of pension insurance were also involved institutes of a civil society. For example, in Denmark since 1659 there was “a cash desk of widows” in which men made regular payments, and after their death, their money received women. Working societies of England were engaged in provision of pensions of the members. However, since transition from the liberal state to “the general welfare state”, pensions had turned from exclusive privileges on a general law that, in our opinion, was connected with the interests of officials and politicians which aspired to the power and redistributions of the public finance (Фіскальна консолідація, 2013).

The operating solidary system of pension insurance (The Old Age Pension Program) which was designed in 1889 by Bismarck, when in the country has been organized the first state system of payments of pensions by age for the purpose of achievement of the best controllability of a society and elimination of socialists from the “political arena”. In 1891 the solidary system has appeared in Denmark, in 1898 – New Zealand, in 1910 – France, in 1911 – England, in 1919 – Italy, the Netherlands, in 1935 – the USA (previously there was a pension system without payment). During the 1956-1964 this system has been implemented in the USSR as well. The period of blossoming of solidarity insurance, hence, falls on the period of 1945-1970, when the income of pensioners steadily increased, and the average pension age was reduced from 66 to 62 years practically in all countries of OECD. However in the last few decades everything has cardinally changed.

Many countries, where was implemented solidary pension insurance system, consuming that those who work, “pay for an old age” retirees did not take into account the important principle of its operation – it can be effective only providing the population growth. However, this pension system of “Bismarck type”, according to Notestein – author of the theory of demographic transition (Notestein, 1953), had led to the decrease in the birth rate in the world (people no longer had a vested interest in a large number of offspring that will help in their old age).

The appearance of solidarity insurance in the most part of the developed countries has coincided with the first and second stages of the demographic transition – periods when mortality rate is decreased, while birth rates is increased and the number of workers is much higher than the number of retirees. The rates of pension contributions were low. That was the way, how the pension fund operated by the end of 1960, until it became obvious that the demographic explosion fell behind, and the population would only get along in years. In Germany, for example, citizens who were older than 65 accounted for only 4% of the population and in 1930 their number had increased to 5,4%, in 1950 – up to 10,5%, in 2000 –

up to 16,3%, in 2010 – up to 25,0%. Today in Germany the ratio of “retired/working” is 1:1,8, while in Ukraine – 1:1,14.

In general, the beginning of the first demographic transition was associated with the modernization process, leading to an increase in GDP per capita, improving the quality of food service, sanitation, quality and accessibility of health care, increasing life expectancy and decrease in mortality rate. Simultaneously, the decline in fertility, because if before children were seen as a reliable guarantee for elderly age, then after the intensification of the processes of social insurance and pensions, this factor became no longer relevant (education for children also become an additional financial burden to the parents). Virtually all countries with high levels of education show a low birth rate and vice versa. Increased independence and education of women also became some kind of disincentive fertility. There even appeared a layer of people who deliberately refuse to have children (childfree – a voluntary childlessness). The beginning of the second demographic transition was associated with the spread of individualistic oriented scheme of values and a corresponding change in the rules of mating behavior (in particular, the increase in the degree of freedom, tolerance to new values, distribution of civil and guest marriages and divorces, the desire to preserve the previous standard of living and a reluctance to share property).

Given the significant increase in life expectancy, as well as a great burden on the state budget through the funding of large pension schemes, most European countries today has declared the strategy of fiscal consolidation in the 2016-2025, in order to finally reform the current pension system (EU citizens after ending of their career “live on pension” for an average of 15-18 years).

