

# The Problem of Public Debt (The Case of Visegrad Group Countries)\*

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The present paper concerns a crucial problem of contemporary public finances, that is the public debt. The article aims, first of all, at the presentation of the scale and reasons for the public debt in the Visegrad Group countries. Apart from the definition, the causes and methods of incurring debt, the present paper demonstrates the acceptable limits of being indebted. In order to achieve such aims, comparative and statistical analysis has been applied.

*Keywords:* public debt, Visegrad Group, budget deficits

## Introduction

Problems which refer to public finance, or strictly speaking, to the public debt and budget deficits affect many countries. They were particularly intensified during the last crisis which was started by a decline in the subprime mortgage market, caused by the collapse of the speculation bubble in the housing market in the United States in August 2007. As a result of the crisis, the finance of numerous European countries suffered considerably. The crisis also hit the Visegrad Group countries (the Czech Republic, Hungary, Poland, and Slovakia) which are discussed in the article. The choice of that group for the topic of the article has been based on similarities observed among these countries. They have come through similar transformations, from real socialist economy towards market economy.

## The Concept of Public Debt

In the professional literature, there are multiple definitions of public debt to be found (public or government or national debt), also known as government or national debt. According to the most succinct student-book definitions, public debt refers to financial liabilities of public authorities related to the loans taken. Other sources claim that public debt encompasses all the liabilities incurred by the treasury, national earmarked funds having legal personality and by municipalities (Górniewicz, 2016).

The definition of public debt *sensu largo* is to be found in the supplementary documents to the Treatise of Maastricht. According to the afore-mentioned definition, public debt means the totality of liabilities of the treasury to national and foreign entities related to loans taken in financial institutions and directly from the governments of member countries of Paris Club or these which were guaranteed or insured by the governments

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or their agendas as well as treasury securities remaining to be purchased issued onto the foreign and national market and other registered liabilities of the treasury (Górniewicz, 2013).

### **The Classification of Public Debt**

The economical literature at large, particularly that on public finances, distinguishes a series of kinds of public debt. However, using the term “classifications” (kinds) does not appear entirely justifiable. Perhaps from the point of view of methodology, at least equally proper is the use at that point the term “debt structures”.

Assuming the criterion of the place of origin of creditors, one can distinguish the national and foreign debt<sup>1</sup>. The former, also referred to as internal debt, encompasses the debt in relations to local entities, resulting mainly from treasury bonds still due to be redeemed. On the other hand, foreign debt (external debt) emerges from the loans taken from international organizations, governments, banks and from the treasury bonds sold abroad.

“Productive debt” and “dead-weight debt” are the successive kinds of public debt. The criterion used in that dichotomy is the reason for its emergence. “Productive debt” is correlated with the assets, the property of the treasury, that is land, capital and infrastructural devices of different kinds; however, “dead-weight debt” does not show the above-mentioned correlation (Górniewicz, 2012).

Furthermore, professional literature also distinguishes the following kinds of debt:

- (1) gross and net (gross net—receivables);
- (2) short-term debt also referred to as liquid debt (up to one year) and long-term debt also referred to as funded debt (more than one year);
- (3) nominal and real (taking inflation into consideration);
- (4) central (national) and local (local-governmental);
- (5) voluntary and compulsory debt (Owsiak, 2005).

In economic reports as well as in the modern opinion journalism, one can find the information about the official and real amount of public debt. The former essentially overlaps with the nominal debt. The real debt additionally comprises the so-called hidden debt, that is among others due payments related to health service and pension scheme. The reason for the existence of the difference between the official and real debt is the accounting system, which subdivides further into cashing accounting system and accrual accounting system. If any events cause the transfer of money, then they are referred to as cashing, and when the events give rise to economic consequences, they are called accrual (Górniewicz, 2012). It is worth mentioning that in the light of the definition highlighted in the point 2, debt regarded as real is not actually public debt because it does not satisfy them. In fact it is certainly a serious fiscal problem of many economies.

