

## Evaluation of the determinants of growing current account deficit

Lina Garšvienė<sup>1</sup>, Mindaugas Butkus<sup>2</sup>

<sup>1</sup> Šiaulių Universitetas, Vilniaus Str. 88, LT-76285 Šiauliai

lina.garsviene@splius.lt

<sup>2</sup> Šiaulių Universitetas, Vilniaus Str. 88, LT-76285 Šiauliai

mindaugo.butkaus@gmail.com

### Abstract

The objective of the paper is to identify and generalize the factors determining the growth of current account deficit and select the periods of growing current account deficit and evaluate their determinants. The results of the analysis confirmed the growing current account deficit reaching from 3% to 30% of GDP in different developing and developed countries. The results showed that growing current account deficit is strongly determined by domestic demand and market prices; however, other factors such as national openness, international movement of capital, and the condition of world market have no significant impact.

**Keywords:** growing current account deficit, determinants, logistic regression.

### Introduction

Due to the increasingly intensive trade and reallocation of financial resources, when countries are becoming more integrated, more favourable conditions are formed for the decrease of current account deficit in the countries. However, in the course of these processes conditioning the growth of competition among the countries, the amounts of deficit evaluating the last decade did not decrease; on the contrary they grew. Global current account deficit as a ratio with GDP in 1980-2010 increased more than 200%<sup>1</sup>. The problem of growing current account deficit is encountered not only by developing countries but also by the developed ones and evaluating the last decade, their average annual amounts reached the level of 20 % from GDP or even more (Iceland – 15,7%, Malta – 9,9%, the USA – 6%, Lithuania – 11%, Bulgaria – 25,2%, and Latvia – 22,4% from GDP). In the countries the growing current account deficit is considered as a sign of economic weakness which indicates certain problems of the changes of competitiveness in a country. In 2011 in the report of the IMF Independent evaluation department, the researchers named the problem of current account deficit as the

main reason of national economic instability. In the course of countries' integration into the world market, not only does the problem of growing current account deficit become especially important but also the evaluation of its risk with regard to economic growth. It is acknowledged that the risk of growing current account deficit to national economic growth might be explained by different reasons that have conditioned it. The current account deficit cannot be made absolute and we cannot state that the economy is weak, but the growing extents of current account deficit might cause negative consequences for the growth of national economy. The mentioned circumstances have determined that the problem of growing current account deficit of the countries in the last decade and the evaluation of its risk became a significant object of economic and political discussions. This is indicated by an increasing interest of international institutions – the World Bank, the European Central Bank, the Organisation for Economic Co-operation and Development, the International Monetary Fund – in the problem of the evaluation of growing current account deficit and the evaluation of its risk to the country. The importance of the problem of current account deficit at the international level is specified by a growing number of organised *international conferences emphasizing this problem* (in 2006 in Wisconsin, USA – “The Problem of the Risk of Current Account Deficit”; in 2006 in Dubrovnik, Croatia and in 2006 in Santiago, Chile – “The problem of the Financing of Current Account Deficit”; in 2006 in Santa Barbara, USA – “The Problem of the Adjustment of Current Account Deficit”; in 2008 in Wisconsin, USA – “Risk Problem”; in 2010 and in 2012 in Washington, D.C., USA “The Problem of Financial Crisis and Growing Current Account Deficit”), *periodical summit meetings* (the issues of consequences of growing current account balance for economy), *international forums* (OECD in 2005 and in 2011 regarding international trade

<sup>1</sup> Referring to the data provided by the World Bank database.

policy), and various *reports of world organisations* (annual reports of IMF, reports of OECD and ECB).

*Scientific question:* we can't evaluate the determinants of growing current account deficit if we do not carry out special periods for the research. As a consequence, the scientific problem which we try to solve in this article is revealed by the following question: what factors are significant for the growing current account deficit and how to evaluate the impact of these factors?

*The object of this article* – factors and determining growing current account deficit. *The aim of this article* – considering the results of empirical research, select and structure the determinants of current account deficit, and determine which of these impact growing current account deficit in the country. In order to achieve the formulated aim of the research, the following tasks of the article are being solved in the article: (1) Identify and generalize the factors determining the growth of current account deficit; (2) Select the periods of growing current account deficit and summarize their intensity; and (3) Identify the factors determining the growing current account deficit in the country.

### **Theoretical framework**

While solving the problem of the extents of growing current account deficit in the countries, it is important to evaluate what determines growing current account deficit. The relevance of the evaluation of this problem is substantiated by the conclusion presented in the project<sup>1</sup> "Evaluation of Current Account Deficit" by the Research Department of IMF in 2012 which indicates that up to now research determining the levels of risky current account deficit has not evaluated the reasons of growing current account deficit in the country. It is explained that the research determining risk levels of current account deficit for the evaluation does not select periods of increasing current account deficit which would allow for the determination of the reasons due to which countries exceed these determined risk levels of current account deficit. While identifying the factors that have determined growing current account deficit, the research carried out in this article contributes to the extent of growing current account deficit and solution of the issues regarding its risk. Taylor (2013) stated that the global financial crisis could be a result of external imbalances - the unprecedented current account deficits and surpluses in recent years, but

<sup>1</sup> "External Balance Assessment: A Successor to the CGER Methodology" A Project of the IMF Research Department, 2012, February.

he evaluated, that global imbalances have only a weak correlation with financial distress compared to indicators drawn from the financial system itself. The counterproductive situation is evaluated by Ca' Zorzi, Chudik, Dieppe, (2012) - current account imbalances are said to have been an important root cause of the recent financial turmoil. Considering the results of the growing scientific interest of possible growing current account deficit impact on the stability of the country, it is important to evaluate the determinants of this specific situation.

