



CURRENT ACCOUNT DEFICITS IN THE EU CANDIDATE AND POTENTIAL CANDIDATE COUNTRIES: A PANEL ANALYSIS*

Vesna Bucevska

Ss. Cyril and Methodius University in Skopje, Faculty of Economics, FYRM

✉ vesna.bucevska@eccf.ukim.edu.mk

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Abstract: This paper presents an empirical investigation of a large number of potentially significant determinants of current account deficits in five EU candidate and potential candidate countries (Albania, Croatia, Macedonia, Serbia and Turkey) in the period 2005 Q1-2015 Q4. Using panel regression techniques we find that current account imbalances in the EU candidate and potential candidate countries are mainly determined by real GDP growth rate and the degree of trade integration. Other factors that have a significant impact on current account balances include relative per capita income, crude oil trade balance and level of financial development. Interestingly, the status of the observed country (an EU candidate or a potential candidate country) does not have any effect on the current account balance. It is expected that further economic and financial development of the EU candidate and pre-accession would encourage domestic saving and contribute to improvement of their current account positions.

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1. Introduction

Current account sustainability has been in the focus of economic theory and policy for a very long time. As a result of the process of globalization the volume of international trade and capital mobility have increased which, in turn, led to larger current account deficits in many countries and brought about new forms of financial instability. The issue of sustainability of the current account imbalances is

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of special importance to the EU candidate and potential candidate countries on their way of becoming full members of the European Union (EU). The persistent current account and trade deficits are a key challenge that most of these countries are facing and one of the major problems that they must solve in order to fulfill the economic criteria for full integration into the European Union (EU). The latest global financial crisis has demonstrated that external imbalances increase the potential exposure countries to a crisis and can have a serious adverse effect on the ability of these countries to fight external economic and financial shocks.

There are various theoretical models (Obstfeld and Rogoff 1995; Ghosh and Ostry, 1995; Milesi-Ferretti and Razin, 1996) and numerous empirical studies (Sheffrin and Woo, 1990; Ghosh, 1995; Debelle and Faruqee, 1996; Chinn and Prasad, 2003) that examine the determinants of current account imbalances. However, the majority of the existing empirical studies focus on the developed and emerging Asian economies, while studies of the current account determinants in the EU candidate and potential candidate countries are very scarce and based on annual data i.e. small sample size leading to debatable results. To the best of our knowledge, this is the first paper which empirically investigates the determinants of the current account imbalances for the EU candidate and potential candidate countries as a group, without putting them together with other developing or emerging economies, thus increasing the homogeneity of the empirical findings.

Using panel regression techniques the author find that current account balances in the EU candidate and potential candidate countries are positively correlated with the fiscal deficit, trade openness, relative per capita income, crude oil trade deficit and foreign direct investment inflows, and negatively associated with real GDP growth rate, domestic investment, initial net foreign assets position, financial development and status of the observed countries in the process of EU enlargement. One of the findings of our empirical analysis is that the status of the observed country in the EU enlargement process does not have any effect on the current account balances of these countries.

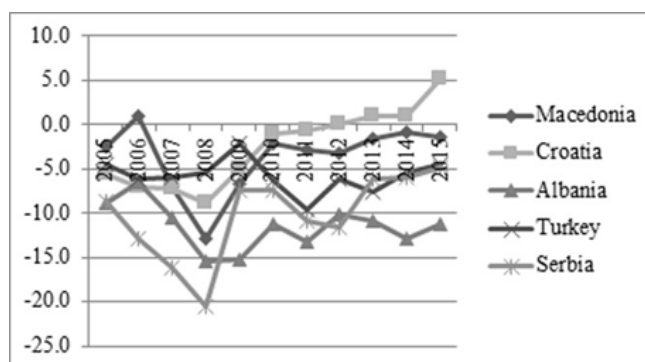
The rest of the paper is structured as follows: Section 2 explains the data and the chosen methodology and gives the estimation results. In Section 3 the author discuss the obtained results. Finally, in Section 4 the author draw conclusions.

