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The Selected Topics of Foreign Trade in the Countries of Visegrad Four

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Abstract: Countries of Visegrad four, namely the Czech Republic, Slovakia, Hungary and Poland, share not only geographical position in the Central Europe but also similar history, similar geo-political ideas and moreover, similar economic development. All of these countries have been developing in last years in terms of gross domestic product however there have been some differences. As far as GDP is concerned, one of the part of this indicator is net export which can be calculated as a difference between exports and imports. This study focuses on the analysis of GDP development and Foreign trade development of Visegrad four countries. Moreover, one of the basic indicator of Foreign trade can be calculated as a share of export on GDP where this indicator measures the openness of particular economy. This study compares this ratio for all Visegrad four countries in terms of goods and services and services only. The analysis shows relatively unexpected development where the position of services is getting worse in all analysed countries. The results are described more deeply in this study.

Key words: Export, Foreign trade, import, Visegrad four, goods and services

INTRODUCTION

Macroeconomic theory shows that Gross Domestic Product (GDP) is one of the most important indicator showing and evaluating development in particular country. This indicator can be calculated in three different ways. First approach is based on the definition of GDP where it measures value of the goods and services in specific year in all industrial sectors in particular country. Second approach of GDP calculation is based on income earned by all the factors of production in economy which presents wages paid to labour, rent earned by land and the return on capital in the form either of interest or entrepreneur's profit. In this approach some adjustments have to be made such as increasing for indirect taxes, increasing for depreciation and finally correction for net Foreign income. Last approach for GDP calculating is based on spending of different groups that participate in the economy. According to this method, GDP is a measure of Consumer spending (C), business Investment (I), Government spending (G) and net exports which is exports minus imports (X-M) which means GDP C+I+G+(X-M).

MATERIALS AND METHODS

This basic economic theory is discussed by Andrews *et al*. (2011), Mankiw (2010), Samuelson and Nordhaus (2010) and Soukup (2007). From above mentioned text is clear that Foreign trade is very important for every country. Therefore, it is possible to use some basic indicators for evaluation of Foreign trade development. One of the basic indicator is the share of export on GDP where this indicator evaluates the openness of particular country.

Countries of Visegrad Group of Visegrad four, namely the Czech Republic, Slovakia, Hungary and Poland can be found in the Central Europe. These countries share similar history where all of them were on the east side of the Iron Curtain which means under the influence of the Soviet Union. All countries went through transformation in the nineties of last century and all countries also joined the European Union together in 2004. Now a days, these countries share some similar opinions for example, in the terms of migration crisis. Because of the common history, these countries established the Visegrad Group in 1991 and had been cooperating even before they joined the EU. After their entrance, they still have been cooperating with greater or lesser success not only in general ways but also in the field of EU.

The Foreign trade is analyzed by a lot of different researchers for example by Baier *et al*. (2014), Do *et al*. (2016), Fraccaso and Marzetti (2015) and Vannoorenberghe (2014). However, the aim of this study is to analyse the Foreign trade of member states from Visegrad group. More precisely, this study analyse the

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development of GDP and then the development of export of goods and services and of services only because Foreign trade is important part of GDP formula in every open economy. Furthermore, the export/GDP ratio both for goods and services and services only in the period 2000-2014 is also analysed. The data which have been used for the calculations were obtained in general available database Eurostat. The researcher decided to use this period of time because the newer data were not available in the moment of preparation of this study and older data were missing in Eurostat database before the years 2000 in some cases. Therefore, the period 2000-2014 has been selected for the analysis.

RESULTS AND DISCUSSION

The analysis of GDP development: Based on the fact that the Czech Republic has currently around 10.5 billion of inhabitants, Hungary around 9.8 billion, Slovakia around 5.4 billion and Poland >38.4 billion, it is quite obvious that the level of GDP in billions of Euro is the highest in Poland while the Czech Republic is on the second position, Hungary is third and Slovakia fourth.

However, it is better to use the level of GDP per capita for comparison. According to this the highest level has the Czech Republic, Slovakia is on the second place, Poland is the third and Hungary the last. With respect to this information is good to add one interesting fact. Even if the development in the number of inhabitants in each country have not been steady this number grew in the Czech Republic, Poland and Slovakia (comparison of the number of inhabitants in the year 2000 and 2014) while in Hungary dropped. In this development can be seen the reason why the position of Hungary in the terms of GDP per capita was the second highest in 2000 where it is the last one in 2014.

