Public Debt as a Problem of the European Union

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Abstract: The article is aimed at analyzing the consequences of debt crisis in European Union. Special attention is paid to changes in economic policy. In the first paragraph theoretical background of public debt is presented. In the second paragraph the level of public debt in European Union is compared with other countries. Finally, changes in the public debt policy are presented.

Introduction

The economic crisis of the years 2007-2009 laid bare the scale of the problems associated with the public debt of the EU states, especially those of the eurozone. The effects of budgetary indiscipline and non-compliance with the principles of the Maastricht Treaty were not sufficiently noticeable until the pressing need for a considerable increase in public debt levels suddenly became evident. The rapidly growing credit needs of govern-
ments, accompanied by the low dynamics of the GDP, eventually led to a debt crisis in the European Union. The present article aims to provide an analysis of the experience of that crisis. First, the author discusses the theoretical aspects of public debt. Second, he compares the debt levels of the EU states with those of other countries. The next chapter presents selected new consequences of the debt crisis. Finally, the conclusions which should be drawn from the crisis are presented.

**Public debt as a category of public finance**

The budget policies of many countries reveal a persistent tendency towards an imbalance between expenditures and revenues. This has brought about the necessity to finance the shortages and resulted in the emergence of a new economic category: public debt. Ever since then, these phenomena have been inextricably connected, becoming a permanent fixture of contemporary budget policies (Kaja, 2007, pp. 87-88). In order to define the notion of public debt, it is necessary to reflect on several relevant details.

In the Maastricht Treaty supporting documents public debt is referred to as consolidated general government gross debt of the whole general government sector at nominal value, outstanding at the end of the year. The general government sector comprises central government, state government, local government, and social security funds.

The Polish Act on Public Finance of 28th August 2009 defines public debt as the nominal debt of the public finance sector, excluding the flows between the entities which are part of this sector. It includes the following liabilities of the public finance sector:
1) the nominal value of issued securities,
2) the nominal value of the drawn loan, credit or other commitment,
3) incurred credits and loans,
4) accepted deposits,
5) due and payable liabilities:
   - stipulated by legal acts, legally binding decisions of courts or final and valid administrative orders,
   - certified as uncontested by a relevant unit of the public finance sector, being the debtor (Act on Public Finance..., 2009, Art. 72).

Public debt has an impact on the daily life of a society, hence it is worth to define it not only from the perspective of the public finance theory, but also in terms of practical solutions applicable in a given legal system. The

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1 http://open-data.europa.eu/pl/data/dataset/1aHVuXOVjxLsOTpj7FHn1 (10.03.2013).
abovementioned Act can serve as the point of departure. There are, however, some differences between the methods used to calculate public debt by the Polish government, the European Union (ESA-95) and the International Monetary Fund.

Apart from arriving at a definition of public debt, one should also review its possible classifications. In literature, the following criteria are used to distinguish the types of public debt:

- Voluntary and enforced debt; citizens can finance debt on a voluntary basis (e.g. as in the case of most bonds), or can be forced to do it, which is similar to taxation (this usually occurs in exceptional circumstances, e.g. during a war) (Owsiak, 2006, p. 331);

- Global, domestic and foreign debt; this division has a major influence on the terms and conditions of incurred liabilities, as well as the costs of their servicing; it is also important for economic development: accumulation of capital can take place at home or abroad, depending on whether local or foreign entities are entitled to interest on the capital; in some cases (e.g. when there is a shortage of domestic capital), financing of public debt from foreign sources can be beneficial for a country;

- Short-term (liquid) and long-term (bonded) debt; a debt that is incurred to fund short-term liabilities of the state can mature within up to one year, and is used to maintain budget liquidity; also liabilities due up to three years belong to this category; a long-term debt has longer maturity; S. Owsiak proposes another category of debt, namely ‘bonded debt’, which helps to fund public utility investment and is secured on the constructed property.

- Gross and net debt; gross public debt encompasses the liabilities of the public finance sector towards the entities from outside this sector, resulting from debtor/creditor agreements; net public debt is not simply calculated by subtracting the amount due by the public sector from the gross debt, but also takes into account whether the recovery of these liabilities is feasible or not.

