

What Determines the Current Account: Intratemporal versus Intertemporal Factors*

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Abstract

This paper adds to the discussion on the determinants of the current account balance. In particular, we construct a large balanced panel of data for 101 countries and 15 years covering observations for the current account and 18 explanatory variables. Next, we apply static and dynamic Bayesian Model Averaging techniques to verify whether intratemporal (i.e. relative demand and real exchange rates) or intertemporal factors (i.e. stage of development, fiscal balance, demographics) are crucial to understand current account developments. Our results indicate that the latter are key drivers of the external balance, which provides support for the intertemporal model of the current account.

1. Introduction

There is a broad consensus among economists that unfavourable current account (CA) developments, through the accumulation of foreign financial assets and liabilities, had been one of the key drivers of the recent global financial meltdown (Obstfeld and Rogoff, 2009; Blanchard and Milesi-Ferretti, 2010) and the European debt crisis (Alessandrini et al., 2014; European Commission, 2012; Chen et al. 2012; Ca' Zorzi and Rubaszek, 2012). Nowadays it is justified to argue that current account deficits and surpluses observed in the euro area countries before the crisis were not “the end of Feldstein-Horioka puzzle”, as described by Blanchard and Giavazzi (2002), but a sign of growing macroeconomic imbalances. This is reflected, among others, by including the CA to GDP ratio in the European Commission Macroeconomic Imbalance Procedure Scoreboard.

Even though there is a broad consensus on the importance of CA developments for macroeconomic stability, agreement is not reached in the discussion on what determines the external balance. On the one hand, the traditional, elasticity approach focuses predominantly on intratemporal factors such as relative demand and relative prices. On the other hand, the intertemporal approach emphasizes the role of variables that affect decisions on investment and savings. The methods used to assess the dynamics of the current account are also diverse and range from econometric regressions (e.g. Chinn and Prasad, 2003) and “present value test” type of analysis (e.g. Sheffrin and Woo, 1990) to simulations with theoretical, general equilibrium models (see Singh, 2007, for a survey). In this study, we add to the above studies by applying panel regression techniques, and in particular Bayesian Model Averaging (BMA) methods, to verify whether intratemporal or intertemporal

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factors are most important in determining the current account.

Ca' Zorzi, Chudik and Dieppe (2012) were the first to apply BMA methodology to analyse current account developments. In particular, they used Bayesian Averaging of Classical Estimates (BACE) methodology proposed by Sala-I-Martin, Doppelhofer and Miller (2004) to estimate the static relationship between the current account and 13 regressors. Their database included a balanced panel for 77 countries and 25 years of annual data, which were divided into two non-overlapping 12-year averages. The next milestone in the application of BMA methodology to analyse the current account was the study of Moral-Benito and Roehn (2016). The authors investigated current account developments with the use of a BMA method proposed by Moral-Benito (2012), which enables the inclusion of the lagged dependent variable in the set of regressors. Yet, in this study the dataset was relatively scarce and covered only 31 countries and 30 years of annual data divided into three non-overlapping 10-year averages.

Our contribution to the above literature is threefold. First, in comparison to the above two studies we have created a larger balanced panel that covers 101 countries over 15 years. Second, we do not use averages over several years to balance the dataset, which means that we provide the results for higher frequencies. Third, our research question is slightly different as we investigate the relative importance of intratemporal and intertemporal drivers of the current account.

The rest of the article is structured as follows. Section 2 describes the set of potential determinants of the current account. Section 3 focuses on our estimation strategy. Section 4 presents the results and Section 5 provides sensitivity analysis. The last section concludes.

2. Current account determinants and the data

The list of potential CA determinants that we use in our regressions is as follows:

Intratemporal factors

Real GDP growth. Increasing demand should lead to higher imports and CA deterioration. Expected sign: negative.

Real Effective Exchange Rate (REER). Appreciation of domestic currency deteriorates price and cost competitiveness, which leads to CA deterioration. Expected sign: negative.

Initial net foreign assets to GDP ratio. An increase in net foreign assets improves primary income balance, hence also the CA balance. Expected sign: positive.¹

Fuel balance to GDP ratio. Because of the direct effect on the trade balance, the expected sign is positive.