2. Current Account Developments in the EU Candidate and Potential Candidate Countries in the Period 2005-2015

Before we investigate the determinants of current account imbalances in the EU candidate countries and potential candidate countries, we will first analyze the current account trends in these countries in the period 2005-2015 in order to check if the external imbalances are persistent or not. Looking back to the years before the global financial crisis (period 2005-2008) the EU candidate and potential

candidate countries were focused on political and economic integration with the EU which led to higher rates of economic growth and rapid catching up with the EU. Unlike catching-up processes in other parts of the world, the process of real convergence in the EU candidate and potential candidate countries (with the exception of Turkey) has been characterized by significant and widening current account deficits in the years before the global financial crisis of 2008. “The most significant common feature of the EE countries has been their growth strategy. Until the fall of 2008 it was conventional wisdom – and widespread practice – that the most appropriate sustainable growth (and catching-up) strategy for the small, open economies of EE is a rapid increase in their exports and investment, actively supported by sustained net capital inflows. This growth model and the implied catching-up process involved persistent current-account deficits.” (Marer - 2010, p. 10). Current account deficits in the analyzed EU candidate and potential candidate countries (Albania, Croatia¹, Macedonia, Serbia and Turkey) almost doubled on average, from 6.08% in 2005 to 12.64% of GDP in 2008. However, as depicted in Fig. 1 there are significant differences between the EU candidate and potential candidate countries. Over the period 2005-2008 Macedonia’s current account deficit rose six times, from 2.6 % of GDP to 12.8 % of GDP, while Croatia's and Turkey's current account deficits increased relatively moderate, from 5.6% and 4.6% to 8.8% and 5.5% of GDP, respectively. The EU potential candidate countries, Serbia and Albania exhibited higher current account deficits compared to their average economic growth. In the analyzed period, Serbia increased its current account deficit for 136%, and Albania’s external deficit rose from 8.9% of GDP in 2005 to 15.5 % of GDP in 2008.

Figure. 1 Current account balances in percent of GDP in the EU candidate and potential candidate countries in the period 2005-2015



Source: The Bank of Albania, Croatian National Bank, National Bank of the Republic of Macedonia, National Bank of Serbia and Central Bank of the Republic of Turkey

¹ Croatia

The two most important driving forces behind the widening of the trade and current account deficits in the above analyzed countries in the years before the global financial crisis were a steady decline of gross savings rate, on one hand and an increase of investment ratio, on the other hand.

The global economic and financial crisis of 2008 hit the EU candidate and pre-accession countries mainly during the fourth quarter of 2008 and the first quarter of 2009 via three channels: foreign trade, foreign direct investments (FDI) and remittance inflows. As a result of larger import base, lower volume of foreign trade contributed to reduction of current account deficits in the EU candidate and potential candidate countries, with exception of Albania, where the current account deficit increased by more than half compared to 2007 as a result of high imports for public infrastructure investments. However, during the second and third quarter of 2009, exports recovered in the EU candidate and pre-accession countries due to the improved external demand, and imports declined significantly. Consequently, trade deficits in the EU candidate and potential candidate countries dropped from around 22% of GDP on average at the end of 2008 to 18% at the end of 2009. The reduced trade deficits led to further improvement of the current account imbalances in the EU candidate and pre-accession countries. At the end of 2009 the current account deficit in Turkey narrowed down to 2.2% of GDP, in Croatia to 5.1% of GDP, in Macedonia to 6.7% of GDP and in Serbia to 7.4% of GDP. Only Albania recorded a high, two-digit current account deficit of 15.2% of GDP.