- Central (government) and local (self-government) debt; this classification distinguishes between the type of debtor: central or local governments (Owsiak, 2006, pp. 218-220).

The limits of government debt are another question worth considering when discussing the problem of public debt. Research into public finance has yet to determine what the safe debt limits are. D. Begg, S. Fischer and R. Dornbusch point out that a responsible economist should be concerned about the level of debt when: 1) its volume becomes excessive in relation to GDP, and when it is necessary to raise taxes in order to cover the growing costs of debt servicing; 2) a state is unable to further increase taxes
and is thus obliged to incur ever higher loans to cover the deficit (Begg et al., 2007, p. 91). That is why the values prescribed in the Maastricht Treaty are regarded as the basic point of reference: maximum public debt should not exceed 60% of GDP. However, this recommendation was disregarded by most of the EU states as no restrictions were imposed on those violating the rule. The recently introduced regulations have yet to be tested in practice to prove their effectiveness. Against this background, the Polish solutions stand out as the most promising. The Polish Constitution stipulates that the maximum public debt is not higher than three-fifths of the GDP. Additionally, the Act on Public Finance of 28th August 2009 specifies three prudence thresholds: 50%, 55% and 60% of the GDP. When these are exceeded, certain security procedures are to be implemented in order to reduce the debt level.

A. Komar (1996) proposes a different theoretical approach to establishing the safe limits of public debt. He refers to it as ‘indication by circumstances’, believing that debt limit is not exceeded when:

- crediting enables fuller exploitation of production capacity,
- crediting enables development and improvement of production,
- crediting enables better division of social product.

The same author suggests that an analysis of benefits and costs be used to identify the maximum acceptable level of public debt. Such an analysis would, however, require keeping detailed records of the benefits that a state gains as a result of debt growth. This principle, therefore, rewards investments in production, as those which generate measurable benefits. It is, nevertheless, virtually impossible to put into practice because of the budgetary regulations stipulating that there is no direct connection between budget expenditure and the sources from which they are funded (the so-called principle of non-funding).

Another method put forward by A. Komar is to measure the debt limits by means of the ratio of public debt interest to the social product or to tax revenues. Under this approach, it could be difficult to determine the ceiling level. Moreover, Komar proposes to perform an analysis of intergenerational distribution of debt payment. It should be determined whether the future generations will not have to excessively restrict consumption and investment as a result of the necessity pay off the inherited debt. Still, this criterion seems too general and imprecise, and thus difficult to apply in practice. According to the author, the best approach is to base one’s calculations on the ratio of new credit over additional budgetary spending, as well as the ratio of interest rates to the social product. And yet, this method also appears to be impractical because public debt is dynamic, changeable
in time. As a result, the above-mentioned relations are extremely fluid (Komar, 1996, pp. 225-228).

**Public debt of the European Union states as compared to other countries**

Having defined the notion of public debt, the paper goes on to present an assessment of the level of public debt in the European Union in comparison to other countries. The aim of the analysis is to present the influence of crisis on the fiscal condition of selected countries and to formulate some recommendations for them. The author decided to present the level and dynamics of budget deficit and public debt in selected countries during years 2007-2011. Next, countries are classified into homogeneous groups, basing on the similarity of fiscal condition. Finally, some consequences of the financial crisis which were revealed in analysis are presented. The analysis is based on data from 30 advanced economies and 29 emerging economies. Both the classification and the statistics used are founded on the data from the International Monetary Fund. The author uses selected data for years 2007-2001, as they encompass the times before the crisis (2007 and part of 2008), as well as those from during and after the downturn (years 2009-2011).