Intertemporal factors

Gross fixed investment to GDP ratio. If foreign funds are used to finance domestic investment then high expenditures should result in CA balance decline.

¹It should be noted that high debt needs to be repayed, which requires trade balance improvement. The adjustment process, however, usually goes through real exchange rate adjustments.

Expected sign: negative.

Domestic credit provided by financial institutions to GDP ratio. Financing the debt might require borrowing funds from abroad, hence the worsening of the current account balance. Expected sign: negative.

Foreign Direct Investment inflows to GDP ratio. Inflow of long-term investment can affect the current account through higher imports (short horizon) and by generating outflows of cash related to paying dividends (longer horizon). Expected sign: negative.

General government budget balance to GDP ratio. The twin deficits hypothesis indicates that the government budget balance is positively correlated with the CA balance. Expected sign: positive.

General government gross debt to GDP ratio. Higher level of debt might discourage foreign investors leading to capital outflows and current account improvement. Expected sign: positive.

Relative per capita income, adjusted by Purchasing Power Parity. According to the permanent income hypothesis the process of catching-up is accompanied by temporarily lower savings, hence lower-income economies should have larger current account deficits. Expected sign: positive.

Population growth. Higher population growth can be associated with immigrant inflow and relatively young population and both groups usually do not save much. Expected sign: negative.

Youth (old) dependency ratio, defined as the ratio of people under 15 (over 64) years old to the size of the labour force. Higher share of economic dependants in population is associated with lower national savings. Expected sign: negative.

Other factors

Trade openness, measured as the ratio of the sum of exports and imports to GDP and interpreted as a proxy for potential barriers to trade. Expected sign: ambiguous.

Voice and Accountability, Regulatory Quality, Rule of Law and Political Stability. The quality of institutions improves investors' trust, which enables borrowing more funds from abroad and running worse CA balance. Expected signs: negative.

Data

The annual database for the above variables, which covers 101 countries over years 2000- 2014, was created using various sources, which are described in the Appendix. In the sensitivity analysis, we have divided the sample into two non-overlapping groups of developing (lower- and lower-middle-income) and developed (higher-middle and high-income countries) using the World Bank classification.

3. Econometric methodology

We refer to BMA as a set of techniques that enable to account for model uncertainty. Given a wide discussion on what determines the current account and the unanswered question about the relative role of intratemporal and intertemporal factors, BMA seems to be an appropriate method to address this problem.

The general idea of BMA is to compute the posterior probability of model j , $P(M_j|y)$, i.e. the probability of the model conditional on our prior belief, $P(M_j)$, and the likelihood of the data y conditional on model j , $l(y|M_j)$. Given that for K regressors the number of potential model specifications, which is equal to the number of possible combinations of explanatory variables, is equal to 2^K , the formula for the posterior probability is:

$$P(M_j|y) = \frac{l(y|M_j)P(M_j)}{\sum_i^{2^K} l(y|M_i)P(M_i)} \quad (1)$$

The first important decision within the BMA framework relates to the choice of the model prior probability $P(M_j)$. The most intuitive choice would be to assume that each variable is independently included in the model with probability ζ and is omitted with probability $1 - \zeta$. In this case the prior probability of M_j depends solely on the number of regressors included in the model (K_j) and is given by Binomial distribution:

$$P(M_j) = \zeta^{K_j}(1 - \zeta)^{K-K_j} \quad (2)$$

It should be noted that for a given ζ the expected model size is ζK . If we therefore want the expected model size to be K^* , then we need to fix the inclusion probability at:

$$\zeta = \frac{K^*}{K} \quad (3)$$

The alternative to fix the parameter for each regressor ζ is to assume that it is a random and is drawn from Beta distribution (Binomial-Beta prior, see Ley and Steel, 2007):

$$\zeta \sim \text{Beta}(a, b) \quad (4)$$

This change enables to diminish the impact of prior assumption regarding the expected model size on the posterior probabilities ($M_j|y$). The reason is that the prior probability of models with different number of regressors becomes flatter in comparison to the situation in which we fix ζ . Furthermore, if we set $a = 1$ and $b = 1$, we get a (discrete) uniform prior probability for each model size.