Innovations of European countries to reform the pension legislation in the context of fiscal consolidation are as follows: 1) raising of the retirement age (average retirement in most EU countries is projected in the age of 67 years instead of the current 65, and officially approved by Brussels new landmark of retirement age for EU countries – is 70 years); 2) application of economic sanctions on citizens who choose to retire before the stipulated deadline, or diminishing motivation for an early retirement. For example, in Greece, the Netherlands, Finland, Norway, in such cases “pension penalty” in the amount of 6-8% is used, and in Poland, those with privileges can retire earlier and receive so-called “bridge pension” by the acquisition of their minimum retirement age, which is much lower than usual. Payment of these transitional pensions is made by fund-in-trust of transitional pension, income of which is formed of employer contributions (1,5% of salary), which employ persons who perform work under specific conditions or in specific positions. After acquiring of the minimum prescribed age, population receive these pensions in full; 3) encouraging people to retire later than the deadline. For example, in Finland pensioners who continue to work after reaching the retirement age, will receive annually additionally 4,5% of their pensions, in Bulgaria – 2,4%, and in Japan with the help of special bonuses, government encourages to work until the age of 70 years, both men and women; 4) cancellation of so-called additional “thirteenth pension”, which was appointed once a year (especially in Hungary); 5) reducing pensions scales, except the minimum (eg, the Romanian government announced a 15,0% cut in pension benefits); 6) optional retirement (including the UK).

As for the peculiarities of certain types of payments of pension benefits, the so-called “early retirement” is missing in the UK, the Netherlands and in Switzerland, Poland it is available for 2-4 years before retirement age; while “deferred pension” for the term of 1-5 years is possible in Poland, Switzerland, Italy, Germany, the United Kingdom (the increasing ratio is 0,5-0,75% for each additional year); there is no maximum pension in Italy, the Netherlands and Germany. The common feature among pension schemes of EU is that the pensions are taxed in all countries, as well as any other type of income.



## Ukrainian experience of fiscal consolidation

Fiscal consolidation is a very important issue for Ukraine just now. After Revolution of Dignity and annexation of Crimea, military confrontation with Russia and war conflict on the East, the Ukrainian economy found itself in extremely difficult condition. In 2014 Ukraine and IMF signed Memorandum which provided for gradual implementation of fiscal consolidation through optimizing budget spending to reduce imbalances as well as reduce the number of government employees, strengthen public trust and facilitate GDP growth (Bochi and Povoroznyk, 2015).

Fiscal consolidation appears an anti-crisis strategy for tax and budget policies, which are been implemented within the context of overcoming the effects of the global financial crisis. The main goal of fiscal consolidation programs for Ukraine is to ensure greater sustainability for public finances. Under the conditions of smoldering war conflict in Ukraine, the domestic economy has stabilized in 2016. A very gradual economic recovery of 1% in 2016 and 2% in 2017 is projected (Ukraine Economic Update, 2016). The stabilization of Ukrainian economy was reached by different kind of social-economic reforms of 2014-2015 and de-escalation of the conflict on the East. As a result real GDP has stabilized with very weak recovery (around 1% growth rate).

Table 2 demonstrates key social and economic indicators of Ukrainian economy since 2010 till 2018. The general government deficit was reduced from 10% of GDP in 2014 to 2% in 2015 due to tight controls of public spending, higher than expected inflation rate, and reduced quasi-fiscal subsidies to the energy sector combine with lower prices of imported gas. In November 2015 Ukraine successfully restructured about \$19 billion of its public external debt. As a result, despite the war conflict overall public debt stabilized at 80% of GDP in 2015 (Ukraine Economic Update, 2016). But fiscal pressures have increased after 2015. In the first half of 2016, revenues declined by 5,4% in real terms compared to the same period in 2015. It was possible mostly due to lower social security contributions (SSC) resulting from the cut in the SSC tax rate from 40 to 22%. But expenditures increased by 4,8% in real terms in the first half of 2016 due to higher spending on defense, internal order and social protection (Ukraine Economic Update, 2016). As a result, the general government deficit amounted to 49 billion UAH in the first half of 2016 and was financed by higher net domestic borrowing and a drawdown of government deposits.

Reforms to improve expenditure efficiency would create fiscal space to unlock public investment, while continued modernization in the private and banking sectors would permit a gradual resumption of lending. In light of lower revenues and higher spending, the fiscal deficit is projected at 3 of GDP in 2017, with public debt rising further to 93% of GDP (Table 2).