The analysis of export development: The analysis of export of goods and services development in Visegrad four countries shows similar results as the GDP development however, some differences can be found. Based on the number of inhabitants it is quite obvious that export in absolute amounts has been the highest in Poland for whole analysed period the Czech, Republic has been on the second place, Hungary third and Slovakia last.

However, the results per capita are little bit different. In the year 2000, the highest export per capita was in Hungary the Czech Republic was on second position and Poland was the last one. The Czech Republic exceeded Hungary in 2004, Slovakia in 2006. Currently, Slovakia has the highest export of goods and services per capita the Czech Republic is on the second position, Hungary is the third and Poland remains the last one. Nevertheless, the development is quite irregular in analysed countries therefore it will be described country by country. As far as the Czech Republic is concerned, GDP has been growing since 2000-2008 than there was a crisis drop in 2009, it grew again in 2010 and 2011 where the GDP per capita exceeded the year 2008 but since 2012 has been the GDP per capita decreasing again. Still, the Czech Republic has been the best of Visegrad four countries in terms of GDP per capita in whole analysed period. However, the export of goods and services per capita has been growing till the year 2008 with following drop in 2009 but instead of the GDP the export recovered really quickly in the Czech Republic and the value in 2010 was higher than before crisis and the growth continued in 2011 and in 2012 as well even if the GDP per capita decreased in this year. In 2013, there was a small drop in export per capita too, together with the drop in GDP but export per capita has been growing in 2014 where GDP per capita has been decreasing. It is obvious that even if the export of goods and services in the Czech Republic has been growing mostly after the crisis the GDP is not growing which means that the other (internal) sectors of the economy in the Czech Republic has been decreasing after crisis and Foreign trade is not strong enough to safe this development.

The GDP per capita in Hungary was the second highest in 2000 and it was growing till 2008 where Hungary had the third highest level of GDP per capita. However, the crisis had bad consequences in Hungary where even if the GDP has been growing since 2009 with only one exception in 2012, it still does not exceed the value from pre-crisis years 2008. Currently, Hungary is last one of analysed countries. With respect to export of goods and services per capita the development is again slightly different than the GDP development. Before crisis was the development similar, Hungary had the second highest level of export in 2000 and it was growing till 2008 where Hungary was on the third position. The export of goods and services per capita has been also growing since 2010 with only one exception in 2012 however, it managed to exceed the pre-crisis year in 2011 and currently has Hungary the third highest export of goods and services per capita. The partial conclusion about not so good developing other sectors of GDP can be repeated.

Poland is the only country where the development of GDP per capita before crisis was not growing, there were two drops in 2002 and 2003. However, after crisis has been the GDP growing relatively fast it exceeded the pre-crisis level in 2011 and Poland left the last place in

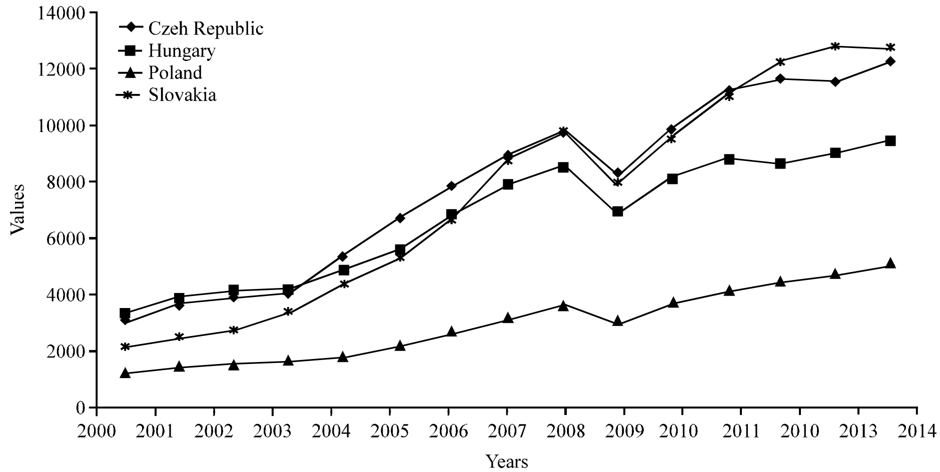

Fig. 1: Export of goods and services development; own calculations based on Eurostat

2012 and currently is on the third position. Again, the development of export of goods and services is different. It was growing in the whole analysed period with the only exception of after crisis years 2009. Moreover, the recovery of export was really quick and Poland had the higher value of export in 2010 than in 2008. Despite this fact, poland has been remaining on the last position in terms of export of goods and services in whole analysed period.