The second important decision within the BMA framework relates to the method of calculating the likelihood function $l(y|M_j)$. Ca' Zorzi, Chudik and Dieppe (2012) use classical Least Squares (LS) method as proposed by Sala-I-Martin, Doppelhofer and Miller (2004). It should be noted that this solution is not well suited to dynamic models, which include lagged dependent variable in the set of regressors due to reasons discussed by Nickell (1981). Moral-Benito and Roehn (2016) address this problem and propose to use Correlated Random Effects (CRE) method as developed in Alvarez and Arellano (2003) and applied in the BMA context by Moral-Benito (2012). Let us discuss briefly the idea behind the CRE method. Suppose that

we estimate model with (time invariant) country-specific effects (μ_i) and a lagged current account value:

$$CA_{i,t} = \alpha CA_{i,t-1} + \beta x_{i,t} + \mu_i + \varepsilon_{i,t} \quad (5)$$

where $x_{i,t}$ represents the matrix of explanatory variables. We follow Moral-Benito and Roehn (2016) and take the following two assumptions:

$$\varepsilon_{i,t} | CA_i, x_i, \mu_i \sim N(0, \delta_\varepsilon^2) \quad (6)$$

$$\mu_i | CA_i, x_i \sim N(\varphi \overline{CA}_i + \delta \bar{x}_i, \delta_\mu^2) \quad (7)$$

where CA_i and x_i are vectors and matrices of observations for $CA_{i,t}$ and $x_{i,t}$, and \overline{CA}_i and \bar{x}_i are sample means. We can therefore rearrange model (5) into:

$$CA_{i,t} = \omega_{i,t} \theta + \lambda_i + \varepsilon_{i,t} \quad (8)$$

where $\omega_{i,t} = (CA_{i,t-1} - \overline{CA}_i, x_{i,t} - \bar{x}_i, \overline{CA}_i, \bar{x}_i)$, $\lambda_i = \mu_i - \varphi \overline{CA}_i - \delta \bar{x}_i$ and $\theta = (\alpha, \beta, \varphi + \alpha, \delta + \beta)'$. The resulting likelihood function is:

$$\begin{aligned} \log f(CA_i | \omega_i) \propto & -\frac{N}{2} \log \bar{\sigma}_\varepsilon^2 - \frac{1}{2\bar{\sigma}_\varepsilon^2} \sum_{i=1}^N (\overline{CA}_i - \bar{\omega}'_i \theta)^2 - \frac{N(T-1)}{2} \log \sigma_\varepsilon^2 \\ & - \frac{1}{2\sigma_\varepsilon^2} \sum_{i=1}^N (CA_i^* - \alpha CA_{i(-1)}^* - x_i^* \beta)' (CA_i^* - \alpha CA_{i(-1)}^* - x_i^* \beta) \end{aligned}$$

Here $\bar{\sigma}_\varepsilon^2 = \sigma_\lambda^2 + \frac{\sigma_\varepsilon^2}{T}$, $\sigma_\lambda^2 = \text{var}(\lambda_i)$, whereas CA_i^* , $CA_{i(-1)}^*$ and x_i^* denote orthogonal deviations of CA_i , $CA_{i(-1)}$ and x_i respectively².

4. Results

In our study we take the following strategy to get the baseline results.

Our first specification is the static model of the current account estimated with LS and for which we assume Binomial-Beta prior with uniform prior probability for model size ($a = 1$ and $b = 1$). In this stage we used codes provided by Zeugner and Feldkircher (2015) within the BMS package in R. In the second and third specifications, we estimate the static and dynamic models with CRE method on the basis of codes provided by Moral-Benito and Roehn (2016) in the Appendix³. As regards models prior, we assume fixed inclusion probability $\zeta = \frac{1}{2}$. We chose this prior in the CRE framework to enable comparison of the results with Moral-Benito and Roehn (2016). However, in the sensitivity analysis we analyse whether selecting Binomial-Beta prior would have a sizeable impact on the results.

The results of benchmark BMA regressions for the entire sample are presented in Table 1. The first column contains LS results, whereas the second and

² $CA_{i(-1)}$ denotes the lagged current account.

