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# CURRENT ACCOUNT DEFICIT AND THE ECONOMIC GROWTH IN VISEGRAD COUNTRIES

#### Introduction

The collapse of communism in the late 1980 dunked Central and Eastern European countriesinto the most profound economic transformation of all time. Economic changes taking place in today's EU are of different speeds and still ongoing. At the present stage we have all prerequisites to talk about the assessment of the effectiveness of transformational changes that have occurred in the region. One option to overcome the transformation imbalances were informal integration associations, among them is the VisegradGroup. However, accession to the EU and the abolition of internal borders, paradoxically, radically weakened domestic interest in Central European neighbors. Nevertheless, Visegrad states continued its development in the frame of large Europe and now it's possible start evaluating the results of the transformations. Taking into consideration that all four states are small open economies that are export oriented. Besides the Current account is an aggregate that reflects their ties with the world and presents great research interest.

## 1 MACROECONOMIC INDICATORS AND BALANCE OF PAY-MENTS OVERVIEW

The process of transformation in Central and Eastern Europe has provided strong evidence of interdependent links between macroeconomic processes and structural reforms.

The success of any policy depends on the ability to reform elements of the economic system as a whole. Of course it takes time to build a solid foundation for market mechanisms, but it should be noted that the time factor is not as critical as the scope and sequence of transformations.

Special attention is devoted to the study expedient diagnosis of the balance of payments and international investment position for the Visegrad 4 countries: Slovakia, Czech Republic, Poland and Hungary.

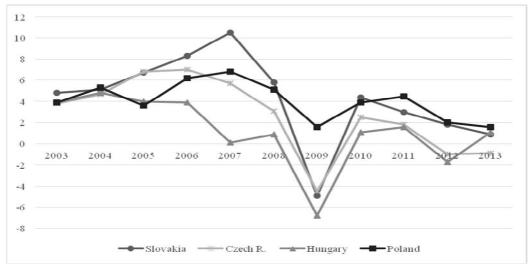


Figure 1: Dynamics of GDP growth rate, % to a previous year

Source: Eurostat

During the period of 2003-2013, it should be noted that the Polish GDP growth dynamics, even under the influence of critical factors demonstrated growth. While for the latter group of countries, the crisis period 2008-2009was marked by a sharp fall.

The hypothesis that explains such a macroeconomic behavior, we believe that it is a relatively low dependence on exports of Polish economy and thus lower current account imbalances.

Visegrad states are vulnerable to the unemployment rate. From 2003 Slovakia remains the country with the highest rate among the V4 partners. The second wave of unemployment raising is 2009 when The Slovak Republic joined the Eurozone and got the lowest inflation ever.

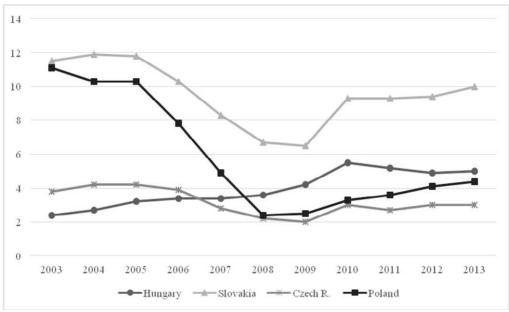


Figure 2: Unemployment rate in V4, %

Source: Eurostat

The lowest unemployment rate is traditionally observed in the Czech Republic, while in Hungary there is a gradual increase in the percentage of unemployment.

The dynamics of inflation of all V4 is presented at figure 3.

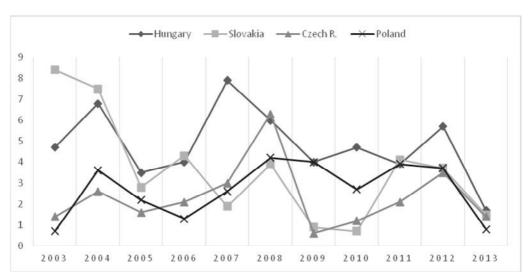


Figure 3: Inflation rate in V4, %

World economic crunch lowered the inflation rate in all of the Visegrad states due to the decline of European economy output. Nevertheless, 2013 showed the lowest rates of inflation that might be interpreted by the second wave of crisis.