The GDP in Slovakia has been growing in whole analysed period with the only exception of crisis year 2009 where this development has been really quick. Slovakia was the worst country in 2000 but it exceeded Poland in 2003 and Hungary in 2007, it recovered really quickly again and had the level of GDP per capita in 2010 higher than in 2008 and currently has the second highest GDP per capita of all Visegrad four countries. The development of export is slightly different it has also been growing for the whole analysed period with the only exception of crisis years 2009 however, Slovakia had the third highest level of export per capita in 2000 and it exceeded the Hungary in 2006. The recovery of exports was not as fast as GDP, Slovakia exceeded the pre-crisis level in 2011. However, in the years 2012 Slovakia exceeded even the Czech Republic in terms of export per capita and currently has the highest level of this indicator. The development is described on Fig. 1.

Moreover, during the analysis of the growth rates is quite obvious that in all analysed countries have been exports growing significantly faster than the GDP. It can be explained in such way that even if the exports have been growing there were other aspects of GDP formula which have been decreasing where the total GDP has been growing slowly.

However, the analysis of export of services shows relatively different development and it will be described again country by country. With respect to the Czech Republic the export of services per capita grew in 2011 while it was decreasing in the period 2002-2004. It has been growing since 2005 with two exceptions in 2009 and in 2013. Even if was the Czech Republic on the first place in terms of export of services per capita, currently has the second position. Moreover, the growth rate of export of services is significantly lower than growth rate of export of goods and services together (compare 302.65% for goods and services and 74.35% for services only). It is relatively unexpected result because it means that the Czech Republic is growing in export of goods while the position of services is decreasing. It can be seen on the share of export of services on the export of goods and services where this share was 33.77% in 2000 and only 14.62% in 2014.

The situation in Hungary is similar. There was increase in 2001, decrease between 2002 and 2004 increase again till 2008 and decrease in after crisis year 2009 and then increase, since this year with only small decrease in 2012. Moreover, Hungary was on the second position in terms of export of services per capita in 2000, it managed exceed the Czech Republic in 2013 and currently is on the first position. However, even if the growth rate is faster than in the case of the Czech Republic (127.1%) it is still lower than in case of export of goods and services (172.06%). The share of export of services on total exports has been also decreasing (23.54% in 2000 and 19.65% in 2014). Even if the position of services is also worse in Hungary this country is focusing on export of services more than the Czech Republic. In poland was the export of services per capita decreasing since 2000-2003, it was

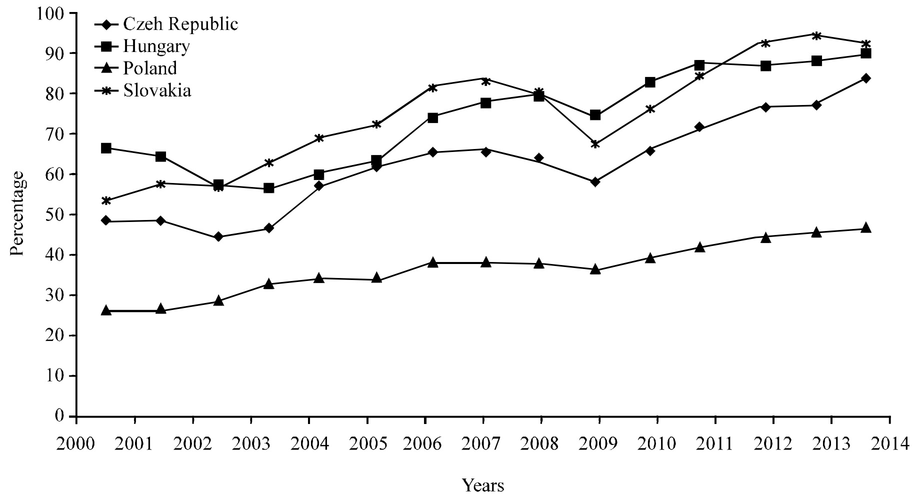

Fig. 2: Export/GDP ratio; own calculations based on Eurostat

growing again till 2008 with following drop in 2009 but it has been growing for the whole after-crisis period. In spite of this growth remains Poland on the last position in terms of export of services per capita. However, the growth rate is the fastest from all analysed countries (compare 211.93% for services only and 284.11% for goods and services). The share of services is also decreasing but this drop is not so significant (22.91% in 2000 and 18.6% in 2014) which means that Poland is also focusing more on export of services.