The research, which determined the factors of current account dynamics or deficit reversal, may be divided into two groups: research that explained the factors determining the current account imbalance and research that determined the factors which could explain the purposeful decrease of current account deficit. The research of the first group selects the long period sample for the evaluation of the impact of factors (Ang, Sek, 2011; Herwartz, Siedenburg, 2007; Ketenci, Idil, 2010; Barnes et al, 2010; Aristovnik, 2006; Chinn, Prasad, 2003; Ca'Zorzi et al, 2009; Gruber, Kamin, 2005; Stavrev, Decressin, 2009; Cheung et al, 2010; Jaumotte, Sodsriwiboon, 2010; Calderon et al, 2000) and usually affirm the significance of the factors of growth of the government's budget balance, national net foreign assets, oil prices and economy. The results of this research do not enable us to explain and foresee growing current account deficit since this phenomenon could be conditioned by other significant factors that determined a greater than usual amount and growth rate in the country. The other part of the research tried to determine which factors may explain the purposeful decrease of current account deficit. One of the aims of the research is to foresee due to what reasons the countries covering the great part of world trade (EOCD) experience these changes that are especially important in respect of other trading countries. It is argued that the purposeful decrease of current account deficit of these countries may influence the economies of all the countries in the world. In this research the methods of probability regression were applied when ascertaining the factors that determine the purposeful decrease of current account deficit (encoding one year). Some authors of this research evaluated and determined the changes of economic growth or value of national currency which are experienced by the countries after the purposeful decrease of current account deficit; however, they do not evaluate the growing current account deficit.

Further we show a table that summarizes the results of performed research, an assessment of

the specific factors that have been selected, and their significance to the current account deficit. It was observed that, in the empirical research of the determinants of current account deficit evaluation, all of these can be divided into two groups: studies that have chosen a long time panel data, and others selecting some appropriate lines or a year of the

current account balance. Therefore, further research was structured on the based mentioned principles.

Empirical research and analysis of the results showed that the majority of studies examine different groups of factors; the final results (direct, indirect or significant) also differ among researches. The difference of these results could be explained by the

Table 1

**Empirical research of the determinant of current account deficit**

	Determinants	<u>Intensity of national trade</u>				<u>Domestic demand</u>				<u>International capital movement</u>				<u>Country's openness</u>		<u>Market prices</u>			<u>Growth of national economy</u>		<u>State of world market</u>		COUNTRIES AND PERIODS					
		Intensity of current account deficit	Trade balance	Stability of current account deficit	Import growth	Consumption of private sector	Saving	Domestic investment	Consumption of government sector	Budget balance of government	Domestic credit for private sector	Domestic interest rate	Net external assets	Foreign debt, it's service	Net international reserves	Official foreign transfers	Country's trade openness	Financial openness	Price Level	Export and import price ratio	Real exchange rate	The real price of oil		GDP per capita	Growth of GDP	GDP gap between potential level	Growth of developed economies	Real interest rate of USA
Research, with selected periods with adjustments of current account deficit (explained and adjustments) (*)	Freund, Warnock, 2005	T*		T		T*		T			T					T												18 developed countries
	Edwards, 2004	T*							T		T	T	N															158 world countries
	Milesi-Ferretti, Razin, 1998	T*					T*, T		T, T*		N*		N*	T*	N				X,			T*	X			N*	Low and middle revenue countries	
	Corsetti, Pesenti, Roubini, 2001	T*																									-	
	Algieri, Bracke, 2007	T*			X				T, T*										X, T*					T*			22 developed 19 developing countries	
	Dabelle, Galati, 2005	T									N*								T*			T*		N*	N*		21 developed countries	
	Edwards, 2005	T*							T		T	N	N*						T*			T/T*					40 countries	
	Benhima, Havrylchyk, 2006	T*					N, N*	T					N		T							T*	T		N		145 developing countries	
	Adalet, Eichen-green, 2006	T*	T*						N, N*						T*							T/T*		N*	N		1880-1998 m. countries with CA adjustments	
	Lane, Milesi-Ferretti, 2011	T*									T																-	
	Liesenfeld, Moura, Jean-Francois, 2010	T						T	T				T*	N*	T				T*				T		N	N	60 low and middle revenue countries	
	Kang, J.Sh, Shambaugh, J. 2013		N*																								euro area periphery and the Baltics in the run-up to the crisis	