While fiscal consolidation in 2014-2015 has drawn on tight spending controls across the board and higher energy tariffs, the consolidation going forward will need to be rooted in deep structural reforms to manage the largest fiscal risks arising from weak tax administration, a narrow tax base and the inadequate pension system; create fiscal space for more effective public investment; improve the effectiveness of education, health and social assistance (Ukraine Economic Update, 2016). Without such permanent fiscal consolidation effort Ukraine will need to rely on more ad hoc revenues measures and expenditures cuts, along with more domestic

The main problem of fiscal consolidation in Ukraine are: increasing budget expenditures of debt service, defense, public order, spending of Pension Fund and other social programs; increasing level of shadow economy and decreasing tax payments from householders and business; increasing budget deficit from 15,5 to 48,0% during 2010-2014 (Bochi and Povoroznyk, 2015).

borrowing, which would undermine debt sustainability and development outcomes.

**Table 2:** Key economic indicators of Ukraine

	2010	2011	2012	2013	2014	2015	2016 <sup>F</sup>	2017 <sup>F</sup>	2018 <sup>F</sup>
Nominal GDP, billion UAH	1,083	1,300	1,405	1,465	1,587	1,980	2,279	2,580	2,897
Real GDP, % change	4,1	5,5	0,2	0,0	-6,6	-9,9	1,0	2,0	3,0
Consumption, % change	6,4	11,3	7,4	5,2	-6,2	-15,8	0,2	2,9	3,1
Fixed investment, % change	3,9	8,5	5,0	-8,4	-24,0	-9,3	8,7	11,3	5,6
Export, % change	3,9	2,7	-5,6	-8,1	-14,2	-16,9	-2,7	2,7	5,4
Import, % change	11,3	15,4	3,8	-3,5	-22,1	-22,0	-1,9	2,6	6,1
GDP deflator, % change	13,8	14,3	8,1	3,1	14,8	38,4	14,0	11,0	9,0
Current account balance, % GDP	-2,2	-6,3	-8,2	-9,2	-3,5	-0,2	-1,3	-1,6	-1,9
External debt, % GDP	85,0	77,6	76,6	78,6	97,6	131,5	135,8	127,4	119,1
Budget revenues, % GDP	43,9	42,9	44,5	43,6	40,3	42,1	37,8	38,3	38,5
Budget expenditures, % GDP	49,2	45,7	48,9	48,4	44,8	43,2	41,6	41,4	41,1
Fiscal balance, % GDP	-5,3	-2,8	-4,4	-4,8	-4,5	-1,1	-3,8	-3,1	-2,6
Public and guaranteed debt, % GDP	40,5	36,3	36,6	40,6	70,3	80,3	90,2	92,8	87,9

**Source:** Ukraine Economic Update (2016)

According to the Strategy for the Development of Public Finance Management, the main measures regarding budget and tax consolidation are (Olden et al., 2014):

- abolishment of tax preferences for individual enterprises and sectors of economy;
- increase in tax rates for the emission of carbon dioxide;
- application of the taxation system of immovable property items according to their value;
- balancing of interests of controlling bodies and taxpayers;
- introduction of legal instruments for the execution of the principle of commercial activities.

In 2014-2015 the following key measures have been implemented (Bochi and Povoroznyk, 2015):

- regime of tax exemption for operations on medicines and medical products suppliers, allowed for the production and consumption in Ukraine and included to the State Register of Medicines, have been cancelled;
- property tax changes – a total area of residential properties instead of residential area have been introduced as a basis for immovable property tax;
- preferential taxation with the enterprise profit tax have been limited;
- taxation of income derived from operations with securities and derivatives at a reduced rate have been eliminated;
- income tax exemption for the hotel business, electricity industry enterprises, which produce electricity from renewable energy sources, have been eliminated;
- reduction of the number of taxes, their consolidation, etc.