First, an analysis of the level and dynamics of public debt in developed countries was performed. Of the 30 advanced economies, only 4 reported a drop in the public debt level in relation to the GDP: Switzerland (by 7.3 percentage points), Norway (7.2), Israel (3.8), and Sweden (2.8). As can be seen, among them there is just one EU country, and, which is significant, not a eurozone member. Interestingly, these countries’ debt levels are not particularly low: Sweden saw a decrease from 40.2% to 37.4% of the GDP, Sweden and Norway from approx. 56% to 49%, while Israel’s debt at the end of the crisis was more than 78% of the GDP. On the other hand, three of the countries (with the exception of Israel) had budget surpluses, which they used to reduce the debt. The case of Israel proves that it is possible to

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2 All the data used for calculations and presented in this chapter were obtained from the International Monetary Fund and can be found here: http://www.imf.org/external/pubs/ft/fm/2012/01/app/FiscalMonitoring.html, as of 25.02.2013.

3 According to the International Monetary Fund, advanced economies include: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Iceland, Ireland, Israel, Italy, Japan, South Korea, Netherlands, New Zealand, Norway, Portugal, Singapore, Slovakia, Spain, Sweden, Switzerland, Great Britain, and the USA (IMF Fiscal Monitor, 2012).
lower the level of debt even with a considerable budget deficit. In three
developed economies the level of debt grew only slightly (by less than 10
pp): Hong Kong (1.0 pp), South Korea (3.5 pp) and Estonia (2.4 pp). Two
of them, Hong Kong and South Korea, recorded significant average budget
surpluses in the years 2007-2011. As their debt levels indicate, also these
countries can be regarded as cautious.

The other 23 developed economies increased their debt levels to a de-
gree which can be considered significant (above 10 pp). In twelve coun-
tries, the debt grew by 10 to 20 pp, in another three, by 20 to 30 pp, and in
four it did not exceed 40 pp. The greatest increases could be observed in:
Japan (46.8 pp), Greece (55.4 pp), Iceland (70.1 pp), and Ireland (80.1 pp).
These countries should be analyzed separately. Japan has been, consciously
and securely, increasing its debt for years, basing it mainly on domestic
funding. Iceland and Ireland incurred immense debts (moving from the
group of the most debt-free states to that of the most indebted ones), being
forced to rescue its banking sector. Meanwhile, Greece is an epitome of the
erosion of budget discipline and irresponsible borrowing. Overall, the lev-
els of debt kept dramatically rising in the developed countries, some of
which experienced particularly steep increases in both debt levels and dy-
namics.

The situation was different for the emerging economies. Of the 29
countries, as many as ten had managed to bring down their levels of debt
since 2007. In three of them, the decrease amounted to 10 pp. This group
includes a country with a high level of debt and low confidence of financial
markets (Argentina) and two economies which have a much lower and safe
debt levels (Saudi Arabia and Indonesia). In further 15 states, the rise in
debt levels stood at 0-13.5 pp. Among these, only Hungary saw a relatively
sharp rise (13.5 pp), exceeding the level of 80% of the GDP. In two coun-
tries, Brazil and Pakistan, the level of debt in 2011 was higher than 60% of
the GDP, but here the growth was slight (1 and 1.5 pp respectively). In the
other four states (Romania, Ukraine, Lithuania and Latvia), the increase in
public debt reached between 20 and 30 pp. It must be emphasized, howev-
er, that in all these countries the initial level of debt was between 7.8% and
16.8% of the GDP, while the debt level in 2001 did not exceed 40% of the
GDP. Therefore, the observed increases can be regarded as safe for the
economies.

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4 According to the International Monetary Fund, emerging economies include: Argentina, Brazil, Bulgaria, Chile, China, Columbia, India, Indonesia, Jordan, Kazakhstan, Kenya, Latvia, Lithuania, Malaysia, Mexico, Morocco, Nigeria, Pakistan, Peru, Philippines, Poland, Romania, Russia, Saudi Arabia, RSA, Thailand, Turkey, and Ukraine (IMF Fiscal Monitor, 2012).
The situation of the European Union compares unfavorably to that of other countries. The average level of debt in the developed EU states grew from 49.7% to 73.3% of the GDP. In 2007, the debt level was nearly 10 pp lower than the debt level of EU non-member states, but by 2011 the difference had dropped to a mere 3.2 pp, and the outlook is still grim. The developing states of the EU are in an even worse position. Their average debt level rose from 28% of the GDP in 2007 (when it was 8.9 pp below that of non-EU developing economies) to 43.3% of the GDP (exceeding the non-EU debt level by 6.1 pp). Nevertheless, the EU’s emerging economies seem to have slightly better prospects. Also the eurozone countries have been displaying a high and dynamically increasing average debt level, which in the analyzed period grew from 66.4% to 88.1% of the GDP, while forecasts predict only a marginal decrease in debt (by 1.2 pp) in the next few years.