	Determi- nants	Intensity of national trade		Domestic demand				International capital move- ment				Coun- try's open- ness		Market prices			Growth of national economy		State of world market		COUNTRIES AND PERIODS						
		Intensity of current account deficit	Trade balance	Stability of current account deficit	Import growth	Consumption of private sector	Saving	Domestic investment	Consumption of government sector	Budget balance of government	Domestic credit for private sector	Domestic interest rate	Net external assets	Foreign debt, it's service	Net international reserves	Official foreign transfers	Country's trade openness	Financial openness	Price Level	Export and import price ratio		Real exchange rate	The real price of oil	GDP per capita	Growth of GDP	GDP gap between potential level	Growth of developed economies
Research, with no special periods of CAD adjustments (explained determinants of CAD (**))	Ang, Sek, 2011									X		X		T*		T*	T*	X	T*								5 deficit, 5 surplus c. (1973-2010)
	Herwartz, Siedenburg, 2007	T*							T*										T*	X			X	T*			16 OECD (1980-2004)
	Ketenci, Idil, 2010						T*	N*												T*							7 EU countries (1995-2008)
	Barnes et al., 2010									T	T*	N*			T*					T*	N*	X	T*				13 Euro zone (1969-2008)
	Aristovnik, 2006	T*								T			N*			N*			T*	T*		N*	T*		N		26 transitional economies (1992-2003)
	Chinn, Prasad, 2003									T*			N*			T* d-ing contr.	T* d-ing contr.						N*				18 developed, 71 developing countries (1971-1995)
	Ca'Zorzi et al., 2009											N*				T*	T*				T*	N*					63 developed, developing c. (1980-2006)
	Gruber, Kamin, 2005										T*		N*			T*					T*	N*	T				59 developed, developing c. (1982-2003)
	Stavrev, Decressin, 2009										T*		N*								T*	N*	T*				11 euro zone countries (1970-2007)
	Cheung et al., 2010											N*									T*	N*					30 OECD countries (1994-2008)
Jaumotte, Sodsriwiboon, 2010										T*		T*								T*	N*					49 developed, developing c. (1973-2008)	
Calderon et al., 2000																			T*	T*			T*	N*	N*	44 developing c. (1966-1995)	

T\* - significant direct effect of CAD (indicator increase, CAD increase)

N\* - significant indirect effect of CAD (indicator decrease, CAD increase)

T - insignificant direct effect of CAD (indicator increase, CAD increase)

N - insignificant indirect effect of CAD (indicator decrease, CAD increase)

X - insignificant or not ambiguous effect

(\*) - Research, with selected periods with adjustments of current account deficit (explained CAD adjustments)

(\*\*) - Research, with no special periods of CAD adjustments (explained determinants of CAD)

special period or because of selecting certain specific indicators, or their groups. Considering the evaluated results of current account deficit determinants in the next part in more detail, the selection of appropriate indicators and their expressions will be discussed.

### Research methodology

The next part of the article presents the methodology of the evaluation of the factors determining growing current account deficit in the country. Having generalized the results of

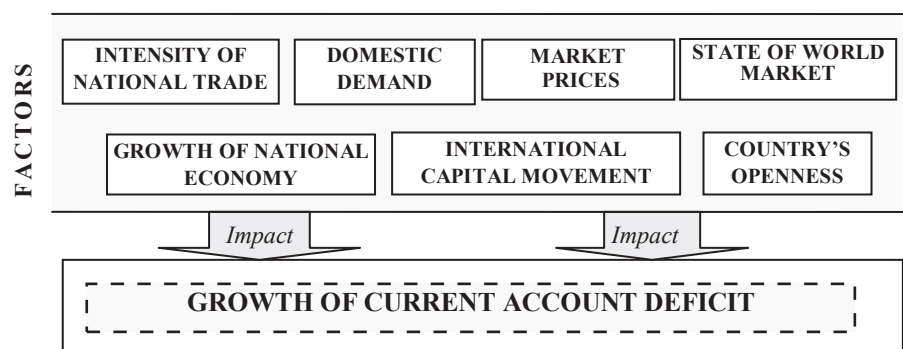


Fig. 1. Evaluation model of the factors determining growing current account deficit to the country

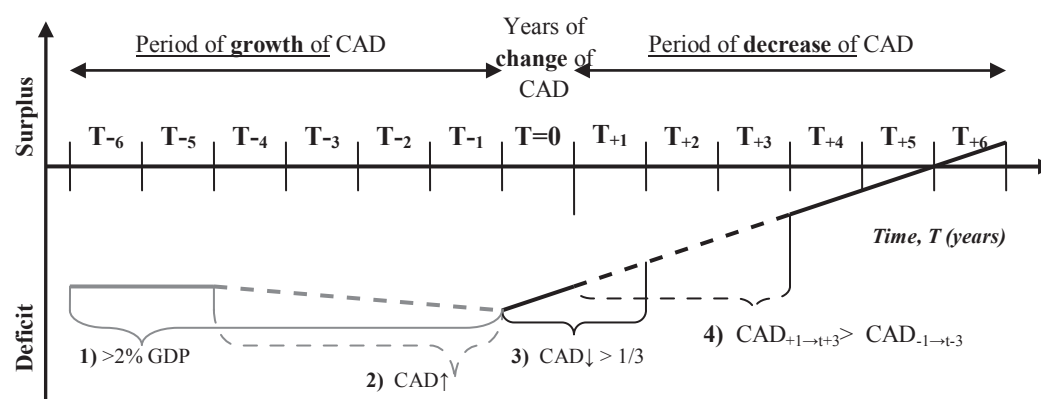


Fig. 2. Selection criteria and periods of the investigated period of current account deficit

theoretical and empirical researches, the model (Fig. 1) has been created that helps to determine the risk of growing current account deficit to the country in terms of the changes of economic growth in the country. Evaluation result of the risk of growing current account deficit to the country – the slowdown of national economic growth. With the help of the model we have tried to find out by what factors the purposefully determined growing current account deficit explains the result of the slowdown or non-slowdown of the national economic growth. Figure 1 illustrates the explanation of the risk of growing current account deficit to the country – the changes of slowdown or non-slowdown of economic growth in the country – by the factors determining it.