At the same time pre crisis period was considered as the economy growing accompanied with the deficit of current accounts for all the V4 states.

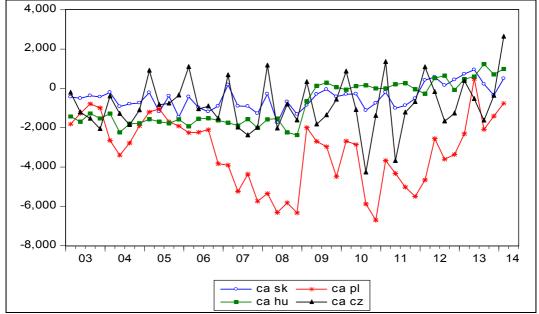


Figure 4: Dynamics of current accounts

Source: Eurostat

The polish economy demonstrated certain economic achievements along with the greatest deficit of its current account.

The Hungarian current account is characterized with the lowest deficit that is explained by high ratio of export to GDP and attractiveness for foreign capital.

That is reflected at table 1. How are V4 depend on the foreign capital.

Table 1: Net investment position, % to GDP

	Hungary	Slovakia	Czech R.	Poland
2003	-78	-33.5	-19.6	-41.7
2004	-85	-39.9	-28.2	-41.6
2005	-94.4	-48.6	-26.9	-42.5
2006	-102.8	-53.5	-32.3	-45.7
2007	-105.1	-51.5	-38.7	-50.1
2008	-106.0	-57.4	-40.1	-56.3
2009	-117.2	-66.7	-46.0	-58.8
2010	-113.3	-63.1	-48.3	-65.4
2011	-107.4	-65.5	-47.5	-64.0
2012	-103.2	-64.1	-48.8	-66.5
2013	-92.6	-65.1	-45.6	-69.3

Source: systematized by author. <a href="http://epp.eurostat.ec.europa.eu/">http://epp.eurostat.ec.europa.eu/</a>

Between 2003-2013 the highest increase was noticed in Hungary, followed by the Slovakia, Poland and Czech Republic.

It is worth mentioning the high volatility of FDI in Hungary and Poland, which emphasize the new discussions about the influence of FDI and portfolio investments on the Visegrad countries vulnerability.

Besides we compare net investment position with foreign debt that is presented at table 2.

Table 2: Foreign gross debt, % to GDP

	Hungary	Slovakia	Czech R.	Poland
2001	51,9	48,3	22,8	37,6
2002	55,1	42,8	25,9	42,2
2003	57,8	41,5	28,1	47,1
2004	58,8	40,6	28,5	45,7
2005	60,8	33,8	28,0	47,1
2006	65,0	30,7	27,9	47,1
2007	65,9	29,8	27,8	45
2008	71,9	28,2	28,7	47,1
2009	78,2	36,0	34,1	50,9
2010	80,9	41,1	38,2	54,9
2011	81,0	43,5	41,0	56,2
2012	78,5	52,1	45,5	55,6
2013	77,3	54,6	45,7	57

Source: systematized by author. <a href="http://epp.eurostat.ec.europa.eu/">http://epp.eurostat.ec.europa.eu/</a>

The highest rate of foreign debt has the Hungarian economy. Experience around the world confirms the objectivity that the use of those additional features that can provide external funding, is a notable factor in forward movement, especially in the context of transformational development. At the same time, the inefficient use of external debt leads to loss of a state its economic and political security.

V. Shevchuk said that in Eastern Europe the transition to economic growth took place against the backdrop of negative current account, which clearly contrasts with the Ukrainian experience.

To identify the nature of the transformation we use method of vector autoregression and impulse respond function.

According to O. Brusilovska, the EU membership did not give all the problems a positive dynamics. The main threat to economic growth in the region remains unstable energy market that is dependent on Russian gas. In Slovakia, 90% of the gas is of the Russian origin [2].

Interesting structural shift in the balance of payments of Slovakia, which is influenced by the factor of joining the EU and the euro zone (Figure 5).