### **The Reasons for Contracting Debt**

In developed and moderately developed countries with respect to their economies, public debt is a common phenomenon and it has been in effect for dozens of years. Despite the fact that the economic situation of these countries is different, it can be said that public debt has become the constant ingredient of their public finances. The accumulation of public debt is the reason for much criticism pronounced not only by economists but also by politicians. For these reasons, it is worth acquainting oneself with the fundamental causes of indebtedness of particular countries.

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<sup>1</sup> One cannot confuse external debt of the treasury with the overall debt, which additionally comprises the liabilities of extra-governmental sector and the sector outside banks (mostly enterprises) as well as bank sector.

The professional literature generally distinguishes the causes of the emergence of public debt:

- (1) long-standing budget deficit<sup>2</sup>;
- (2) the period of increased public spendings (particularly periods of wars and deep economic crises);
- (3) the implemented economic doctrine which can consciously assume the long-standing budget deficit and public debt as tools of state interventionism;
- (4) the implementation of political goals of the ruling elite which does not decide on increasing the taxes and neither does it cut spendings (the theoretical justification of such a policy is public debt-neutrality thesis for both the economy and the society as such; if one assumes that thesis is correct, then it is more advantageous for the government to take new loans than to impose new taxes);
- (5) public authorities falling for the so-called debt trap (losing the ability of the due repayment of debt) (Owsiak, 2005).

A particularly important reason for the emergence of public debt seems to be budget deficit, being mentioned at the beginning. The elementary relation between debt and the state of budget is reflected in the following formula:

$$d = d_0 + rb$$

where:

- d—the balance of government budget—conventionally conceived—in relations to gross domestic product;
- $d_0$ —primary deficit or budget surplus (without the expenses for debt service) in relation to gross domestic product;
- r—average interest rate in the public debt service;
- b—the level of public debt in relations to gross domestic product (Gotz-Kozierkiewicz, 1994).

The analysis of primary balance in the government budget<sup>3</sup> is becoming the issue of utmost importance, which analysis sheds some light on its balancing. Primary balance provides an answer to the question how the equilibrium in the government budget would be shaped if there were no public debt and thus there would not be any necessity for its service.

It also serves as basis for determining if the amount of debt does not threaten the budget solvency.

The emergence of negative primary balance means exceeding safety threshold with respect to debt. On the other hand, the increasing primary surplus under the condition of total deficit means approaching balancing budget, which takes place at the moment of the equilibrium between the primary surplus and the expenses for debt service.

It is to be emphasized that relatively high public debt does not directly threaten the solvency of the government budget if there is primary surplus in the budget (Górniewicz, 2013).

### **The Forms of Contracting Public Debt**

It follows from the definition of public debt presented in the first point of the chapter that public debt is the result of contracted liabilities by public authorities. The liabilities can assume the following forms:

- (1) securities;

<sup>2</sup> The growing national budget spendings can obviously be covered by the method of growing tax burdens (increasing interest rates and introducing new taxes), but such a budget policy may result in the growth of inflation and impeding the pace of economic growth, which in practice may lead to the decrease of budget revenues (A. Laffer curve).

<sup>3</sup> Primary balance of national budget is a difference between revenues and spendings with the cost of primary debt service subtracted from the latter.

(2) loans and credits;

(3) receivables not regulated by public entities as well as liabilities related to legal decisions, provided warranties and guarantees and other titles (Gołębiowski, 2004).

Among major securities used to finance budget deficit by contracting public debt, there are promissory notes and treasury bonds to be mentioned.

Treasury bills are short-term securities issued by the government in order to cover the current payments due. Promissory notes are usually issued in big nominals and are devoted to transactions on the so-called wholesale market. They belong to the basic instruments of open market operations; and thus, apart from satisfying the government demand on money, they are an instrument enabling monetary authorities to regulate the supply of money in the economy. Treasury bills are sold at the nominal value minus a discount according to the rules being in effect when it comes to the discount of bills.

The term of maturity of treasury bills does not exceed one year (usually it reaches three or six months). From the economic point of view, being short-term has some conventional meaning. As a matter of fact then, the process of issuing, selling, and then the payment of bills last permanently. Being short-term concerns only a given series of bills then. That is why one can safely say that treasury bills as a whole are a fixed instrument of financing public debt. The essential property of bills is the possibility of adjusting their amount to the needs of budget deficit and the service of public debt (Owsiak, 2005).