³<http://dx.doi.org/10.1016/j.eurocorev.2015.07.005> (accessed 10.08.2016)

third columns present the output for static and dynamic CRE models, respectively. In general, the results show that intratemporal factors are of lower importance than intertemporal ones. The posterior inclusion probability (PIP) for *Real GDP growth* and *REER* is very low and does not exceed 10%. Moreover, in two specifications the PIP for *Net foreign assets* is below 20%. *Fuel balance*⁴ is the only intratemporal factor that proved to be important for current account developments, where the estimated parameter indicates that the pass-through from fuel balance to the current account is about 0.5, which means that an improvement in the fuel balance by 1% of GDP increases the current account by about 0.5% of GDP. As regards intertemporal factors, the PIP for five of them amounted to 100%. Moreover, the estimated parameters are in line with expectations and of reasonable scale. An increase of investment by 1% of GDP leads to current account decline by about 0.55% of GDP. However, if this investment is in the form of FDI, the deterioration is larger by additional 0.15% of GDP. Also, higher government deficit is correlated with the current account, where the pass-through coefficient is about 0.25. The remaining two variables with PIP equal to unity are describing domestic credit expansion and the stage of economic development, as measured by GDP per capita. For other factors, it was found that trade openness is an important determinant of the current account, whereas the indicators describing the quality of institutions were found to be of lower importance. Finally, it should be added that the PIP for the lagged current account balance amounting to 100% indicates that dynamic specification is the appropriate modelling choice. At the same time, it should be noticed that adding the lagged dependent variable does not alter significantly the PIPs for the other explanatory variables.

What we find interesting and worthy to discuss is that intratemporal factors, but the fuel balance, proved to be of lower importance for the current account developments. In particular, we found that REER has an extremely low PIP. This result adds to the long-standing debate about the sources of international competitiveness of countries. For example, Kaldor (1978) showed that countries that experience REER appreciation also tend to increase their export market share, which suggests that there are other, structural factors that affect international competitiveness through their impact on the supply of export goods - Fagerberg (1996). In this sense our findings confirm that REER cannot be regarded as the main driver of the external balance, and implicitly international competitiveness. Our results would question the usefulness of methods of calculating exchange rate misalignment on the basis of current account imbalances, as proposed by Williamson (2004) within the Fundamental Equilibrium Exchange Rate framework.

Table 1 Current Account Determinants

	<i>LS static model</i>		<i>CRE static model</i>		<i>CRE dynamic model</i>	
	<i>PIP</i>	<i>Post. Mean</i>	<i>PIP</i>	<i>Post. Mean</i>	<i>PIP</i>	<i>Post. Mean</i>
Lagged Current account balance					1.0000	0.3726 (0.0184)
<i>Intratemporal factors</i>						
Real GDP growth	0.0371	0.0005 (0.0059)	0.0289	0.0004 (0.0054)	0.0738	0.0004 (0.0069)
REER	0.0408	0.0002 (0.0021)	0.0949	0.0005 (0.0033)	0.0348	-0.0002 (0.0017)
Net foreign assets	0.1716	0.0028 (0.0071)	0.9994	0.0162 (0.0088)	0.1555	-0.0017 (0.005)
Fuel balance	1.0000	0.5426 (0.032)	1.0000	0.5395 (0.0332)	1.0000	0.4283 (0.0297)
<i>Intertemporal factors</i>						
Total investment	1.0000	-0.5535 (0.0251)	1.0000	-0.5568 (0.0261)	1.0000	-0.4403 (0.0235)
FDI inflows	1.0000	-146.4118 (20.5398)	1.0000	-0.1458 (0.0213)	1.0000	-0.0899 (0.019)
General gov't balance	1.0000	0.2663 (0.0259)	1.0000	0.2668 (0.0271)	1.0000	0.1951 (0.0239)
General gov't gross debt	0.8046	0.0143 (0.0087)	0.7746	0.0146 (0.0095)	0.5005	0.0068 (0.0077)
Domestic credit	1.0000	-0.0420 (0.005)	1.0000	-0.0410 (0.0053)	0.9948	-0.0198 (0.0049)
GDP per capita (PPP)	1.0000	0.0002 (0)	1.0000	0.2035 (0.0292)	0.9965	0.1248 (0.026)
Age dependency ratio, young	0.1368	0.0066 (0.0194)	0.3561	0.0181 (0.0298)	0.1792	0.0070 (0.018)
Age dependency ratio, old	0.0424	-0.0029 (0.0261)	0.0578	-0.0055 (0.0349)	0.0804	0.0021 (0.0301)
Population growth	0.2640	-0.0392 (0.0741)	0.3844	-0.0564 (0.0835)	0.8896	-0.1590 (0.0806)
<i>Other factors</i>						
Trade openness	1.0000	0.0545 (0.0071)	1.0000	0.0543 (0.0074)	1.0000	0.0328 (0.0065)
Regulatory Quality	0.4226	-0.5880 (0.7743)	0.3478	-0.4730 (0.7302)	0.1556	-0.1300 (0.3596)
Voice and Accountability	0.4500	-0.6735 (0.8405)	0.3861	-0.5795 (0.8212)	0.5267	-0.6538 (0.7248)
Rule of Law	0.2279	-0.3329 (0.6963)	0.2517	-0.3718 (0.734)	0.1344	-0.1287 (0.3935)
Political Stability	0.0403	-0.0073 (0.0816)	0.2695	-0.0479 (0.2094)	0.1956	-0.1217 (0.2825)