The created model extends the evaluation opportunities of the growth of current account deficit and risk factors (its growth) as well as solves problem issues that emerge while performing similar researches: (1) the model solves the problem of the evaluation of the impact of individual factors in the country of growing current account deficit; (2) the model integrates domestic demand and price factors and with their help evaluates and explains the risk

of growing current account deficit; (3) the model distinguishes the factors of the intensity of national trade, national economic growth, domestic demand, national openness, market prices, international movement of capital, and the condition of world market from the channels of their impact. The model of empirical evaluation of the factors determining the risk of growing current account deficit to the country is formed following the scheme discussed below.

*A reasoned research sample and selection criteria of the periods of growing current account deficit.* In this research the selection period 1980-2010 has been chosen due to the necessary greater number of investigated cases of growing current account deficit. It is important to mention that because of the chosen 13-year period, that includes intensive current account deficit growth and decrease, the period on some cases seeks until 2013. The period of 1980-2010 only illustrates the situation of the searched purposefully growing current account deficit, but the empirical research includes 2013 data. Referring to the fact that growing current account deficit is a problem not only of developing countries, in the work we are investigating European countries as

well as the countries of other geographical regions<sup>1</sup> that purposefully growing current account deficit was characteristic to. In the work we have disassociated from the countries<sup>2</sup> of low income and the countries where a greater part of trade is composed by oil and other excavation' exports.

Following the selection criteria of research periods selected by IMF and other researchers, the period of 13 years (T-6; T+6) has been selected (fig. 2).

The selection of the periods of growing current account in the countries carried out in this article refers to the following criteria: (1) CAD makes more than 2 % from GDP and exceeds the value of their determined change tendency during the period 1980-2010; (2) for the 3-4 years CAD is decisively growing; (3) after its growth period the value of CAD decreased more than 1/3 of its amount in two years (and more than 2% of GDP per year); (4) during the period of its decrease the value of CAD did not exceed its value during the growth period (for three years).

*The selected and verified factors and indicators reflecting them and their expressions.* In order to foresee the factors significant to purposefully growing CAD, its periods (t=1, ...13;) are divided into separate periods t→t+s referring to its growth and decrease. The expression  $cad_{j,t \rightarrow t+s}$  indicates to which period – growth or decrease of CAD – country “j” is ascribed to during the period t→t+s. The dependent variable  $cad_{t \rightarrow t+s}$  has a double meaning; i.e., it is encoded either as 1 or 0. The periods of investigations are divided into the periods of CAD growth ( $cad_{t \rightarrow t+s} = 1$ ) and decrease ( $cad_{t \rightarrow t+s} = 0$ ). The factors of intensity of national trade, domestic demand, and international movement of capital, market prices and the condition of the world market have been selected for the dissertation's empirical evaluation as well as the indicators reflecting them. A model of evaluation of the factors determining the risk of growing current account deficit to the country has been composed which is presented in a generalized form:

$$P(cad = 1) = f(\Delta imp; \Delta con; \Delta inv; \Delta cred; \Delta inrate; \Delta reer; \Delta oil; \Delta nfa; \Delta ebpogr)$$

$\Delta imp_{j,t \rightarrow t+s}$  measures the reversal of import of production and services of a country “j” during the period t→t+s.

$\Delta con_{j,t \rightarrow t+s}$  measures the reversal of household consumption of a country “j” during the period t→t+s.

<sup>1</sup> Except African countries, as according to GDP the countries of African region are 3.5 times lower than the average developed countries and opportunities of their international trade greatly differ from other countries of the world.

<sup>2</sup> Referring to the classification of the World Bank.

$\Delta inv_{j,t \rightarrow t+s}$  measures the reversal of domestic investment of a country “j” during the period t→t+s.

$\Delta inrate_{j,t \rightarrow t+s}$  measures the reversal of actual interest rate of a country “j” during the period t→t+s.

$\Delta cred_{j,t \rightarrow t+s}$  measures the reversal of the credit for household sector of a country “j” during the period t→t+s.

$\Delta reer_{j,t \rightarrow t+s}$  measures the reversal of actual effective exchange rate of a country “j” during the period t→t+s.

$\Delta oil_{j,t \rightarrow t+s}$  measures the reversal of oil prices during the period t→t+s.

$\Delta nfa_{j,t \rightarrow t+s}$  measures the reversal of absolute foreign assets of a country “j” during the period t→t+s.

$\Delta ebpogr_{j,t \rightarrow t+s}$  measures the reversal of national economic growth of OECD during the period t→t+s.