An important instrument used to cover borrowing requirements is the treasury bond. A bond is a security containing the issuer's commitments to pay the owner of the bond its nominal value together with the interests specified in the bonds or on the basis of general rules of subscription. The distinctive feature of the bond is that they guarantee the flat interest rate. There are many kinds of bonds. Assuming the criterion of time, one can distinguish the bonds of the following types: short-term bonds (up to 5 years), medium-term bonds (from 5 up to 15 years), and long-term bonds (more than 15 years). Assuming the criterion of the issuer of the bond, one can distinguish treasury bonds and municipal bonds.

Loans are credits which are essential methods of contracting public debt. Two terms are to be explicitly distinguished. "Each credit is a loan, but not each loan is a credit"<sup>4</sup>. Both loans and credits may come from national creditors (mainly from commercial banks) and foreign creditors (other countries' governments, foreign commercial banks, and international organizations such as International Monetary Fund).

The professional literature distinguishes short-term credits or loans (up to one year), medium-term ones (from one up to five years), and long-term ones (more than five years) or just short-term ones (up to one year) and long-term ones (more than one year).

Modern credits are a highly diversified and wide group of financial transactions. They differ from one another mainly with respect to—as stated above—the term as well as the purpose, form of security for a debt, negotiating procedure or documentation. As a result, international credit market is not a coherent economic organism. Only loan policy ensures some coherence of big transnational banks, which manage the credit portfolio in a more or less centralized manner (Górniewicz, 2012).

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<sup>4</sup> The category of credit is inextricably intertwined with the Central Bank and commercial banks having the right of money creation. A commercial bank can extend a credit at the amount considerably exceeding the financial resources possessed. If, for instance, households purchase treasury bonds, they thus extend a loan to a country—not a credit. A similar situation occurs in the loans between countries (governments) especially in relation to the autonomy—in relation to government—of Central Bank and the treasury resigning from direct issuing of money for governmental needs. Thus, loan is a broader concept than credit.

### The Acceptable Limits of Debt

The appearing critical opinion concerning the accumulation of public debt and the problems with its payment give rise to the issues related to the limits of debt. The most widely accepted criterion is the claim that debt should not violate economic equilibrium. However, it seems that it is such a vague and general statement that apart from the general idea it is difficult to relate the statement to any specific amount of public debt (Górniewicz, 2013).

In the analysis of the measurements and the structure of debt, it seems indispensable to relate the amount of debt to basic economic units and to international trade in particular. The whole issue concerns the indicators of debt service—the relation of debt to export (Zabielski, 1994)—and to national gross product) and to the average debt per capita.

In the professional literature, one can find the thesis that if the increase of gross domestic product at a given period is bigger than the debt payment due for the same time, it can be described as situation not detrimental to a given economy.

$$\Delta\text{GDP} > \text{OZ, gdy: } \text{OZ} = \text{A} + \%Z;$$

where:

$\Delta\text{GDP}$ —the increase of gross domestic product;

$\text{OZ}$ —debt service;

$\text{A}$ —debt depreciation for a given period;

$\%Z$ —interests from the debt.

On the other hand, in case the increase of gross domestic product allows only for covering the expenses resulting from debt service, that is:

$$\Delta\text{GDP} = \text{OZ},$$

that is the beginning of insolvency (Górniewicz, 2012). Real insolvency emerges when debt service is bigger than the increase of gross domestic product:

$$\Delta\text{GDP} < \text{OZ}.$$

In the nineties, Organization for Economic Cooperation and Development, after the analysis of the amount of debt in many countries, assumed the following indicators:

- the relations of debt to export (the critical value is 275%);
- the relation of interests to export (the critical value is 20%);
- the relations of debt service—payment of installments and interests to export (30%);
- the relation of debt to gross domestic product (50%) (Kołodko, 1992).