Notes: Standard errors in parentheses. PIP denotes posterior inclusion probability of a given variable.

⁴In our analysis we included trade in different types of fuels, that include coal, oil, gas etc.

5. Sensitivity analysis

The sensitivity analysis consists of two parts. First, we divide our sample into two subgroups of countries (developed and developing) to check whether the results are stable across the sample. Second, we analyse how sensitive are our results to the choice of the prior for models.

We start by dividing our sample into two subgroups representing higher (65 countries, left column in Table 2.) and lower income countries (36 countries, right column in Table 2.). In both cases, we used CRE method with lagged dependent variable. The comparison of both columns in Table 2 leads to several interesting conclusions. First, better access of developed countries to international financial markets enables them easier external financing of investment spending, government expenditures or spending on fuel and other commodities. This is reflected in higher estimates for pass-through of the current account with respect to the above variables in the case of developed economies. On the other hand, the relationship between the current account and FDI inflows is much stronger for the group of developing countries, which can be explained by good access of foreign companies to external financing Kolasa, Rubaszek and Taglioni (2010). Second, according to our estimates variables describing the quality of institutions (Rule of Law and Political Stability) are more important for developing countries than for developed ones. In particular, in developing countries good institutions enable to maintain worse current account balance (i.e. run higher deficit). The reason is that good institutions reduce political risk of investing in a given economy for foreign companies. It seems that this risk is negligible for a group of developed countries. Third, for both groups of countries the inertia of the current account turned out to be significant. However, the estimate of the autoregressive parameter, albeit comparable, is somewhat higher for developing countries. To conclude, the results in Table 2 show that the impact of macro-variables on the current account determinants might be heterogeneous among developed and developing countries.

The second part of the sensitivity analysis was to check how stable are the baseline results with respect to the choice of models prior. For that purpose, we change the parameter that describes the probability of including a variable in the model (ζ) so that the expected model size was equal to some specified value K^* . The results are presented in Table 3. The first column of the Table presents estimation results for a model in which we assume *a priori* relatively small size ($K^* = 5$), whereas in the third column the expected model size is larger ($K^* = 15$). It is therefore intuitive that we should expect lower PIPs in the first column in comparison to the third column. In turn, the second column presents the results for Binomial-Beta prior with $a = 1$ and $b = 1$ so that there is uniform prior for each model size. The main conclusion of this exercise is that the choice of prior has very little effect on the estimates. We can observe only minor changes in the values of the PIP, which indicates that our results are robust with respect to different choices of prior assumptions on the model size and inclusion probability of the variables.