Current account balances continued to improve in the first quarter of 2010, triggered by better exports. In Croatia and Macedonia the current account deficits declined significantly, from 5.1% of GDP in 2009 to 1.1% of GDP in 2010 and from 6.7% to 2.2% of GDP, respectively. In 2010 external deficits generally moderated in Serbia and Albania. On the contrary, as a result of significantly increased imports and a widening of the trade deficit to 7.8% of GDP, Turkey's current account deficit roughly tripled in 2010 compared to 2009. The long standing current account deficit in Croatia hardly improved in 2011 (0.7% of GDP), and in Macedonia the current account deficit deteriorated to a limited extent (2.9% of GDP). Albania and Serbia recorded moderate worsening of their external imbalances. However, stronger deteriorations occurred in Turkey. Turkey's current account deficit practically doubled over one year, reaching 9.6% of GDP in 2011.

External imbalances continued to improve in 2012 in all EU candidate and potential candidate countries, except in Serbia and Macedonia, where the current account deficits widened respectively to 11.6% of GDP and 3.2% of GDP, mostly driven by a widening of the trade deficits. The achieved adjustment of external imbalances during 2012, continued to improve strongly in 2013. Particularly impressive was the improvement of Serbia's current deficit which was halved to 6.1% of GDP mainly due to very strong exports performance. While in Turkey and

Albania the current account deficits widened to respectively 7.7% of GDP and 10.9% of GDP, the current account deficit in Macedonia narrowed thanks to improved export performance and low domestic demand and imports. Croatia ended 2013 with a current account surplus of 1 % of GDP.

The end of 2014 brought an improvement in exports and a reduction in the current account deficit in Macedonia and Serbia. In Turkey, as a result of stronger exports and declining imports, especially of gold, the current account deficit has gradually declined from 7.7% of GDP in 2013 to 5.5% of GDP in 2014. The current account surplus recorded in the newest EU member state-Croatia in 2013, remained stable during 2014, as a result of better exports and lower prices of merchandise imports. On the contrary, Albania's current account deficit widened further, reaching 12.9% of GDP.

External imbalances, reflected in large trade deficits (above 20% of GDP) and persistent current account deficits remained a key challenge for the EU candidate countries in 2015. Macedonia's current account deficit worsened, from 0.8% of GDP in 2014 to 1.4% of GDP in 2015. In Turkey, current account deficit decreased further in 2015 to 4.5% of GDP mainly as a result of the oil price decline. Albania recorded a reduction in the current account deficit to 11.2% of GDP compared to 12.9% in 2014. Serbia's e current account deficit decreased to 4.8% of GDP, as a result improved services balance and higher net transfers. Contrary to the EU candidate countries, the EU member state - Croatia recorded the highest in its history current account surplus (5.2% of GDP), mainly as a result of high tourism income, import compression and lower energy import costs.

As reviewed above, the analyzed EU candidate and potential candidate countries have permanently run current account deficits in the years before, during and after the global financial crisis of 2008, raising issues about their sustainability. Therefore it is of vital importance to investigate the determinants of these imbalances.

3. The Empirical Frameworks

We estimate a model using balanced panel data for five EU candidate and potential candidate countries (Albania, Croatia, Macedonia, Serbia and Turkey) that are selected on the basis of availability of actual quarterly data for the investigated determinants of current account balances in the period 2005 Q1 to 2015 Q4. Data are obtained from various sources, mainly from the central banks and state statistical offices of the sample countries, but also from the EUROSTAT database, the World Bank Development Indicators (WDI) and the United Nations Economic Commission for Europe.

The estimated model is as follows:

$$CAB_{it} = X_{it}\beta + u_{it} \quad (1)$$

where the dependent variable is a vector of quarterly current account balances (CAB), expressed as a share of gross domestic product (GDP) for every country in the sample, and X is a set of eleven independent variables: persistency (CABit-1) expressed as the lagged current account balance, lagged fiscal balance in relation to GDP (BUDGET), lagged domestic investment (GFCF) expressed as gross capital formation in per cent of GDP, real GDP growth rate (GDPGROWTH) measured by a real GDP growth rate, relative income (RELGDP) expressed as a difference between real GDP per capita in the individual EU candidate and potential candidate countries and GDP per capita in the reference countries (EU-28), initial level of net foreign assets (NFA) as a share of GDP, crude oil trade balance in per cent of GDP (OIL), trade integration (OPENESS) expressed a ratio of total exports and imports of goods and services to GDP, lagged foreign direct investment (FDI) measured as net inflows of foreign direct investment in per cent of GDP, financial development (FINDEV) as a ratio of loans to private sector to GDP and a dummy variable (CC) expressing the status of the sample countries in the process of EU integration. The vector of coefficients (β) shows the sensitivity of the current account to these fundamental variables. Finally, we include a vector of standard error terms, denoted by u assumed to be independent and normally distributed. Table 1 represents the summary statistics of the concerned variables.

Panel unit root tests of the individual time series confirmed that all variables except NFA are stationary. Since our sample consists of heterogeneous countries in terms of different macroeconomic and political conditions, we are going to apply more sophisticated specifications than OLS estimation. Namely, we extend the benchmark OLS model by using special techniques, i.e. the fixed effects method or Least Squares Dummy Variable method (FEM), the random effects method (REM) and seemingly unrelated regression (SUR) method, having in mind that the panel data are characterized by group-wise heteroscedastic, contemporaneously and serially correlated residuals.

Table 1. Summary statistics

Variable description	EU candidate countries (5 countries, 220 quarterly observations)			
	Mean	Std. dev.	Skewness	Kurtosis
Fiscal balance as % of GDP (BUDGET)	-5.503173	11.26199	-3.512204	17.35445
Relative income (RELGDP)	-5021.335	892.8401	2.969612	25.33092
Foreign direct investment (FDI)	-1.822395	5.261531	0.239166	3.756504
Financial development (FINDEV)	1.579995	0.689795	0.630092	2.221326
Real economic growth (GDPGROWTH)	2.534278	4.024687	-0.420064	4.338176
Trade integration (OPENESS)	72.35211	21.79384	0.635246	2.186970
Domestic investment (GFCF)	23.74416	6.956098	0.317914	2.910576
Net foreign assets (NFA)	62.61345	57.58904	-0.374073	2.773607
Crude oil balance (OIL)	-2.968260	2.264935	-0.402955	2.370081
Current account balance (CAB)	-6.511910	8.633015	1.600186	7.173003

Source: Author's own calculations

The results from implementing fixed and random effects on cross-sections, periods and both cross-sections and periods as well as Feasible Generalized Least Squares (FGLS) or SUR are depicted in Table 2.

Table 2. Estimation results

VARIABLE	PANEL LS	FIXED CROSS SECTION EFFECT	FIXED PERIOD EFFECT	FIXED CROSS SEC- TION AND PERIOD EFFECT	RANDOM CROSS SEC- TION AND PERIOD EFFECT	FGLS
C	-1.193	-6.874	3.713	11.343	0.453	-0.098
CAB(-1)	0.034	0.062	0.115	0.039	0.059	0.410***
BUDGET (-1)	0.097 *	0.084	0.073	0.072	0.086	0.043*
GFCF(-3)	-0.114	-0.089	-0.157 *	-0.075	-0.129 *	-0.045
OPENNESS	0.248 ***	0.279 ***	0.211 ***	0.171 ***	0.233 ***	0.092***
D(NFA)	-0.019	-0.029	-0.124**	-0.091 *	-0.054	-0.003
RELGDP	0.002 **	0.001	0.002 **	0.000	0.002 **	0.001**
OIL	1.219 ***	0.691	0.877 **	-0.040	1.097 ***	0.457**
FDI(-1)	0.210 *	0.167	0.177	0.097	0.193 *	0.024
FINDEV	-3.860 ***	-6.0254 ***	-3.597 ***	-14.128 ***	-3.739 ***	-1.310**
GDPGROWTH	-0.331 ***	-0.417 ***	-0.263*	-0.232	-0.306 **	-0.158 ***
CC	0.076	-1.012	-0.610	-5.522 ***	-0.113	0.713

Source: Author's own calculations

In order to test if the fixed effects are redundant, we have employed the LR test. The results can be seen in Table 3.