Within Maastricht summit, which resulted in signing the Treatise of establishing European Union 7 February 1992, one specified the basis conditions of joining Economic and Monetary Union also called convergence criteria. In one of these criterion (Budnikowski, 2001), it was assumed that base value for public debt in relations to gross domestic product in market prices amounts to 60% (the data presenting the relation of public debt to GDP are demonstrated in the second chapter of the present paper).

The Treatise was nonetheless taking into account the exceptions from nominal convergence criteria. European Commission may consider a criterion to be satisfied despite the possibility that a given country may achieve a higher value than the base value, if the relation of public debt to gross domestic product is decreasing at a sufficient rate and approaches base value at the satisfying pace.

To a small extent, also the procedure valid in case of the emergence of excessive budget deficit relates to the amount of public debt. If the debt exceeds 60% of GDP, then irrespective of whether it is accompanied by the budget deficit exceeding 3% of gross domestic product, European Commission prepares the report after the opinion on it is expressed; it becomes the basis to evaluate the issue of the emergence of excessive deficit.

The mere fact of exceeding the debt limit amounting to 60% of GDP is not the basis to sanction a particular country (Górniewicz, 2013).

### Public Debt in the Visegrad Group Countries

During the 1970s, the public debt in most countries of the world did not come as a major problem—also for the countries of the Visegrad Group. After that period, however, the public debt started to grow rapidly. The reason for such a situation was rooted in the oil shock (1973-1974) when the prices of oil in the world grew three or even fourfold. Having become more and more affluent, the OPEC countries located their financial surplus in American and Western European banks. Subsequently, with such high deposits, banks started to compete in offering as many credits as possible. Such a situation resulted in a quick growth of debts in numerous countries. Furthermore, considering the countries which later became the members of the Visegrad Group, their public debts grew also because of inefficient socialist economy, dominated by political nomenclature (Górniewicz, 2012).

Initiated in the last decade of the 20th century, transformation processes contributed to the reduction of the public debt (by approximately 50% in Poland), but at the same time, they triggered another process of running into further debts. Considering very little capitals owned by the countries of the Visegrad Group, they willingly took advantage of foreign credits, and they started to issue domestic and foreign bonds. The situation resulted in a relatively fast increase in debt. It was mainly justified by the requirements of economies going through their transition period (Górniewicz, 2007).

Among the Visegrad Group countries, Poland—the largest and the most populated country—was the one which incurred the highest public debt. At the end of 2016, it reached the level of EUR 228 billion. The second highest debt was incurred by Hungary (over EUR 84 billion), and the third position was taken by the Czech Republic (nearly EUR 65 billion). The lowest level of debt in the discussed group was observed in Slovakia (the details are presented in Table 1).

Table 1

#### *Public Debt in Billions Euro*

Country	2007	2010	2014	2015	2016
Czech Republic	40.0	60.1	65.6	67.9	64.9
Hungary	66.0	78.4	77.7	80.4	84.4
Poland	145.9	193.2	202.1	215.7	228.2
Slovakia	17.0	27.8	40.7	41.3	42.1

Source: The author's own work on the basis of the data by Eurostat.

The real burden for the country caused by the public debt cannot be viewed through the amount of the debt itself, but through its relation to the gross domestic product. In accordance with the Maastricht Treaty, such a relation should not exceed the level of 60%. During all the analysed years, all the discussed countries met that requirement, except for Hungary, where the discussed relation reached the level of almost 74% at the end of 2016 (see Table 2).

Table 2

*Public Debt in % Gross Domestic Product*

Country	2007	2010	2014	2015	2016
Czech Republic	27.8	38.2	42.2	40.3	36.8
Hungary	65.6	80.5	75.7	74.7	73.9
Poland	44.2	53.1	50.2	51.1	54.1
Slovakia	30.1	41.2	53.6	52.5	51.8

Source: The author's own work on the basis of the data by Eurostat.

