

The Context of the Macro Data and the Characteristics of the General Government in Central Eastern Europe

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Abstract. Since the outbreak of the biggest economic crisis of modern age 4 (four) years have passed, but the effects are still felt today. The crisis has significantly rearranged the general government forcing to reconsider the long established financial structures in many countries. A few countries in the world could and can claim that the process did not touch it at all. The classic task of the Governments is to enhance the economic growth which requires resources and measures to be taken. The most evident consequence of the process was the decrease of free resources minimizing the opportunity to stimulate growth. The government revenues declined which brought the reduction of expenditure and simultaneously the deficit and the national debt increased in the attempts to buffer effects of crisis. The declining consumption and the drastic reduction in the number of jobs aggravated the situation resulting in the reduction of macroeconomic indicators. This study aims to present these effects through the example of the “Visegrad Group” (Czech Republic, Hungary, Poland, Slovakia) examining the influencing factors and their relations.

Keywords: V4 Countries, Government Revenues and Spendings, Deficit, National Debt, GDP, GNI, GNDI.

1. Introduction

The financial and economic literature deal with the affects of the crisis and its consequences. The crisis had a deep impact on every fields of the life: on the state budget, on enterprises (Széles et.al., 2011, Szira et.al., 2011) on education (Lazányi, 2012) an on social and health care system too. The literature lists several crisis definitions of which not one can describe completely the bubble burst in 2008 and the way to the crisis. The definition of Árvai – Vincze (1998) is perhaps the most obvious description of the concept: “if it occurs, even the blind can see it”. But what is it to see and what can be done? In order to answer this question it is necessary to overview the most important crisis definitions. The classic typology of crisis declares to have 4 types of the crisis (based on Bordo and others /2001/, Heming – Kell – Schimmelpfening /2003, Reinhart – Rogoff /2009/): currency crisis, bank crisis, twin crises and debt crisis. The literature groups the crisis on many aspects occurred in history so far. Farkas (2009) names 3 significant groups of crisis based on lessons from history: crisis which can be traced back to classical business cycles, global crisis and intersection crisis. Farkas states in relation to the grouping mentioned above that the crisis in 2008 is a quite innovative and serious one; it is the concentration of the global and the node crisis with several unforeseen consequences. The list of Farkas can be completed with a type which was typical for the transition countries in the nineties, this is the *crisis of regime* when the countries have to stand their ground in a completely new economic environment. Instead of the planned economy artificially operated up until then, a completely new economic system, the competitive economy driven by the market defines the new conditional system which the countries had only known from the textbooks before the change. The new system brought the massive loss of jobs, the privatization of public enterprises, the mass termination of businesses and the drastic reduction in welfare. The Central European countries experienced the crisis more than 20 years ago but it is evident that even today we still learn from the experience. Lentner – Szigeti – Borzán (2011) emphasis the role of the following interest groups concerning the outbreak and escalation of the financial crisis in the financial

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markets: banks and other banking businesses on the supply side, borrowers businesses, households on the demand side, Government, Central Bank and Supervision with regulatory roles. Bélyácz – Pintér (2011) consider the following manifestations concerning the present crisis as the most important ones (including but not limited to): changes in form of loans, bubble formation then bursting, excessive in form of loans, undervaluing risks, asymmetric information flow, lack of transparency, insufficient control mechanism and misleading accounting practice.

2. Results

2.1. Crisis Management in V4 Countries

The pass-through of the crisis to Europe, therefore to Central and Eastern Europe left a huge impression on national economies, on governments and on local governments too (Kovács, 2012.). Overall, each country tried one of the elements of the equation for income of the classical macroeconomic four-sector model ($Y = C + I + G + /EX-IM/$), however the options were entirely different. There were countries where it was possible to increase the government purchases, the investment and the consumption (e.g. Germany, Slovakia), but there were other countries (such as Hungary) where there was no other option but to stimulate the external market (Lentner – Kolozsi – Tóth, 2010). The crisis management of V4 countries represents high degree of similarity since all the four countries used only government support and increase in credit insurance. While the leading European powers such as Germany, United Kingdom or France and the Mediterranean countries tried to curb the speculation with short selling ban, the V4 countries attempted to use fiscal instruments with more or less success. Analysing the macro data of the countries it is obvious that the positions are rather different.