Table 3. LR test for fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	6.271249	-4,149	0.0001
Cross-section Chi-square	31.897457	4	0.0000
Period F	2.57678	-40,149	0.0000
Period Chi-square	107.781891	40	0.0000
Cross-Section/Period F	2.541437	-44,149	0.0000
Cross-Section/Period Chi-square	114.778787	44	0.0000

Source: Author's own calculations

We can clearly see that according to the values of F statistics (6.271249; 2.57678 and 2.541437) there is a strong evidence of fixed cross section and period effects in the model, i.e. existence of only common intercept. This was expected since we are dealing with relative small number of countries. In order to see if there are random effects in the model we have estimated the model with random cross section and period effects. The results of Hausman test are given in Table 4.

Table 4. Correlated Random Effects - Hausman Test

<i>TEST CROSS-SECTION AND PERIOD RANDOM EFFECTS</i>				
TEST SUMMARY	CHI-SQ. STATISTIC	CHI-SQ. D.F.	PROB.	
CROSS-SECTION RANDOM	0.6506	11	1.000	
PERIOD RANDOM	11.4888	11	0.403	
CROSS-SECTION AND PERIOD RANDOM	14.7892	11	0.192	
<i>CROSS-SECTION RANDOM EFFECTS TEST COMPARISONS:</i>				
VARIABLE	FIXED	RANDOM	VAR (DIFF.)	PROB.
CAB(-1)	0.0894	0.0919	0.0004	0.9102
BUDGET(-1)	0.0704	0.0744	0.0002	0.8109
GFCF(-3)	-0.1232	-0.1300	0.0007	0.8001
OPENNESS	0.2160	0.2197	0.0003	0.8274
D(NFA)	-0.0834	-0.0849	0.0001	0.9150
RELGDP	0.0004	0.0005	0.0000	0.5793
OIL	0.2792	0.3079	0.0191	0.8360
FDI(-1)	0.1098	0.1037	0.0016	0.8776
FINDEV	-8.7291	-8.2075	0.5194	0.4693
GDPGROWTH	-0.3379	-0.3388	0.0017	0.9820
CC	-2.9467	-2.6855	0.3478	0.6579
<i>PERIOD RANDOM EFFECTS TEST COMPARISONS:</i>				
VARIABLE	FIXED	RANDOM	VAR(D IFF.)	PROB.
CAB(-1)	0.0577	0.0919	0.0020	0.4439
BUDGET(-1)	0.0795	0.0744	0.0005	0.8188
GFCF(-3)	-0.0984	-0.1300	0.0019	0.4684
OPENNESS	0.1851	0.2197	0.0004	0.0993
D(NFA)	-0.0975	-0.0849	0.0005	0.5831
RELGDP	0.0006	0.0006	0.0000	0.9957
OIL	0.0215	0.3079	0.0369	0.1359
FDI(-1)	0.0807	0.1037	0.0026	0.6544
FINDEV	- 12.3247	-8.2075	2.6357	0.0112
GDPGROWTH	-0.2509	-0.3388	0.0059	0.2507
CC	-4.6710	-2.6855	0.6999	0.0176

Source: Author's own calculations

The results of Hausman test indicate that we cannot reject the hypothesis that there are random cross-section and period effects and suggest employing a two-ways random individual effects model. Hausman test indicates that for all determinants the the random effects model (REM) provides a better specification. The results given in the last column of the Table 2 are the estimates obtained by implementing the SUR method which performs estimation by using Generalized Least Squares. The SUR method consists of applying two sequential transformations on the estimated model. The first transformation removes the serial correlation, while the second simultaneously corrects for contemporaneous correlation and heteroscedasticity. Since we have a small number of cross-sections, only five, we are not able to use the GMM method even we estimate a dynamic panel. Based on the obtained estimation results we find that seven of eleven parameters (in FGLS estimation) are significant at 10% level. The Wald test confirms the significant effect of the model as a whole, and the adjusted R2 amounts to 0.5.