Having been on the verge of insolvency, Hungary was the first country of the Visegrad Group, or even of the European Union, which applied for international support in 2008. Hungary, which was ruled by the socialists at that time, was offered a loan at the amount of EUR 20 billion. The financial support came from the International Monetary Fund, the World Bank, and the European Union. After Victor Orban had seized the power, in 2010, his government decided not to prolong the agreement with the IMF, the institution which was criticised by the Hungarian Prime Minister on numerous occasions for the methods applied to fight the crisis. Hungary used totally EUR 7.5 billion of the part of a financial support package provided by the IMF. In July 2013, Hungary early repaid the last tranche at the amount of approximately EUR 720 billion. The tranche was actually due in March 2014 (Cieřlik, Jankowska, Górniewicz, Piotrowicz, Redo, Redo, & Siemiątkowski, 2015).

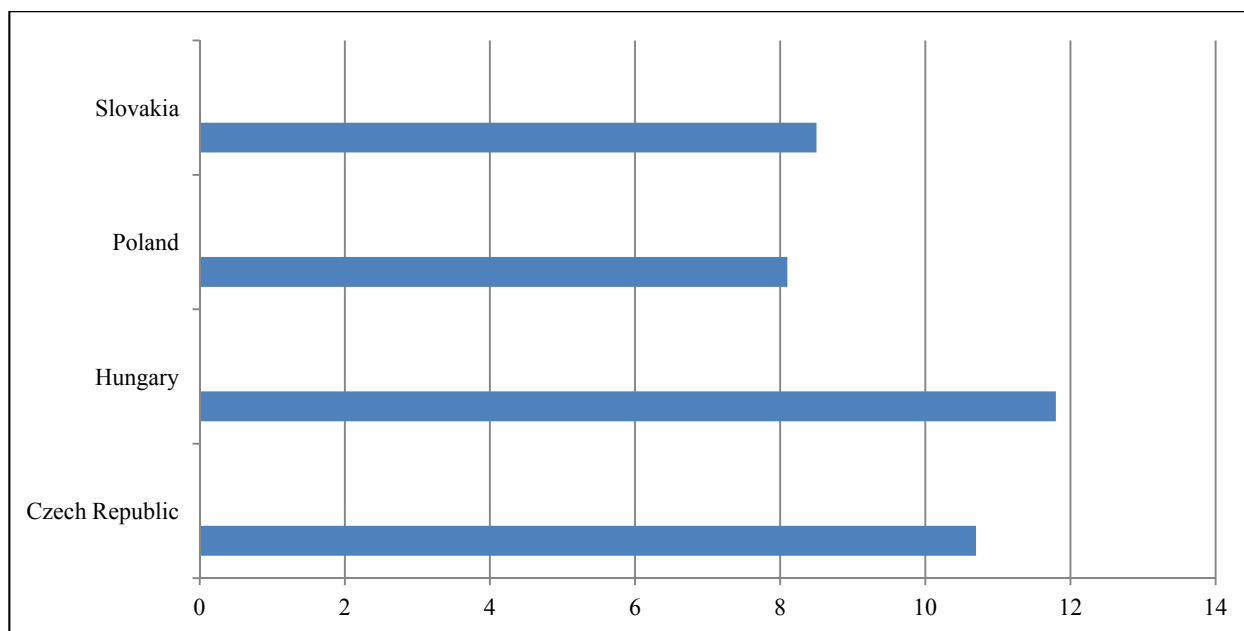


Figure 1. General government debt per capita (USD thousand). Source: The author's own work on the basis of the data, The Economist.

Apart from the fact that the relation of the general government debt and the GDP was the worst in that country, Hungary also incurred the highest general public debt per capita. At the end of 2014, it reached the level of nearly USD 12 thousand. The second position was taken by the Czech Republic with the amount of USD 10.7 thousand. The lowest debt per one inhabitant was incurred by the country with the highest debt, namely, Poland (see Figure 1).

### Budget Deficits

The primary reason for incurring the public debt is generally related to budget deficits. In accordance with the Maastricht Treaty, their relation to the GDP should not exceed the level of 3%. In the time period analysed in the article, all the countries struggled with budget deficits which were higher than that. Particularly poor results were recorded in 2010, when the consequences of the world crisis affected the situation in many countries. During the recent years, however, the situation has been improved. In 2014, Poland was the only country which did not meet the EU criterion, and in 2015 and 2016, all the countries met the required criterion. In the last analyzed year, the Czech Republic had a budget surplus of 0.7% of GDP (see Table 3).