Research hypothesis have been formulated and causal relations foreseen in them have been verified. In the article the hypothesis H1-H5 has been formulated explaining the impact of separate factors upon the growing current account deficit.

H1: The factor of trade intensity determines growing current account deficit in the country and they are related by a direct dependence ( $f_{\Delta imp} > 0$ ).

H2: The factor of domestic demand determines growing current account deficit in the country.

H2.1: The growth of household consumption determines growing current account deficit in the country and they are related by a direct dependence ( $f_{\Delta con} > 0$ ).

H2.2: The growth of general domestic investment determines growing current account deficit in the country and they are related by a direct dependence ( $f_{\Delta inv} > 0$ ).

H2.3: The increase of credit for a private sector determines growing current account deficit in the country and they are related by a direct dependence ( $f_{\Delta cred} > 0$ ).

H2.4: The decrease of actual interest rate determines growing current account deficit in the country and they are related by a reverse dependence ( $f_{\Delta inrate} < 0$ ).

H3: The factor of market prices determines growing current account deficit in the country.

H3.1: The increase of actual effective exchange rate determines growing current account deficit in the country ( $f_{\Delta reer} > 0$ ).

H3.2: The decrease of oil prices determines growing current account deficit in the country ( $f_{\Delta oil} < 0$ ).

H4: The factor of international capital movement determines growing current account deficit in the country and they are related by a reverse dependence ( $f_{\Delta nfa} < 0$ ) (1).

H5: The factor of the condition of world market determines growing current account deficit in the country and they are related by a reverse dependence ( $f_{\Delta ebpogr} < 0$ ) (1).

The model of empirical evaluation of the factors determining the risk of growing current account deficit to the country has been composed (Fig.3).

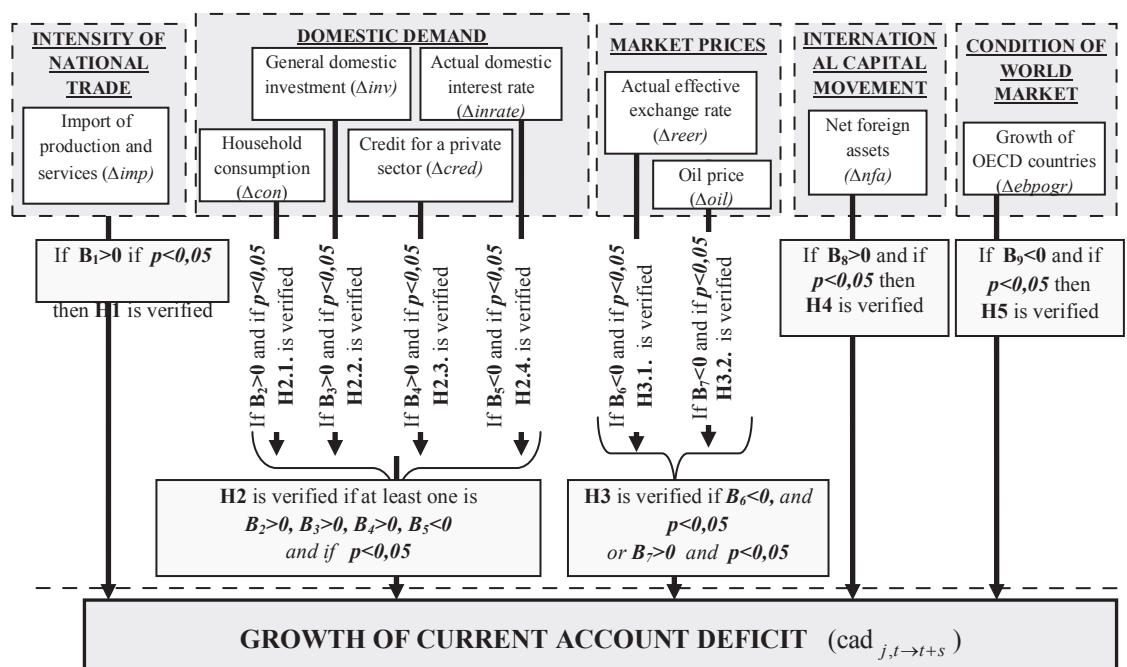


Fig. 3. The model of empirical evaluation of the factors determining growing current account deficit

The method of logistic regression is applied in the dissertation which evaluates the result – periods of growth and decrease of purposefully growing current account deficit. The model of logistic regression may be presented as follows:

$$P(\text{cad}_{t \rightarrow t+s} = 1) = \frac{e^{Z(X)}}{1 + e^{Z(X)}}; \text{ here: } e = 2,718;$$

$$Z(X) = \beta_0 + \beta_1 X_1 + \dots + \beta_k X_k;$$

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9$  – values of constant of logistic regression.

### Research results

The performed analysis of intensity and distribution of growing current account deficit in the investigated countries showed that during 1980-2010 the level of global current account deficit increased more than 200 % (up to 3% of world GDP). 43 periods of

Table 2

### Structural distribution of research sample according to the dependence of countries to European or other geographical regions or their level of development.