It stems from the above that the recent crisis has resulted in a considerable rise in the level of debt, particularly in advanced economies. In order to fully comprehend the reasons for these disparities, it is worthwhile to have a closer look at the budget results of the studied countries. In 2007, 19 of the 30 developed countries enjoyed budget surpluses. In the following year, their number fell to 11, whereas in 2009, to just 3. In 2011, the situation improved a little, as 7 states had surpluses and another two recorded low deficits (up to 3% of the GDP). Overall, in the years 2007-2011, six countries had budget surpluses. In another five states, the deficit was not higher than 3% of the GDP. In two countries, Greece and Ireland, the average deficit exceeded 10% of the GDP. In general, the crisis brought a decline in the financial condition of the public finance sectors of the developed economies, which seriously hampered the pace of economic growth in those countries.

The situation was similar in the emerging states. In 2007, many of them (11) had budget surpluses. Another 11 reported moderate deficits (up to 3% of the GDP). In 2008, 12 states were still enjoying surpluses or balanced budgets. On the other hand, the number of countries with moderate deficits dropped to 6. In 2009, all the developing countries suffered deficits, which can be regarded as moderate in only 7 cases. The financial conditions fairly rapidly improved, and as soon as in 2011, 7 of the emerging economies achieved budget surpluses, while another 8 had moderate deficits. When analyzing the average values for 2007-2011, it should be noticed that 4 countries recorded budget surpluses, 12 had moderate deficits, and the highest deficit (in India) reached an average of 8.7% of the GDP, which is half as much as in the most heavily indebted developed states. The crisis had, therefore, a much heavier impact on the growth of budget deficits and public debt in developed countries. This could be explained in two ways.
On the one hand, developed economies were less ready for the crisis and thus far less cautious about debt growth (which was rapid thanks to the benevolence of financial markets). On the other hand, these countries resorted to unprecedented interventionism, which helped stimulate global economic growth. It was not possible for emerging economies to exert such an influence on business cycle, but they were able to take advantage of the growth.

The position of the European Union is unfavorable. In 2007, 9 EU member states had positive budget results, whereas in 2011, only 2 of them (Sweden and Estonia) could boast budget surpluses, having, however, gone through periods of deficit. Greece, Spain and Ireland were in a particularly precarious situation. Furthermore, the latest developments prove that more states are running into similar trouble (Cyprus being the latest example).

It is also interesting to compare the ratios of government expenditure to GDP in both groups of countries. In the developed economies, government spending remains at an average of 41.9% of the GDP. For the eurozone, this indicator is even higher: 48.9%. Only 7 of the analyzed 30 countries spent less than 40% of the GDP. Among these, merely one managed to bring down the debt level during the period in question, two of them recorded moderate increases, while in the others, the growth of debt to GDP ratio was higher than 10 pp. Modest government expenditure and lowering the debt levels were, therefore, an exception rather than the rule as far as developed countries are concerned.

As regards the emerging economies, the picture was different. The average government expenditure to GDP ratio stood at 28.1%, which was 13.8 pp less than in the developed countries, and 20.8 pp less than the eurozone average. Moreover, the governments of 13 out of the 29 states spent less than 30% of the GDP, whereas only 4 spent more than 40%. None of the countries exceeded the 50% GDP level. Debt growth above 10 pp was observed only in those states where expenditure was higher than 30% of the GDP. Thus, a possible conclusion from the fact is that the wealthier the country, the higher the level of government spending, which leads to a further deepening of public debt.