Table 3

#### *Budget Deficit in % Gross Domestic Product*

Country	2007	2010	2014	2015	2016
Czech Republic	-0.7	-4.4	-1.9	-0.6	0.7
Hungary	-5.1	-4.5	-2.1	-1.6	-1.9
Poland	-1.9	-7.3	-3.4	-2.6	-2.5
Slovakia	-1.9	-7.5	-2.7	-2.7	-2.2

Source: The author's own work on the basis of the data by Eurostat.

During the recent years, the countries of the Visegrad Group have tried to improve their situation in terms of budget deficits. For example, since 2011, the budget deficits in the Czech Republic have been limited mainly by the changes made at the expenditure sides. There have been some attempts at a decrease in remuneration for public administration, capital expenses, pensions, and disability pensions. Furthermore, the government has suggested an increase in the VAT. The Polish government has tried to find some remedy for the situation in the expenditure side as well. The government has taken over and redeemed bonds collected in the open pension funds, which allowed it to decrease the general government debt by PLN 152 billion. In Slovakia, there were some concerns that the situation could get worse because of joining the Eurozone in 2009. Similarly to other countries, the worst results were recorded in 2010, however they were caused by the general economic conditions in the world rather than by the adoption of a new currency (Górniewicz, 2017).

### Credit Ratings

The financial situation in the particular countries is defined by, among others, so called credit ratings. Rating agencies systematically collect information on institutions which issue bonds, and then they evaluate the creditworthiness of such entities (the ability to pay interests and principal instalments in due time); they also assess debt instruments which are traded in the secondary market. Among numerous rating agencies, the most renowned are three of them: Moody's, Fitch, and Standard & Poor's.

Table 4

#### *Credit Ratings (January 2017)*

Country	Moody's	Fitch	Standard & poor's
Czech Republic	AA-	A1	A+
Hungary	BBB-	BAA3	BBB-
Poland	BBB+	A2	A-
Slovakia	A+	A2	A+

Source: The author's own work on the basis of the data by Trading Economics.



At the beginning of 2017, among the countries of the Visegrad Group, the best ratings were recorded for the Czech Republic and Slovakia. Poland was on the third position and the financial situation of Hungary was assessed as the weakest. The prospects for all the countries were defined by three agencies as stable. The Moody's Agency was the only agency which defined the prospects for Poland as negative.

### Conclusions

Apart from other problems of economic nature, the countries of the Visegrad Group, which have been recently integrated with the European Union, have also encountered some problems related to public finance. During the analysed years, all the countries struggled with permanent budget deficits. In the year of the crisis, 2010, they did not meet the criterion of the Maastricht Treaty referring to the relation between the deficit and the GDP (3%). However, later on, they managed to achieve relatively positive results. Comparing to 2007, all the countries have recorded a considerable increase in the general government debt, the acceptable level of which has been exceeded only by Hungary.

Public debt may have both a negative and a positive impact on the economic growth. Debt might prove to be an important stimulus for the economic growth providing that it will be used for the sake of increasing the number of investments. However, if the purpose of incurring the debt is to cover budget deficits, then in the long run it will prove to be an obstacle to economic growth.

Economist have long-standing debates on whether the debt is an obstacle to economic growth. Reinhart and Rogoff try to prove in their research that public debt is not a big issue until it exceeds 90% of GDP (Reinhart & Rogoff, 2010). This opinion is often cited in the disputes over the direction in economic policies in the world.

The above-mentioned authors divided the states into four groups:

- (1) the ones in which the debt to GDP ratio does not exceed 30%;
- (2) the ones in which the debt to GDP ratio ranges from 30 to 60%;
- (3) the ones in which the debt to GDP ratio ranges from 60 to 90%;
- (4) the ones in which the debt to GDP ratio exceeds 90%.

Note that Czech Republic (economic growth rate in 2016 was 2.4%), Poland (2.7%), and Slovakia (3.3%) were belonging to the second group and Hungary (2.0%) to the third one. The above results should be considered as the relatively positive phenomena. Summing up all of the above, we conclude that the economic growth of Visegrad Group countries gives the possibility of developing.

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