Our empirical analysis shows that the lagged current account balance as a ratio to GDP has a positive and a statistically insignificant effect on the current account balance (except in FGLS model). The size of the obtained partial regression coefficient (0.03-0.408) suggest that the EU candidate and potential candidate countries faster adjust their current account imbalances. These results are in line with previous empirical findings (Zanghieri, 2004; Herrmann and Jochem, 2005). A lower level of current account persistence suggest that the EU candidate and potential candidate countries need less time to revert to their long-time means and therefore run current account imbalances (deficits or surpluses) in the short-term.

The central government budget balance (BUDGET) has a positive, but an insignificant effect on CAB in most of the estimated models (except in OLS and FGLS) thus supporting the “twin deficits” hypothesis and previous empirical findings (Herrmann and Jochem, 2005; Chinn and Ito, 2007; Urošević, Nedeljković and Zildžović, 2012). The small net effect of the budgets deficit cannot be attributed to its size which in some countries is almost equal to the level of the current account deficit, but more to the fact that budget deficits in the analyzed EU candidate and potential candidate countries are predominantly financed by private savings.

The partial regression coefficient of the domestic investment variable (GFCF) is as theoretically expected negative. The EU candidate and potential candidate countries show low (negative) partial correlation coefficients (between 0.045-0.157) confirming the extremely low degree of integration of their domestic economy with international capital markets which is opposite to the previous findings (Debelle and Faruqee, 1996; Bussière, Fratzscher and Muller, 2006).

The coefficient of the initial NFA position is negative, very small and mostly statistically insignificant. The much lower NFA position (or higher external indebtedness) of the EU candidate and potential candidate countries can be

interpreted as a signal for greater confidence of foreign investors in the future of these countries and higher dependence of their economies on foreign capital.

We find a positive and statistically significant relationship between relative per capita income (RELGDP) and the current account balance which is in line with the findings of Chinn and Prasad (2003), Herrmann and Jochem (2005), Bussière, Fratzscher and Muller (2006), Rahman (2008) and Urošević, Nedeljković and Zildžović, (2012). A per capita income of one per cent below the average of the EU-28 lowers the current account balance by approximately 0.02 to 0.2 percentage point. The rationale is that in the catching up process the EU candidate and potential candidate countries are assumed to grow faster than the EU-28 member states and are thus borrowing more money from abroad. The obtained result also confirms the stages of development hypothesis.

The financial development variable expressed as a ratio of private sector credit to GDP is one of the three most significant determinants of current account balance. We find that it is negatively and strongly affecting the current account balances in the EU candidate and potential candidate countries which is consistent with the results of previous empirical studies (Rahman, 2008; Cheung, Furceri and Rusticelli, 2013).

The variable trade integration (OPENESS) has a positive coefficient and is statistically significant at 1% level of significance in all estimated models. In fact, an increase in the ratio of exports and imports to GDP of one percentage point leads to a current account balance improvement of 0.09 to 0.28. Actually, the openness variable could be indicative of attributes such as liberalized trade, receptiveness to technology transfers, and the ability to service external debt through export earnings (Milesi-Ferretti and Razin, 1996). Thus, the results confirm that those EU candidate and potential candidate countries with greater exposure to international trade tend to be more export-orientated. These results are in line with the findings of Chinn and Prasad (2003) and Urošević, Nedeljković and Zildžović (2012).

As expected the crude oil trade balance has a positive and in four out of six models statistically significant impact on the CAB. The estimated coefficient implies that a 1 percentage point improvement in the oil balance ratio is associated with an increase in the CA balance of 0.21 to 0.32 percentage points of GDP.

The dummy variable for the EU candidate status turns out to be insignificant in all models and the coefficient is always negative which can be explained with the enlarged opportunities for borrowing from abroad that the EU candidate and potential candidate countries obtain as they near the full EU membership. This result is in line with Rahman (2008) that EU accession is expected to lower the CA balance through increased domestic absorption.