Finally, it seems worth mentioning the forecasts issued by the International Monetary Fund, which suggest that the average level of debt in the world will drop from 74% of the GDP in 2011 to 68.2% in 2017. Although the change is quite subtle, it is certainly an optimistic prospect. Nevertheless, a careful analysis of the situation in developed countries indicates that their debt levels are unlikely to decrease, but might even rise from 103% of the GDP in 2011 to 108.1% in 2017. Countries such as Spain, Netherlands, USA and Slovenia are facing particularly grim futures. Also Japan is ex-
pected to slide further into debt. Meanwhile, the positions of Greece, Iceland, Belgium, Canada, Germany, Sweden, South Korea, and Singapore should clearly improve (the debt to GDP ratio is to drop by over 10 pp). These changes will be accompanied by an increase in the mean financial result of the governments from -6.6 of the GDP in 2011 to -2.7% in 2017. As can be seen, the prospects of the developed countries are not by any means good.

An analysis of the prospects of the emerging economies reveals that their average government debt should decrease from 37.6% of the GDP in 2011 to 28.7% in 2017. This will mean a drop that is nearly three times as steep as that in the developed states. Only 4 countries are predicted to see a rise in the debt levels: Russia, Nigeria, Malaysia and Thailand. The largest decrease in debt will happen in: China, Kazakhstan, Indonesia and Brazil. The budget balance situation should also improve, but this change will not be so evident. One should expect a drop in the average deficit from -2.2 of the GDP in 2011 to -1.7% in 2017. And thus, the relatively lighter burden of debt might help the developing countries to strengthen their economies, but could diminish their motivation to make certain their budgets are balanced. Forecasts for EU member states include slight changes in the level of government debt. In the developed member states the expected growth is from 73.3 of the GDP in 2011 to 74.1% in 2017. Again, it is not a significant rise, but the developed states which do not belong to the EU are predicted to suffer a decrease from 76.5% to 72.5% of the GDP. As for the emerging economies in the EU, the IMF foresees a drop in public debt from 43.8% to 38.2% of the GDP. In the eurozone, only a slight drop is expected: from 88.1% of the GDP in 2011 to 86.9% in 2017. It can be noticed that no striking improvement is anticipated in the next few years, although as recently as two years ago, a considerable growth of debt level was forecast until 2020 (see: Dług publiczny będzie rósł..., 2011; Public debt 2020..., 2010; Public debt 2020..., 2011). This means that the problem of indebtedness will remain unresolved

**Selected consequences of debt crisis in the European Union**

The above analysis reveals several consequences of the present situation. They should be taken into consideration when examining the development of the European Union and its economic competitiveness. Besides, steps must be undertaken to prevent another debt crisis.
The advent of the debt crisis exposed huge disparities within the European Union and the eurozone. After Greece’s solvency difficulties and the subsequent violent reaction of financial markets, analyses were conducted of the debt levels, economic foundations and vulnerability to market upheavals of particular countries. The results laid bare the scale of problems associated with the public debt and the future prospects for the countries concerned. Because of that, the European Union had ceased to be perceived as homogenous. The gaps between particular countries, and the simultaneous necessity to take joint responsibility for the problems of the euro area, led to numerous misunderstandings among the EU member states. Their interests began to diverge, as did their perception of the future of European integration. The ‘separatist’ trends in Great Britain are an extreme example of these developments (see: Gadomski, 2013). That is why, following the debt crisis, the European Union will have to redefine the integration process and its directions.

The idea of European integration has mostly taken the form of institutional arrangements. The purpose was to standardize relevant laws wherever the diversity of regulations caused problems, as well as to help promote the best solutions. Unfortunately, no harmonization of institutional framework regarding public debt took place. Each country followed its own policy, particularly in terms of debt reduction. What is more, the remedies provided by European treaties proved to be far from perfect, mainly because they did not include any punitive measures for non-compliance with the recommendation to reduce debt. The debt crisis fully exposed the deficiencies in public debt regulations, making it necessary to co-operate for improved solutions in this regard. And yet, as some authors emphasize, public debt can still elude the control of the new laws. The coming years will show whether these regulations are effective (Pielach, 2012).