Periods	1980-1989	1990-1999	2000-2010	Totally:
<b>Regions *</b>	<b>Number of periods of selected growing CAD</b>			
<b>EUROPE</b>				
<b>Totally:</b>	<b>5</b>	<b>11</b>	<b>12</b>	<b>28</b>
<b>Developed countries</b>	CYP 86–7,51%, GRC 86–7,26%, DNK 87–6,03%, NOR 89–4,02%	GRC 91–3,8%, GBR 91–3,7%, FIN 93–4,6%, ISL 93–2,3%, ITA 93–2,6%, ESP 93–3,4%, SWE 93–2,7%	ISL 01–0,13%, CZE 05–5,1%, ISL 07–15,7%, MLT 07–9,9%, SVK 07–7,85%	16
<b>Developing countries</b>	POL 89 - 11,1%	BGR 94–24,1%, MKD 99–8,6%, MDA 99–19,7%, ROM 99–6,8%	LVA 00–8,9%, LTU 00–10,8%, HUN 01–8,6%, BGR 08–25,2%, EST 08–15,9%, LVA 08–22,4%, ROM 08–13,4%	12
<b>OTHER REGIONS *</b>				
<b>Totally:</b>	<b>1</b>	<b>7</b>	<b>7</b>	<b>15</b>
<b>Developed countries</b>	USA 88 - 3,39%	ISR 97–4,92%, CAN 94–3,86%	AUS 08–6,19%, USA 07–5,99%	5
<b>Developing countries</b>		ARM 99–22,1%, MEX 95–5,7%, PNG 90–9,9%, CHL 99–4,7%, BHS 99–18,6%	MWI 07–11,2%, ATG 08–30,6%, GRD 08–26,6%, LCK 08–32,4%, BRA 02–4,1%	10
<b>Totally:</b>	<b>6</b>	<b>18</b>	<b>19</b>	<b>43</b>

\* - other regions: Asia, North and South America, Africa, Oceania, Central America, the Caribbean, Middle East

purposefully growing CAD in respective countries have been selected for the research whose distribution during 1980-2010 is presented in Table 2.

In Table 2 it is obvious that the problem of growing current account deficit is encountered by both the developed countries (21) and the developing ones (22). During 1986-2008 the value of current account deficit of different countries from GDP reaches from 3% to 30%. Around 37% of the entire sample is composed by the countries where the deficit reached 2-5%, 30% for countries whose amount of deficit reached 6-10% from GDP. The remaining part (33%) of the entire sample was composed by the countries that during the investigated period encountered higher than 11% (up to 30) of current account deficit from GDP. The analysis of intensity of current account deficit revealed that during the periods selected for the research current account deficit from GDP during the period of growth increased on average by 6,46%. During the selected periods, current account deficit grew on average around 52,66% per year. Thirty-six percent of the selected countries encountered a

more rapid than average pace of the growth of current account deficit that exceeds 100%.

Generalising the results of empirical evaluation in general research group, we may state that domestic consumption and the reversal of competitiveness due to the prices in comparison with the changes of currency value of its main partners have the strongest direct impact on growing current account deficit in the countries. The determined insignificant impact of the variables of OECD countries economic growth, net foreign assets, and oil prices verifies that growing current account deficit is not a result of the external environment but more a result of the country's internal environment and its competitiveness among the countries.

Summarizing the results (Table 3) of performed empirical evaluation of the factors determining growing current account deficit, we may state that growing current account deficit is strongly determined by domestic demand and market prices; otherwise such factors as national openness, international movement of capital as well as the condition of world market have no significant impact.

Table 3

**Analysis of research hypotheses: results of evaluation of factor impact of growing CAD**

Tested hypothesis (sub-hypothesis)	Accepted/ rejected	Models' coefficients	
		B	Exp (B)
<b>H1:</b> The factor of trade intensity determines growing current account deficit in the country and they are related by a direct dependence ( $f_{\Delta imp} > 0; B_1 > 0$ , and $p < 0,05$ )	Accepted	<b>6,13*</b>	2,61
<b>H2:</b> The factor of domestic demand determines growing current account deficit in the country	Accepted	$B_2 > 0; B_3 > 0, B_4 > 0$ , and $p < 0,05$	
<b>H2.1:</b> Growth of household consumption determines growing current account deficit in the country and they are related by a direct dependence ( $f_{\Delta con} > 0; B_2 > 0$ , and $p < 0,05$ )	Accepted	<b>5,26*</b>	1,93
<b>H2.2:</b> Investment of general domestic investment determines growing current account deficit in the country and they are related by a direct dependence ( $f_{\Delta inv} > 0; B_3 > 0$ , and $p < 0,05$ )	Accepted	<b>2,21*</b>	1,09
<b>H2.3:</b> Growth of the credit for a private sector determines growing current account deficit in the country and they are related by a direct dependence ( $f_{\Delta cred} > 0; B_4 > 0$ , and $p < 0,05$ )	Accepted	<b>2,36*</b>	1,11
<b>H2.4:</b> Decrease of actual domestic interest rate determines growing current account deficit in the country and they are related by a reverse dependence ( $f_{\Delta irate} < 0; B_5 < 0$ , and $p < 0,05$ )	Rejected	<b>0,018*</b>	1,01
<b>H3:</b> The factor of market prices determines growing current account deficit in the country	Accepted	$B_6 > 0$ and $p < 0,05$	
<b>H3.1:</b> Growth of actual effective exchange rate determines growing current account deficit in the country ( $f_{\Delta aver} > 0; B_6 > 0$ and $p < 0,05$ )	Accepted	<b>4,38*</b>	1,79
<b>H3.2:</b> Decrease of oil prices determines growing current account deficit in the country ( $f_{\Delta oil} < 0; B_7 < 0$ , and $p < 0,05$ )	Rejected	-0,66	-
<b>H4:</b> The factor of international capital movement determines growing current account deficit in the country and they are related by a reverse dependence ( $f_{\Delta nfa} < 0; B_8 < 0$ , and $p < 0,05$ )	Rejected	-0,013	-
<b>H5:</b> The factor of the condition of world market determines growing current account deficit in the country and they are related by a reverse dependence ( $f_{\Delta ebpogr} < 0; B_9 < 0$ , and $p < 0,05$ )	Rejected	0,030	-