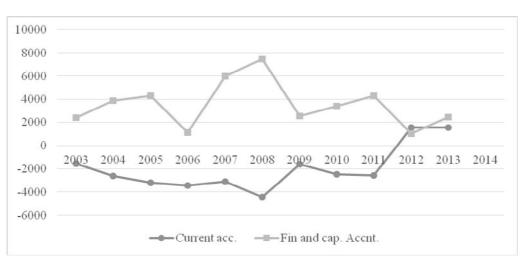


Figure 5: Dynamics of Balance of payments accounts of Slovakia [Slovak national bank]

Investment activity led to improvement in the overall balance of payments of Slovakia. Positive financial account balance was achieved through a considerable amount of capital inflows.

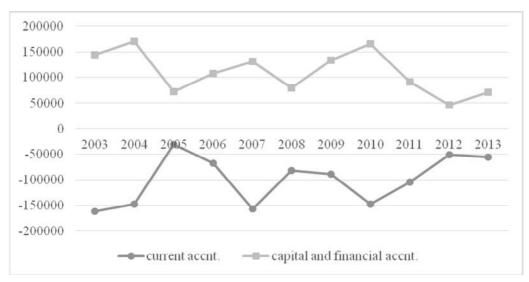
In support of the special nature of the international investment position of Slovakia, we have investigated the dynamics of the balance of payments figures of the country. The period from 2003 to 2011 was marked by a significant current account deficit - common to most CEE countries. However, a detailed analysis of the causes of the deficit identified that this is due to a significant negative volumes of the "income" account (it reflects the payment of the proceeds from the country in the form of wages, portfolio investments

(dividends), income from equity or any other type of investment). However, as noted above, the current account trade balance is largely positive only in 2012-2013.

In our opinion, this is due to the positive effects of joining the euro area for Slovak balance of payments, the growing demand for key positions of merchandise exports by trading partner countries, as well as the inherent attractiveness of the Slovak Republic to the accumulation of foreign capital.

The economic growth rate of the Czech Republic was slower than in Slovakia.

Figure 6: Dynamics of Balance of payments accounts of Czech Republic [Czech national bank]



Potential of the Czech Republic in the global economy has the following features: Czech Republic has a rather high level of human development index. The country has significant technological position in the world. Unlike many CEE countries most of the investments came in Mechanical Engineering (40%), leading to increased exports. Structural changes in the economy have caused significant changes in the composition and proportion of certain types of exports. Thus, the share of machinery and equipment 41%, chemicals about 10%, other manufactured goods - 40%, which implies that the country managed to avoid resource specialization. Joining the EU increased its share in the structure of foreign trade that was highest among CEE countries [3].

We would like to point out that the Czech government, despite the general trend in European integration process, refused to accept the euro as the national currency until at least 2019. It also allows the government to use special macroeconomic policies to stimulate the balance of payments.

The Hungarian economy is heavily oriented toward the European Union. Favorable in early 2000, conditions in the EU contributed to rapid economic growth in Hungary (Figure 7). Under the influence of the world crisis, the macroeconomic balance deteriorated.

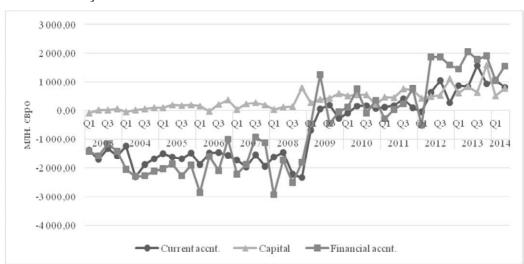


Figure 7: Dynamics of Balance of payments accounts of Hungary [Hungarian national bank]

The period that we analyze is characterized by significant imbalances and asymmetries of Hungarian balance of payments (Figure 7).

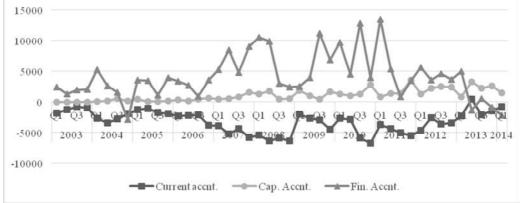
The positive balance of foreign trade to GDP was 8% in the post-crisis years. The above data show a significant gap between production in Hungary's gross domestic product and its use through internal consumption and accumulation. The difference between production and domestic use of GDP in the basic part of was for on debt service and other external transfers. As a result, there was, on the one hand, a significant outflow of funds, on the other hand - achieved some improvement in foreign trade balance

One of the most important characteristic features of the Hungarian economy is a very high degree of openness, which in recent years has continued to increase.