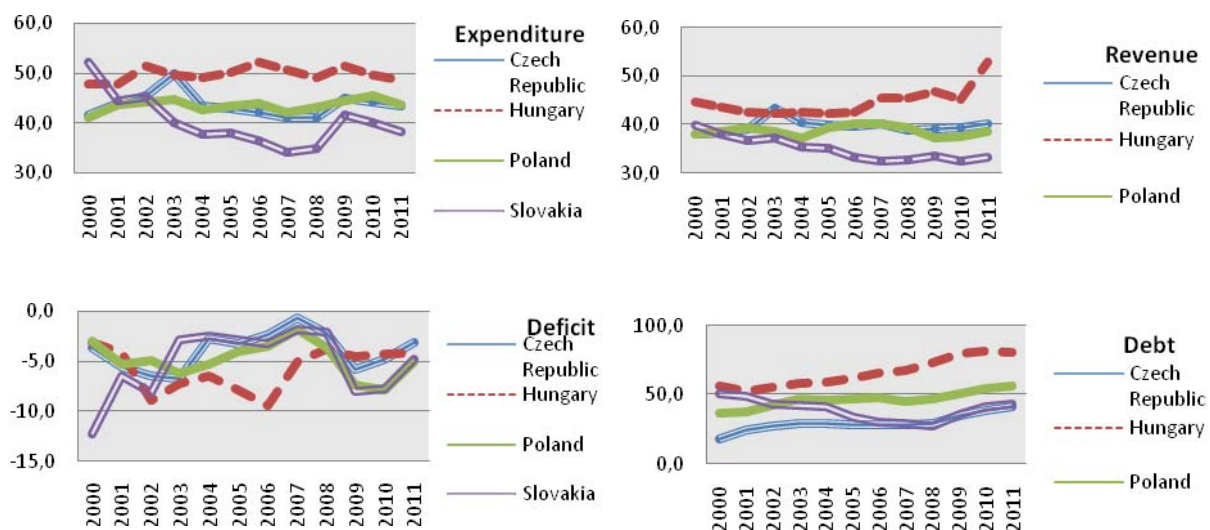


Fig. 3: The government data of V4 in GDP %. Sources: based on data of Eurostat, compiled by the editors.

Analysing the data of *Hungary*, it is evident that it has the largest expenditure and revenue to GDP ratio and the largest public debt within the V4 countries. As for the deficit, this is one of the best values at the moment however in 2006 the deficit was 9.5%, a record value. Because of these data, it has to be said that in the case of Hungary the macroeconomics was already bad before the crisis erupted and this led to a loss of confidence and the narrowing of fiscal space. The government reckons that recovery from the crisis is possible through drastic expenditure cuts and the largest revenues (primarily taxes) increase, although the growth was not set on for an continuous increase. (Palócz, 2010). *Poland* is said to weather the crisis with a relatively stable economy. The GDP ratio of the revenues and expenditure did not change significantly (values of around 40%), the public debt was stabilized, kept under 60%. The only problem was the sharp increase in deficit due to the decrease in revenues and the unchanged values of expenditure, to which end a

little fiscal consolidation was forced to perform. *Czech Republic and Slovakia* are roughly in the same macroeconomics situation. The public debt increased slightly under the influence of the crisis but it is still little more than 40%, the value which is the best among the V4 countries. Based on the data, it is evident that the revenues of Czech Republic were hardly affected by the crisis because they were always around 40%. This was the only country which was able to reach the best value concerning the deficit (0.7%) before the crisis, however it slightly increased (4.8%) under the influence of the crisis in 2010. The country considered the resolving of the crisis not in the increase of revenues but rather in the stimulation of the supply side through public investments, decrease in payroll costs as well as export subsidies. *Slovakia* can be regarded as the luckiest country among the V4 countries. After the turn of the millennium this country implemented the largest spending costs apart from the slight decrease in the revenues resulting in the declining path of debt along with the smallest deficit value as typical up to the beginning of the crisis. The crisis however forced also Slovakia to implement fiscal consolidation. The Government here also aimed softening the real economy impact and relied on the effect of automatic stabilizers when it came to resolve the situation. It decreased the public expenditure, as all the other countries analysed, and cut back on public investments as well.

2.2. Results

In our study the goals were to find out to what extent the semi-net indicators such as GDP, GNI and GNDI showing the performance of the macro economy determine the Government characteristics of the V4 countries as described above. During the study the data of Eurostat was used between 2000 and 2011. All the used data was calculated in EUR million. During the study the Pearson correlation coefficient was used to calculate and analyse the connection among the data (Pató et.al, 2010). The coefficients were calculated in 3 dimensions, the relationship among the data was analysed for the entire study period which was between 2000 and 2011, then the time interval was divided into 2 parts: before the crisis (2000 – 2007) and after the crisis (2008 – 2011) because our conviction is that the crisis started in 2008 is not over yet.

2.2.1. The Connection between Government Revenues and Macroeconomic Indicators

Based on the correlation value, it is obvious that there was a strong link between the revenues of V4 countries and the macroeconomic indicators during the period of the study as well as in the period before the crisis that is the increase of GDP leading also to the increase of government revenues through the increase of revenues, contributed revenues and due to their additional effects.

Table 3: The Pearson correlation coefficient value between government revenues and macroeconomic indicators

2000-2011	2000-2007	2008-2011	2000-2011	2000-2007	2008-2011	2000-2011	2000-2007	2008-2011
0,99585	0,99113	0,95979	0,99445	0,99062	0,88191	0,99418	0,99031	0,86703
0,95950	0,98957	0,63680	0,95781	0,98448	0,61068	0,96051	0,98259	0,65063
0,99366	0,99810	0,97908	0,99429	0,99912	0,98953	0,99535	0,99930	0,99153
0,99828	0,99833	0,93061	0,99824	0,99617	0,91830	0,99845	0,99633	0,92195

Source: based on the data of Eurostat, own calculations

After the crisis the connection remained close in the countries. The only exception was Hungary where, after the crisis, a moderately strong connection could be found concerning the 3 macroeconomic indicators because the value of correlation is above 0.6. In Czech Republic in the correlation of GNI and GNDI the value is smaller (below 0.9) which still suggests a close connection.