\* - coefficient is statistically significant when the level of significance is 95%.



This also suggests that the growing current account deficit is the result of a domestic capacity to control its sector demand, while price competition in the international market. We reject the theoretical idea that the current account deficit could be a result of any external situation.

## Conclusions

It is necessary to emphasize that the situation of growing current account deficit in economy shows that the country spends more when buying production and services from foreign countries than is able to sell for its production and services overseas. The fact that the state gives more revenues to foreign countries rather than attracts to itself determines the situation due to which the level of national internal revenues decreases.

Having performed the analysis of the identification of the factors of current account deficit, it has been determined that various scientific literary sources present a rather wide spectrum of the factors interpreting current account deficit. The obtained results of the significance and impact tendency of the factors and indicators reflecting them differ. In this article, referring to the analysis of the factors determining current account deficit, we have distinguished the following factors: the intensity of national trade, domestic demand, international capital movement, country's openness, market prices, the growth of national economy, and the condition of the world market. The performed analysis of the generalization of empirical results has shown that the research investigates separate factors or their groups and the obtained results are ambiguous due to the sample and the period of the research as well as the impact of the evaluated specific factors.

The performed analysis of the intensity and distribution of growing current account deficit in the investigated countries showed that during 1980-2010 the level of global current account deficit increased more than 200% (up to 3% of world GDP). During 1986-2008 the value of current account deficit of different countries from GDP ranged from 3% to 30%. During the selected periods, current account deficit grew on average around 52,6% per year. Thirty-six percent of the selected countries encountered a more rapid than average pace of the growth of current account deficit that exceeds 100%.

Generalizing the results of empirical evaluation, we may state that domestic consumption and the reversal of competitiveness due to the prices in comparison with the changes of currency value of its main partners have the strongest direct impact upon growing current account deficit in the countries. Thus, we can state that the main reason for the current account deficit

fluctuation among their targeted trend is strongly determined by domestic consumption changes and price competitiveness among its main partners.

The determined insignificant impact of the variables of OECD countries' economic growth, net foreign assets and oil prices verifies that growing current account deficit is not a result of the external environment.

We can mention several reasons of the insignificance of these determinants. First of all, the analyzed empirical studies released a stronger impact in the investigation of 20-30 years, rather than the assessment of a specific current account deficit periods. It can also be explained by the stronger impact of the other factors determining the intensive growth of current account deficit in the country.

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Garšvienė, L., Butkus, M.

## **Einamosios sąskaitos deficito augimą lemiančių veiksnių, vertinimas**

### Santrauka

Sprendžiant augančio einamosios sąskaitos deficito šalyse masto problemą, svarbu įvertinti, kas jį lemia. Šios problemos vertinimo aktualumą pagrindžia TVF Tyrimų skyriaus 2012 m. Einamosios sąskaitos deficito vertinimo projekte pateikiama išvada, jog iki šiol tyrimuose, kuriais siekta nustatyti šaliai rizikingo einamosios sąskaitos deficito lygius, nevertinamos augančio einamosios sąskaitos deficito šalyje priežastys.

Tyrimai, kuriuose vertinant veiksnių poveikį einamosios sąskaitos deficitui pasirinkta ilgojo laikotarpio imtis, dažniausiai patvirtina vyriausybės biudžeto balanso, šalies grynojo užsienio turto, naftos kainų ir ekonomikos augimo veiksnių reikšmingumą. Šių tyrimų rezultatai neleidžia paaiškinti ir numatyti augančio einamosios sąskaitos deficito, nes šis reiškinys gali būti kitų reikšmingų veiksnių, lėmusių didesnę nei įprastai jo dydį ar augimo tempą šalyje, priežastis.