As far as the situation in Slovakia is concerned, there were only three drops in terms of export of services per capita in whole analysed period, specifically in the years 2003, 2009 and 2014. Slovakia has been on the third position for the whole analysed period. Even if the export of services has been growing faster than in the Czech Republic (145.98%), it is still significantly lower than the export of goods and services together (474.45%). Another proof that Slovakia as well as the Czech Republic is focusing more on goods is the decrease of the share of export of services on the total exports where this share was 22.79% in 2000 and it was only 9.76% in 2014.

The analysis of export and GDP ratio: As mentioned above, one of the indicator of Foreign trade development is export/GDP ratio where this amount evaluates the openness of particular economy. Higher results means greater openness and vice versa. Figure 2 shows the development of export/GDP ratio in analysed Visegrad four countries.

As can be seen in Fig. 2, the development of export/GDP ratio is again very irregular. This ratio was <50% in the Czech Republic in 2000 (48.33%) while it has been increasing in a relatively fast pace (growth rate 173.43%) and currently is this share 83.82%. Hungary had the highest ratio in 2000 (66.81%) which is the reason while there is the slowest growth rate (only 133.59%) and currently has Hungary the second highest export/GDP ratio on 89.25%. Poland has had the lowest ratio for all analysed period where this ratio was only 27.23% in 2000. In spite of the highest growth rate (for 174.25%) is this ratio still under 50% (47.45% in 2014). With respect to the Slovakia, the export/GDP ratio was the second highest in 2000 (54.07%). The growth rate in Slovakia is the third highest but the differences between Slovakia, Poland and the Czech Republic are really small (growth rate in Slovakia 169.89%) therefore is Slovakia currently on the fist position with the ration 91.85%.

These results show that almost all Visegrad countries can be considered as relatively open economies currently where exports play significant role (the ratio is over 80% in case of Slovakia over 90%). The only exception is Poland where this ratio is under 50% which means relatively different position of export in the economy of Poland. However, this share is growing in Poland in the fastest pace but because of really weak position at the very beginning of analysed period is this share still under 50%.

CONCLUSION

The aim of this study was to analyse the selected topics of Foreign trade Visegrad four countries with special focus on export/GDP ratio. Visegrad four countries share similar history and also similar economic development in last years however, after world economic crisis have been some countries developing really quickly while other countries have been slower. This study analysed whether the development in Foreign trade with goods and services and with services only is similar. The analysis shows that all countries have been growing in terms of GDP per capita however, after the world economic crisis (since 2009) has been the Czech Republic dealing with the lowest growth rate while Poland and Slovakia have been growing really fast. However, the Czech Republic still has some lead from previous years but this lead is weaker every year because of the slow growth rate.

In terms of export of goods and services, all analysed countries have had relatively different development than in GDP. There were years when GDP decreased despite the fact that export grew. It can be explained in that way that export (or more precisely Foreign trade) has not such strong influence on GDP development in Visegrad four countries, there are other (internal) sectors with stronger influences. This conclusion is supported by analysis of export/GDP ratio where even if the current situation shows relatively open economies (except Poland) in the year 2000 were this ratio relatively low in all analysed countries. However, even if this ratio is relatively high in Slovakia, Hungary and the Czech Republic (the export of these countries is quite important compared to GDP) and these countries can be considered as open, the differences in GDP development and export development proof that there are more important parts of GDP formula in all analysed countries than Foreign trade.

Moreover, the development of export of services shows relatively unexpected results. The share of export of services on total exports (goods and services together) has been decreasing in all analysed countries where this decrease is really high in case of Slovakia and the Czech Republic. This share has been decreasing also in Hungary and Poland but these decreases have been smaller. It can be explained in that way that Hungary and Poland are focusing more on services than the Czech Republic and Slovakia.

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