The sign of the FDI coefficient is positive but small, and only in two of the estimated models (REM and PLS) it shows a statistically significant effect on the CAB. A one percentage point increase in FDI ratio increases the CAB by 0.02 to

0.21 percentage point, implying a low import content of FDI, a large contribution to the existing capital stock, a large contribution to export industries and a low contribution to the production of domestic goods and services. This can be explained by the fact that in the EU candidate and potential candidate countries the FDI inflows have mostly been directed to export industries (Tiusanen, 2006).

The real GDP growth rate has in all models negative and high statistically significant effect on CAB. A one-percentage point rise in GDP growth leads to 0.16 to 0.42 percentage point rise in the current account deficit. The obtained result is consistent with the theory that domestic economic growth increases the demand for foreign goods and services and consequently worsens the current account balance as well as with the previous empirical findings (Chin and Prasad, 2003; Rahman, 2008; Urošević, Nedeljković and Zildžović, 2012) that real GDP growth negatively affects the current account balance.

4. Conclusion

The purpose of our paper is to investigate the determinants of current account imbalances in the EU candidate and potential candidate countries as a group of countries. To achieve this objective we employ panel regression techniques and use actual quarterly data for the period 2005 Q1 to 2015 Q4.

The obtained results for all observed five countries (Albania, Croatia, Macedonia, Serbia and Turkey) suggest that the estimated models perform quite well in describing the current account developments in the EU candidate and potential candidate countries over the last decade. Our findings, which are in line with the results of previous theoretical and empirical literature, confirm that the current account imbalances of the EU candidate and potential candidate countries are mainly determined by the level of economic development i.e. by the real GDP growth rate and the degree of trade openness. Relative per capita income, crude oil trade balance and the level of financial development also have a significant impact on the current account balances of these countries. It is expected that further economic and financial development of the EU candidate and potential candidate countries would encourage domestic saving and contribute to improvement of their current account positions. Interestingly, the status of the observed country (an EU candidate or a potential candidate country) does not have any effect on its current account deficit.

References

- Albanian Institute of Statistics (2017). www.instat.gov.al (Accessed April 11, 2017).
Aristovnik, A. (2006). Current Account Sustainability In Selected Transition Countries. William Davidson Institute Working Papers Series wp844: William Davidson Institute at the University of Michigan.