The last, but not least, we analyze Poland.



Figure 8: Dynamics of Balance of payments accounts of Poland [Polish national bank]



Fluctuations of the polish balance of payments emphasize the openness of the economy. The short period of current account surplus was only in 2 quarters of 2013. However, there is a lack of financial resources for the economic development of the country, which is covered by reserves.

Thus, a common characteristic for all countries Visegrad is a negative current account balance during the period of highest economic growth.

## 2 METHODOLOGY

To evaluate the impact of current account deficit on economic growth we implement vector autoregressive modelling (VAR) that has the following theoretical view (1)

$$y_t^i = a_0^i + \sum_{j=1}^k a_{1j}^i y_{t-1}^j + \sum_{j=1}^k a_{2j}^i y_{t-2}^j + \ldots + \sum_{j=1}^k a_{pj}^i y_{t-p}^j + \varepsilon_t^i$$

Impulse response functions are useful for studying the interactions between variables in a vector autoregressive model. They represent the reactions of the variables to shocks hitting the system.

Response of GDP\_CZ to CA\_CZ Response of GDP\_HU to CA\_HU 3,000 3.000 2.000 2.000 1,000 1,000 -1,000 -2.000 -2.000 -3.000 10 Hungary Response of GDP\_PL to CA\_PL Response of GDP SK to CA SK 8,000 1.600 6,000 1.200 4.000 800 2.000 400 -2,000 0 -4 000 -400

Slovakia

Figure 9: Impulse response function of GDP to current account

Source: modelling in EViews 8

Poland

-6,000

Thus, with a similar openness of the economies of V4 the impact of current account on GDP was different for each state. For Poland and Hungary in the long term result was the same. However, in the short term, in Hungary there is a positive impact on economic growth. In the long term, effect becomes negligible.

The results for the Czech Republic were unexpected. However, the strengthening of national currency and current account deficits, in our opinion, are the main factors explaining the results of the model, namely the negative impact of current account to GDP growth in the Czech economy.

Only for Slovakia, we found a stimulating effect of the negative current account to GDP growth.

## Conclusion

The current period of economic transformation in the Visegrad countries emphasizes the increasing dependence on external factors. In macroeconomic studies, separate role is played by balance of payments, which reflects the asymmetry of economic development.

Together with the similar structure of national economies, the impact of the same factors is different for economic growth. We found a negative impact of the current account balance for all Visegradcountries. The stimulating effect of the current account was found to increase the economy of Slovakia, while the Czech Republic has negative impact of this factor. In Poland and Hungary, this effect is negligible. For these two countries' economic growth driven by foreign borrowing.

Thus, one of the main macroeconomic challenges for governments should be to align current account deficit while limiting foreign borrowing.

## **Keywords**

Current account, economic growth, macroeconomic indices, vector autoregressive modelling

## **JEL Classification**

E20, F32

#### LITERATURE

- [1] http://dspace.onu.edu.ua:8080/bitstream/203.179-186.pdf.
- [2] http://mev.lac.lviv.ua/downloads/vyklad/shevch/shevchuk-05NBU9.pdf.
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## **SUMMARY**

The article is devoted to current account deficit and economic growth in Visegrad countries. At the present stage we have all prerequisites to talk about the assessment of the effectiveness of transformational changes that have occurred in the region. However, accession to the EU and the abolition of internal borders, paradoxically, radically weakened domestic interest in Central European neighbors. Nevertheless, Visegrad states continued its development in the frame of large Europe.

It is worth mentioning the high volatility of FDI in Hungary and Poland, which emphasizes the new discussions about the influence of FDI and portfolio investments on the Visegrad countries vulnerability.

Using impulse response function we discovered the different impact of current account to GDP growth. The positive effect was detected only for Slovakia that has lowest net international investment position along with foreign debt and high rate of unemployment.

The method we implemented could be used for identifying the impact financial account and capital account on GDP.

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