Atsižvelgiant į nurodytus augančio einamosios sąskaitos deficito tyrimų ribotumus, straipsnyje formuluojamas *probleminis klausimas*: kokie veiksniai lemia augantį einamosios sąskaitos deficitą ir kaip įvertinti jų poveikį. Akcentuojant aptartą mokslinę problemą, apibrėžiamas *tyrimo objektas* – veiksniai, lemiantys augantį einamosios sąskaitos deficitą. *Tyrimo tikslas* – atrinkti ir susisteminti tyrimų, kuriuose vertinti einamosios sąskaitos deficito veiksniai, rezultatus ir nustatyti, kurie iš jų lemia augantį

einamosios sąskaitos deficitą šalyje. Siekiant iškelto tyrimo tikslo, straipsnyje sprendžiami šie *tyrimo uždaviniai*: 1) atlikti einamosios sąskaitos deficito mokslinių tyrimų analizę; 2) atlikti einamosios sąskaitos deficito augimo intensyvumo tiriamais laikotarpiais vertinimą; 3) identifikuoti einamosios sąskaitos deficito augimą šalyje lemiančius veiksniai.

Mokslinių tyrimų analizė atskleidė, kad mokslinėje literatūroje pateikiamas gana platus einamosios sąskaitos deficitą paaiškinančių veiksnių spektras. Gauti veiksnių ir juos atspindinčių rodiklių reikšmingumo ir poveikio krypties rezultatai skiriasi. Per analizę identifikuoti šie veiksniai: *šalies prekybos intensyvumas, vidaus paklausa, tarptautinis kapitalo judėjimas, šalies atvirumas, rinkos kainos, šalies ekonomikos augimas ir pasaulinės rinkos būklė*.

Išsivysčiusiose ir besivystančiose šalyse 1986–2008 m. laikotarpiu augančio einamosios sąskaitos deficito dydis sudaro nuo 3 iki 30 % BVP. Apie 37 % visos imties sudaro šalys, kuriose deficitas siekė 6–10 % BVP, 33 % visos imties – šalys, kurios tiriamu laikotarpiu susidūrė su didesniu nei 11 % BVP (iki 30 %) einamosios sąskaitos deficitu.

Tyrimo buvo tikrinamas šalies prekybos intensyvumo poveikis augančiam einamosios sąskaitos deficitui. Tyrimu nustatytas reikšmingas šio veiksnio poveikis leidžia teigti, kad prekių ir paslaugų importo augimo spartėjimas

turi įtakos augančiam einamosios sąskaitos deficitui šalyje. Nustatyta, jog tam turi įtakos ir namų ūkio sektoriaus vartojimo didėjimas. Teigtina, kad būtent šalies vidaus vartojimo padidėjimas yra reikšmingas einamosios sąskaitos deficito augimui, viršijančiam jo kryptingą ilgalaikę tendenciją. Einamosios sąskaitos deficito augimą šalyje taip pat lemia vidaus investicijų į plėtrą, pajėgumus ir gyvenamąjį būstą didėjimas. Patvirtinamas ir privataus sektoriaus kreditavimo didėjimo poveikis: šis veiksnys turi nedidelį, bet reikšmingą poveikį augančiam einamosios sąskaitos deficitui šalyje. Tai patvirtina požiūrį, jog einamosios sąskaitos deficito augimas gali būti nulemtas didėjančio privataus sektoriaus kreditavimo – šalys auksa ateities vartojimą dėl išaugusio dabarties vartojimo poreikio. Kitas veiksnys – realios vidaus palūkanų normos mažėjimas, jį ir augantį einamosios sąskaitos deficitą šalyje sieja atvirkštinė priklausomybė. Tiesioginę priklausomybę būtų galima paaiškinti per einamosios sąskaitos pajamų balansą. Didėjant realiai vidaus palūkanų normai, didėja pajamų užsieniui išlaidos, susijusios su investicine veikla. Apibendrinant galima teigti, jog augantį einamosios sąskaitos deficitą šalyje lemia ir vidaus paklausos veiksnys. Augantį einamosios sąskaitos deficitą šalyje taip pat lemia rinkos kainų veiksnys – realaus efektyvaus

valiutos kurso augimas. Pagal gautus rezultatus, aiškinant augantį einamosios sąskaitos deficitą šalyje naftos kainų pokyčiai nėra reikšmingi.

Rezultatai leistų teigti, kad tarptautinio kapitalo judėjimo pokyčiai nelemia augančio einamosios sąskaitos deficito šalyje. To nepatvirtina grynųjų kapitalo įplaukų teorijos, kuriose akcentuojama, jog pagrindinis augančio einamosios sąskaitos deficito veiksnys yra didėjančios kapitalo įplaukos į šalį. Nustatyta, jog EBPO šalių ekonomikos augimo poveikis augančiam einamosios sąskaitos deficitui nereikšmingas. Tai leistų teigti, jog pačių turtingiausių pasaulio šalių, sukuriančių 2/3 pasaulio BVP, ekonomikos augimas nepaaiškina augančio einamosios sąskaitos deficito šalyje.

Remiantis logistinės regresijos modelio rezultatais galima teigti, jog augančiam einamosios sąskaitos deficitui šalyje stipriausią poveikį turi *prekybos intensyvumo, šalies vidaus paklausos ir rinkos kainų veiksniai*. Tai patvirtina reikšmingas ir stipriausias šių veiksnių (juos atspindinčių rodiklių) poveikis modeliuose ir nereikšmingi stipriųjų pasaulio šalių ekonomikos augimo, grynojo užsienio turto ir naftos kainų kintamųjų poveikio rezultatai.

**Pagrindiniai žodžiai:** augantis einamosios sąskaitos deficitas, veiksniai, logistinė regresija.

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