- Bussière, M., Fratzscher, M. and Muller, G. J. (2006). Current Account Dynamics in OECD and New EU Member States: An Intertemporal Approach. *Journal of Economic Integration*, 21, 593-618.
- Central Bank of the Republic of Turkey (2017). www.tcmb.gov.tr (Accessed March 22, 2017).
- Cheung, C., Furceri, D. and Rusticelli, E. (2013). Structural and cyclical factors behind current account balances. *Review of International Economics* 21(5), 923-944.
- Croatian Bureau of Statistics (2017). www.dzs.hr (Accessed March 15, 2017).
- Croatian National Bank (2017). www.hnb.hr (Accessed March 15, 2017).
- Ghosh, A. R. and Ostry, J. (1995). The Current Account in Developing Countries: A Perspective from the Consumption-Smoothing Approach. *World Bank Economic Review* 9(2), 305-333.
- Herrmann, S. and Jochem, A. (2005). Determinants of Current Account Developments in the Central and East European EU Member States. *Deutsche Bundesbank Research Paper* 05-32.
- Milesi-Ferretti, G. M. and Razin, A. (1996). *Current Account Sustainability*. Princeton Studies in International Finance, No. 81: Princeton, New Jersey.
- National Bank of the Republic of Macedonia (2017). www.nbrm.mk (Accessed March 9, 2017).
- National Bank of Serbia (2017). www.nbs.rs (Accessed April 4, 2017).
- Obstfeld, M. and Rogoff, K. S. (1995). The Intertemporal Approach to the Current Account. In: Obstfeld, M. and Rogoff, K. S. (Eds.), *Handbook of International Economics*, Vol. III, Ch. 24. Amsterdam: Elsevier.
- Rahman, J. (2008). Current Account Developments in New Member States of the European Union. *International Monetary Fund Working Paper* 92.
- State Statistical Office of the Republic of Macedonia (2017). www.stat.gov.mk (Accessed March 9, 2017).
- Statistical Office of the Republic of Serbia (2017). www.stat.gov.rs (Accessed April 7, 2017).
- The Bank of Albania (2017). www.bankofalbania.org (Accessed April 12, 2017).
- The Eurostat Database (2017). ec.europa.eu/eurostat/data/database (Accessed March 7, 2017).
- The World Bank Data (2017). data.worldbank.org (Accessed March 7, 2017).
- Tiusanen, T. (2006). *Foreign Investors in Transition Economies: Cases in Manufacturing and Services*. Lappeenranta University of Technology Northern Dimension Research Centre (Finland), Publication No. 27.
- Turkish Statistical Institute (2017). www.turkstat.gov.tr (Accessed March 23, 2017).
- Urošević, B., Nedeljković, M. and Zildžović, E. (2012). Jackknife Model Averaging of the Current Account Determinants. *Panoeconomicus*, 59(3), 267-281.
- Zanghieri, P. (2004). *Current Accounts Dynamics in New EU Members: Sustainability and Policy Issues*. Centre d'Etudes Prospectives et d'Informations Internationales (CEPII) Working Paper 2004-07.

DEFICITI PLATNOG BILANSA U ZEMLJAMA KANDIDATIMA ZA ULAZAK U EU I POTENCIJALNIM KANDIDATIMA: PANEL ANALIZA

Apstrakt: Ovaj rad predstavlja empirijsko istraživanje o velikom broju potencijalno značajnih determinanti deficita platnog bilansa u pet zemalja kandidata i potencijalnih kandidata za članstvo u EU (Albanija, Hrvatska,

Makedonija, Srbija i Turska) u periodu 2005 Q1-2015 Q4. Koristeći tehnike panelne regresije utvrdili smo da su neravnoteže platnog bilansa u zemljama kandidatima za članstvo u EU i potencijalnim kandidatima uglavnom određene realnom stopom rasta BDP-a i stepenom trgovinske integracije. Ostali faktori koji imaju značajan uticaj na balanse platnog balansa uključuju relativan prihod po glavi stanovnika, trgovinski bilans nafte i nivo finansijskog razvoja. Zanimljivo je da status posmatrane zemlje (kandidata ili potencijalnog kandidata za članstvo u EU) ne utiče na balans platnog bilansa. Očekuje se da će dalji ekonomski i finansijski razvoj kandidata za članstvo u EU i pretpristup podstaći domaću štednju i doprineti poboljšanju pozicija u platnom bilansu.

Ključne reči: deficit platnog bilansa, determinante platnog bilansa, zemlje kandidati i potencijalni kandidati za EU, tehnike regresije panela.

Authors' biography

Vesna Bucevska is a full-time professor at the Faculty of Economics, University "Ss. Cyril and Methodius" in Skopje. She teaches Econometrics, Econometric Theory, Advanced Econometrics, Financial Econometrics and Statistical Quality Control at undergraduate, graduate and doctoral level. Since 2013 she is Vice-Dean for Science and International Cooperation at the Faculty of Economics.

In her tenure Vesna Bucevska has been professionally trained at the Institute of Quantitative Research of the University of Bocconi, University of Cambridge, University Carlos III Madrid, University Roma Tre, Ludwig Maximilian University of Munich etc. She published more than 100 scientific-research papers in international scientific journals and is a member of the Statistical Council of the Republic of Macedonia. Since 2013, she is an Editor-in-chief of the international scientific journal "Journal of Contemporary Economic and Business Issues" published by the Faculty of Economics-Skopje.