Table 2 Current account determinants by subgroups of countries (dynamic CRE model)

	<i>Higher income countries</i>		<i>Lower income countries</i>	
	<i>PIP</i>	<i>Post. Mean</i>	<i>PIP</i>	<i>Post. Mean</i>
Lagged Current account balance	1.0000	0.3172 (0.0212)	1.0000	0.3803 (0.0376)
<i>Intratemporal factors</i>				
Real GDP growth	0.8547	-0.0023 (0.0265)	0.0464	0.0010 (0.0112)
REER	0.0688	-0.0007 (0.0034)	0.0682	0.0003 (0.0039)
Net foreign assets	0.2250	-0.0033 (0.0072)	0.9979	0.1208 (0.0308)
Fuel balance	1.0000	0.5540 (0.0346)	0.2760	0.0306 (0.0568)
<i>Intertemporal factors</i>				
Total investment	1.0000	-0.5799 (0.0268)	1.0000	-0.2578 (0.0382)
FDI inflows	0.5794	-0.0293 (0.0289)	1.0000	-0.3280 (0.0525)
General gov't balance	1.0000	0.1959 (0.0287)	1.0000	0.1613 (0.0386)
General gov't gross debt	0.0381	-0.0002 (0.0017)	0.8159	0.0205 (0.0124)
Domestic credit	0.9889	-0.0165 (0.0047)	0.5810	-0.0267 (0.0261)
GDP per capita (PPP)	1.0000	0.1426 (0.023)	0.0625	0.0128 (0.0891)
Age dependency ratio, young	0.0414	-0.0006 (0.0066)	0.6926	0.0845 (0.0694)
Age dependency ratio, old	0.0577	0.0011 (0.023)	0.0714	0.0266 (0.1483)
Population growth	0.9968	-0.2071 (0.0679)	0.0776	-0.0085 (0.0443)
<i>Other factors</i>				
Trade openness	0.8633	0.0199 (0.0104)	0.8874	0.0320 (0.0175)
Regulatory Quality	0.0515	-0.0159 (0.1466)	0.3172	-0.4468 (0.8295)
Voice and Accountability	0.4166	-0.5063 (0.7373)	0.0844	-0.0053 (0.2742)
Rule of Law	0.0798	-0.0074 (0.2037)	0.5200	-0.9591 (1.1493)
Political Stability	0.1360	-0.0090 (0.154)	0.4691	-0.4881 (0.5986)

Notes: Standard errors in parentheses. PIP denotes posterior inclusion probability of a given variable.

Table 3 Sensitivity analysis of the results (full sample, dynamic CRE model)

	<i>Prior model size = 5</i>		<i>Uniform prior for model size</i>		<i>Prior model size = 15</i>	
	<i>PIP</i>	<i>Post. Mean</i>	<i>PIP</i>	<i>Post. Mean</i>	<i>PIP</i>	<i>Post. Mean</i>
Lagged Current account balance	1.0000	0.3731 (0.0184)	1.0000	0.3728 (0.0184)	1.0000	0.3730 (0.0185)
<i>Intrateporal factors</i>						
Real GDP growth	0.0298	0.0001 (0.0044)	0.0714	0.0004 (0.0068)	0.2415	0.0012 (0.0125)
REER	0.0182	-0.0001 (0.0014)	0.0448	-0.0001 (0.0019)	0.1338	-0.0003 (0.003)
Net foreign assets	0.0840	-0.0010 (0.0039)	0.1786	-0.0019 (0.0052)	0.4173	-0.0043 (0.0072)
Fuel balance	1.0000	0.4268 (0.0297)	1.0000	0.4286 (0.0297)	1.0000	0.4297 (0.0297)
<i>Intertemporal factors</i>						
Total investment	1.0000	-0.4456 (0.0231)	1.0000	-0.4391 (0.0236)	1.0000	-0.4349 (0.0232)
FDI inflows	1.0000	-0.0898 (0.019)	1.0000	-0.0901 (0.019)	1.0000	-0.0902 (0.019)
General gov't balance	1.0000	0.1933 (0.0238)	1.0000	0.1958 (0.0239)	1.0000	0.1969 (0.0239)
General gov't gross debt	0.3077	0.0043 (0.007)	0.5403	0.0073 (0.0077)	0.6814	0.0089 (0.0074)
Domestic credit	0.9909	-0.0192 (0.0049)	0.9947	-0.0200 (0.0049)	1.0000	-0.0205 (0.0047)
GDP per capita (PPP)	0.9994	0.1213 (0.0245)	1.0000	0.1257 (0.025)	1.0000	0.1311 (0.0255)
Age dependency ratio, young	0.0638	0.0027 (0.0119)	0.1697	0.0063 (0.0171)	0.2951	0.0103 (0.0206)
Age dependency ratio, old	0.0379	0.0015 (0.02)	0.0862	0.0019 (0.0294)	0.1846	0.0019 (0.0421)
Population growth	0.8145	-0.1461 (0.0891)	0.9090	-0.1625 (0.0779)	0.9696	-0.1734 (0.0678)
<i>Other factors</i>						
Trade openness	1.0000	0.0328 (0.0064)	1.0000	0.0326 (0.0065)	1.0000	0.0326 (0.0065)
Regulatory Quality	0.0677	-0.0615 (0.2605)	0.1572	-0.1245 (0.3492)	0.3087	-0.2389 (0.453)
Voice and Accountability	0.3945	-0.5103 (0.7079)	0.4961	-0.6050 (0.7129)	0.5371	-0.6159 (0.6946)
Rule of Law	0.0963	-0.0999 (0.3518)	0.1665	-0.1460 (0.4126)	0.2707	-0.2093 (0.4781)
Political Stability	0.1346	-0.0905 (0.2547)	0.2933	-0.177 (0.3226)	0.3493	-0.1945 (0.3248)