The problem of debt level has made the question of fiscal consolidation relevant. The public finance sector is all but homogenous. Apart from the government sector, most countries have territorial governments and independent institutions (e.g. special purpose funds) which have a right to take out credit. For this reason, the soaring public debt is partly beyond state
control. The question arises how to distribute the license to incur debt among the particular sectors of the public finance industry. Another issue which should be addressed is debt allocation.

Inflation as a debt removal method?

Bearing in mind the contradiction between the debt level indicators and the GDP dynamics, the future of the European Union seems to be threatened by inflation, which could be used as a way of reducing the fair market value of the member states’ liabilities. The European Central Bank, wishing to behave responsibly, is not interfering into the problems of individual EU states. But at the same time, such countries as Great Britain or the USA do not hesitate to increase their money supplies. In the long term perspective, this could force the ECB to take similar steps in order to maintain the EU’s competitive position. Moreover, the difficulty in trading off the tension between debt reduction and growth stimulation (e.g. currently observable in Greece) can motivate the EU countries to resort to non-standard tools, including buying of the debt by the ECB. This could, in turn, lead to over-issuing of money. Such a solution is considered to be economically disadvantageous, but might prove more acceptable to society than further increases in the tax burden.

Fiscal constraints and growth prospects

The negative impact of the current attempts to keep public debt in check on the dynamics of European economies seems to be a major problem. The modestly rising, or even declining GDPs, mean that governments find it increasingly difficult to balance their budgets. This translates into further cuts, affecting the economic condition of many countries and GDP dynamics. Additionally, there is growing social resistance to austerity measures. This leads to frequent changes of governments and greater support for political parties which do not intend to pursue fiscal reforms. Consequently, the growth prospects are worse for the EU than for other countries.

Debt-free Europe: possible/desirable?

The future of the European Union is nowadays assessed mainly from the point of view of the member states’ debt levels.

The outlook is not optimistic as many analytical centers are predicting a rise in the average public debt level in the next 10 years. This is due to the problems associated with the implementation of austerity programs and
their negative impact on GDP dynamics. Therefore, the question arises: should the European Union strive to bring down the debt at any cost? On the one hand, such countries as the USA or Japan are running ever deeper into debt. On the other hand, their economic positions, public debt financing strategies, and the attitude of international markets towards them are strikingly different than in the case of Europe. Besides, public debt has become such a considerable problem for the EU (and the euro area in particular) that the debt crisis may persistently recur. It should also be remembered that the disparities between developed and emerging economies (discussed in the previous chapter) will continue to deepen (Zarazik, 2011).

Conclusions

To sum up, one can draw several conclusions from the debt crisis in the European Union. Firstly, the European community, especially the eurozone, has been most affected by the crisis. It has been more acute in developed rather than developing states, and the divergence between the levels of debt in these two groups is likely to continue. Secondly, the debt problem has made it necessary to adopt firm measures to enforce compliance with the Maastricht Treaty. Their successful implementation will have to be phased over several years because the problems with GDP dynamics will make budget balancing difficult. Moreover, such action would contribute to the divisions existing in the EU, by causing controversy regarding the fairness of imposed constraints and by impeding further economic integration. Thirdly, the debt crisis calls into question the mechanisms of debt reduction, and it can be expected that the most efficient solutions will become widespread. This also applies to the consolidation of the public finance sector and the problem of local government debt. Fourthly, there is the question of growth prospects and the future of the debt problem in the European Union. Debt reduction and stimulation of economic growth might be, to a large extent, mutually exclusive. The resistance of the citizens of the most indebted countries can be an additional complication. It is thus important to carefully consider the question whether the EU states will decide to use inflation for bringing down the fair market value of the public debt. All in all, the debt crisis has compelled the European Union to address many significant issues, which would have been disregarded had the economic conditions been more favorable. The EU has already made several crucial decisions, but there still remains a lot to be done. One can only hope, therefore, that the EU will, in a sense, benefit from the debt crisis by
drawing correct conclusions from the lesson and finding solutions to some of the hitherto insoluble problems.

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