2.2.2. The Connection Between the Government Expenditures and Macroeconomic Indicators

The correlation value between the government expenditures and macroeconomic indicators reveal similarities with the government revenues. During the entire study period and in the period before the crisis, a strong link existed between the analysed values (above 0.9). All the values are positive – just like in the case of the revenues – therefore the increase of indicators implies the increase of the expenditures as well.

The values after the crisis, however, differ from those experienced previously. Now the values of Czech Republic and Slovakia, 2 northern countries, differ; and here there is little connection between the values (below 0.5).

Table 4: The Pearson correlation coefficient value between government expenditures and macroeconomic indicators

2000-2011	2000-2007	2008-2011	2000-2011	2000-2007	2008-2011	2000-2011	2000-2007	2008-2011
0,98593	0,96760	0,47519	0,98404	0,96929	0,27457	0,98359	0,96902	0,24466
0,99304	0,99537	0,96038	0,99326	0,99524	0,95604	0,99172	0,99472	0,94101
0,99560	0,99096	0,95552	0,99509	0,99236	0,93500	0,99427	0,99286	0,92924
0,97315	0,98257	0,33325	0,97736	0,98591	0,39613	0,97884	0,98454	0,46972

Source: based on the data of Eurostat, own calculations

2.2.3. The Connection between Deficit and Macroeconomic Indicators

The Pearson coefficient of the deficit and the macroeconomic indicators show quite the opposite compared to the coefficients experienced so far. Instead of the strong links, mainly weak ties and in some cases moderately strong ties can be found. The directions are also different which is statutory because the growing economy has to bring declining deficit. However the coefficients do not always prove this. Strong link can only be found in Hungary in the period before the crisis as well as in Czech Republic in the period after the crisis.

Table 5: The Pearson correlation coefficient value between deficit and macroeconomic indicators

2000-2011	2000-2007	2008-2011	2000-2011	2000-2007	2008-2011	2000-2011	2000-2007	2008-2011
0,26770	-0,50180	-0,90176	0,26406	-0,48913	-0,96275	0,26270	-0,48875	-0,96743
0,37096	0,75940	-0,51750	0,37607	0,77527	-0,51773	0,37046	0,77933	-0,46901
0,61183	-0,38240	-0,37787	0,60682	-0,37979	-0,43638	0,59858	-0,37741	-0,45082
0,51510	-0,55877	-0,14421	0,53261	-0,53473	-0,06986	0,53794	-0,54117	0,00740

Source: based on the data of Eurostat, own calculations

2.2.4. The Connection between Public Debt and Macroeconomic Indicators

The public debt, just like the revenues and expenditures, is clearly determined based on the macroeconomic indicators. For the entire study period as well as during the period before the crisis, there is obviously a strong link between public debt and macroeconomic indicators besides the co-movement of coefficients and the values. As for Czech Republic, Hungary and Poland all is different after the crisis. In Czech Republic there was no link between public debt and macroeconomic indicators after the crisis, while in Hungary a moderately strong negative connection can be found according to the values. In Poland there cannot be found connection between the studied factors based on the coefficients. As for Slovakia, however, all the values suggest having strong link between the factors.

Table 6: The Pearson correlation coefficient value between public debt and macroeconomic indicators

2000-2011	2000-2007	2008-2011	2000-2011	2000-2007	2008-2011	2000-2011	2000-2007	2008-2011
0,94368	0,97889	0,13522	0,93617	0,97973	-0,08079	0,93494	0,98001	-0,11148
0,93949	0,98186	-	0,94685	0,97943	-0,56892	0,94770	0,97594	-0,58325
		0,60867						
0,93677	0,95017	0,19585	0,92581	0,93842	0,08132	0,92236	0,93624	0,06755
0,89614	0,94683	0,80637	0,90076	0,93930	0,84711	0,90642	0,94236	0,88660

Source: based on the data of Eurostat, own calculations

3. Summary

Based on the data it is true to say that there is close similarity among the V4 countries in many respects. Each country underwent the crisis of regime, new foundations for the economy were laid in the nineties and currently it still learns how the market economy works. The crisis left its mark on the economies of each country, forcing the governments more or less to fiscal consolidation. As for the performance indicators of the macro economy, similarities are evident. Czech Republic and Hungary show the most resemblance in the economy processes and are also similar in their territories, and economies. Unfortunately Hungary is the only country within the V4, however, which “waited” the crisis with the worst fundamentals. This was the reason for the quick help of IMF provided in 2008 under the condition to have the deficit cleaned up. This condition made its influences felt also in practice, which resulted in the quick and drastic decline of deficit compared to the other countries. The study proves that the increase of GDP, GNI and GNDI result in the increase of government revenues and expenditures, but the connection is not the same in every case and every section. Between deficit and indicators there is hardly any link, therefore the decline in deficit does not bring about the boom of the economy, so every government has to take real and efficient measures.

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