6. Conclusions

In this study we have investigated whether intratemporal or intertemporal factors are most important for current account dynamics. For that purpose, we have created a large balanced dataset for 101 countries over the period 2000-2014 and estimated a set of static and dynamic panels using BMA techniques. Our analysis unambiguously indicates that intertemporal factors are to a large extent more important than intratemporal ones. In particular, we have found that the posterior inclusion probability for GDP growth and real exchange rate is very low in all model specifications. On the other hand, the intertemporal variables, such as the investment rate, budget balance or relative stage of development proved to be very important drivers of the current account.

Another important conclusion from our study is that there are differences between developing and developed countries in terms of what drives the current account. We have found that high-income countries are to a larger extent financing investment and government expenditures with external resources. This indicates that they have better access to international financial markets. In turn, for developing countries the quality of institutions was found to play a more pronounced role than in the case of developed countries. All in all, these results would indicate that the analysis of current account dynamics should consider both systematic fundamentals – mostly intertemporal factors – as well as country specific developments.

APPENDIX

Data sources

The data used in this study are taken from the following databases:

- IMF, World Economic Outlook (April 2016 edition, WEO)
- World Bank, World Development Indicators (WDI)
- World Trade Organization (WTO)
- Bruegel database on Real effective exchange rates (Bruegel)
- Worldwide Governance Indicators (WGI).

In addition to this, if for a given country and for a given variable no more than a single observation was missing, we estimated it on the basis of available data. In some cases we used data from Eurostat or local statistical offices.

Table A1 Data sources

	<i>Variable description</i>	<i>Source</i>
Current account balance	Current account balance to GDP ratio	WEO
Total investment	Gross fixed investment to GDP ratio	WEO
General gov't balance	General government balance to GDP ratio	WEO
Fuel balance	Net trade of fuels to GDP ratio	WTO/WEO
Domestic credit	Domestic credit to GDP ratio	WDI
Trade openness	Sum of Exports and Imports to GDP ratio	WDI
GDP per capita (PPP)	Relative per capita income (PPP)	WEO
FDI inflows	Foreign Direct Investment to GDP ratio	WDI
General gov't gross debt	General government gross debt to GDP ratio	WEO
Voice and Accountability	Voice and Accountability Indicator	WGI
Regulatory Quality	Regulatory Quality Indicator	WGI
Population growth	Population growth	WEO
Rule of Law	Rule of Law Indicator	WGI
Net foreign assets	Net foreign assets value to GDP ratio	WDI
Age dependency ratio, young	Age dependency ratio, young	WDI
Age dependency ratio, old	Age dependency ratio, old	WDI
REER	Real Effective Exchange Rate	Bruegel
Political Stability	Political Stability Indicator	WGI
Real GDP growth	Real GDP growth	WEO

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