In long-term we see the necessity of pension system reform, enlargement of tax base, changes of the structure of public spending, streamlining the structure of subsidies for market

participants; modernizing mechanisms of the provision of social transfers, limitation of quasi-fiscal operations, et. (Table 3).

**Table 3:** Main fiscal consolidation reforms in Ukraine

Public expenditure reforms	Tax policy reforms
1. Parametric pension reform (comprehensive pension reform to revamp the design of the pension system). 2. Size and efficiency of government (limitation size of the budget-paid workforce in more rational way). 3. Education (improve the quality and efficiency of education spending). 4. Healthcare (open up the sector to private financing and move to medical insurance system). 5. Social assistance (protection the most vulnerable groups from higher energy bills). 6. Investment (increasing and maintaining capital investment level).	1. Social security contributions (reducing SSC wedge). 2. Personal income tax (better detect and tax the income). 3. Agriculture VAT (the effect of the general VAT regime). 4. Property taxes (elimination of exemptions and rising of tax rates). 5. Extractive industry taxation (new fiscal regime).

**Source:** own scheme based on Betliy and Kirchner (2013)

## Conclusions

Thus, the policy of fiscal consolidation is not efficient. The implementation of the tools in practice is encountering resistance from the special interest groups and the state apparatus. However, alternative measures of post-crisis recovery of the economy (inflation tax defaults) contain no less contradictory socio-economic consequences. During the implementation of fiscal consolidation, interest rate cuts usually tend to support overall production. The central banks neutralize the negative deterrent effect on the economy by lowering interest rates to ensure that these activities would help to absorb the impact of fiscal consolidation on consumption and investment. In case of the low interest rate, carrying out the consolidation policy of public finances, leads to the further reduction in the output. Budget constraint, which is based on reducing costs, has less deterrent effect on the economy than those in taxation. Monetary incentives seem to be particularly weakened after the increase in indirect taxes, leading to the higher prices. In countries with a high risk of default, the increase in overall production, as a result of fiscal consolidation, occurs infrequently.

In the developing of consolidation strategy of public finances, the authorities should focus on several issues:

- Reduction of non-priority recurrent expenses contributes the budget adjustment towards the direction of consolidation of the national debt. Limitation of expenses on transfers (pensions, subsidies) and wages reduces the pressure on non-discretionary items of expenditure that tend to increase over the time. Limiting of the costs related to an aging of the population, including the health care and pensions, is particularly important against the background of demographic problems. In this context, particular attention should be paid to the reform of the system of social relief. Increasing the share of public investment boost the probability of successful debt reduction due to the reorientation of the structure of the budget for programs that conduce the economic expansion, and that can raise the mid-term productivity by improving the infrastructure.
- Increased tax revenues are essential for successful debt reduction in countries experiencing significant need for fiscal consolidation, due to the need to maintain a balance between cuts in spending and measures to increase revenues. Measures to improve tax should be designed in such a way to avoid the loss of efficiency.

Simplifying the tax system by reducing the excessively high tax rates and broadening the tax base can help improve the performance of tax collection and thus reduce the relative tax burden on inputs. For example, taxes on the financial sector or carbon emissions can strengthen the budget and at the same time help the problem solution of the cost-effectiveness.

Almost all European countries have started to develop national plans for fiscal consolidation realization, real measure of which will be felt in early 2012-2014 years. Some countries seek to implement a stricter three-year term fiscal consolidation, while others seek to implement the gradual and moderate activities for a smooth transition to the targets by means of more long-term realization of fiscal consolidation. The experience of developed countries shows that more drastic measures may cause worsening of the problems in the short term but in the long run more positive results are expected. Countries, that take less drastic measures, reach the insignificant results, however, resolve the issue of social stability. The fiscal consolidation programs are accepted in Ukraine too. Due to the external and internal challenges, implementations of measures in the context of fiscal consolidation has mainly weak positive effect for public finance of Ukraine.

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