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Trade Costs and Current Accounts

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1. INTRODUCTION

THE main issue tackled in this paper is whether global current account imbalances are a consequence of trade liberalisation. These growing imbalances have become a subject of interest and concern as recalled in Obstfeld (2012). Current accounts are around four times more dispersed in 2010 than they were in 1990, which implies diverging current account balances. Over the same time period, trade costs have decreased allowing larger trade flows, at both the intensive and the extensive margin (Arvis et al., 2013). The present paper asks whether these trade cost reductions are a plausible determinant of these increasing current account imbalances.

An extensive literature has investigated the key forces driving current account dynamics. The empirical literature has listed many potential candidates including openness, financial integration and demographic trends, among others. Chinn and Prasad (2003) provide a survey of the empirically relevant determinants of current account balance variations across countries and over time. Surprisingly, the role of trade liberalisation has received less attention. How much of the current account imbalances is linked to regional integration? This paper provides an explanation for these growing imbalances which relies on the nature of the regional integration process. More specifically, it supports the idea that national industrial structures are affected by the changing trade costs faced by firms when they export goods or services. Trade cost variations affect national trade structures, the level of trade and its nature in terms of factor service. They are likely to affect current account balances insofar as these changes in the industrial structure translate into changes in the national investment level.

I build on the recent approach by Jin (2012) by emphasising the role of trade costs in shaping industrial structures and the current account balance. Two predictions are derived from the model and brought to the data. The model predicts (i) that trade cost variations interact with changes in the industrial structure to determine the effects of regional integration on current accounts and (ii) that the depth of regional agreements shapes the response of current accounts to changes in trade costs and in specialisation patterns: the joint effect of trade costs and of the national capital intensity of production on current accounts is exacerbated for countries with highly integrated institutions.

The current account ratio to GDP is regressed on the capital content of exports, its interaction with trade costs for the 1988–2005 period. A full set of factors is included in the specifications, factors which could potentially influence current account balances by controlling for savings, openness and other country-specific variables. The endogenous determination of the capital content of exports is corrected for by implementing an instrumental variable strategy. The World Governance Indicators from Kaufmann et al.'s (2010) data on institutional quality are used as instruments for the capital intensity of production at the country level. Following

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Acemoglu et al. (2001, 2005), institutional quality is a strong determinant of growth, and a significant part of the effect is channelled through investment.

The estimates report a positive joint effect of capital intensity and trade costs on current accounts: *ceteris paribus*, when trade costs decrease, countries where production is oriented towards capital-intensive activities have larger current account deficits, consistently with the existence of a higher demand for capital in these countries. Estimations controlling for endogeneity confirm this result. The results are confirmed by robustness checks which deal with unobserved heterogeneity and potential lagged effects.

I infer from these results that, aside from the direct effect generally put forward in standard macro analysis, changes in production patterns may be an additional channel of impact of trade liberalisation on current accounts.

The remainder of the paper is composed of five sections. The next section provides a literature review. The theoretical model, emphasising the joint effect of trade costs and changes on the industrial structure on current accounts, is presented in Section 3, where the two testable predictions are derived. Section 4 translates the theoretical predictions into an empirical strategy and defines data sources. Section 5 presents empirical evidence of the impact of capital intensity and trade cost variations on current accounts and investigates how institutional integration may shape the relation between current accounts and capital intensity. Section 6 shows some robustness check results, including an investigation of lagged effects and unobserved heterogeneity. The last section provides concluding comments.

2. LITERATURE REVIEW

This paper contributes to two strands of the literature. First, it is related to the literature that rationalises the link between regional integration and global imbalances. Focusing on current accounts, Blanchard and Giavazzi (2002) advocate that integration is likely to increase current account imbalances, as borrowing and lending conditions are implicitly relaxed in an integrated area. Borrowers are led to borrow more in an integrated area, implying increasing current accounts. Schmitz (2011) provide evidence of growing financial integration in the euro area as a source of increasing current accounts in member countries, where the single currency plays a substantial part. Interestingly, the introduction of the euro in 1999 is mainly interpreted as deepening financial openness in the euro zone, while the euro may also be a source of a decrease in exchange rate volatility and thus in trade costs (Berthou and Fontagné, 2013). I explicitly focus on this latter hypothesis and provide insights on its magnitude in current account dynamics.

Second, a recent interest in the relationship between trade and capital flows has emerged. While in standard HOS theory trade and capital flows are perfect substitutes, a major recent improvement has been to depart from the standard HOS framework, thus allowing both for trade in goods and in factors. Using Obstfeld and Rogoff's (1996) terminology, this literature departs from the standard inter-temporal analysis by combining both intra-temporal trade and inter-temporal trade. In this field, Jin (2012) provides a seminal contribution and a tractable theoretical framework which can replicate the empirical features of the direction of capital flows, as mentioned by Gourinchas and Jeanne (2013) who provide evidence that capital tends to flow towards countries with high level of investment and low growth. Jin (2012) provides a theoretical framework that allows for the endogenisation of current accounts by trade structure. She shows that the capital intensity of the industrial structure is a quantitatively important determinant of current accounts.

In the present paper, the role of trade costs in shaping current account dynamics is emphasised. In the trade literature, a consensus has emerged: reducing trade costs affects the industrial structure. Three strands of literature, however, have distinct predictions about these patterns. First, the HOS theory states that countries will specialise in industries which are intensive in the factors which they are abundantly endowed with. Contributions like Leamer (1980), Trefler (1993, 1995), Davis and Weinstein (2001), or Romalis (2004) have provided solid empirical evidence of the performance of the factor proportion theory. In these papers, comparative advantage is revealed by its effect on the factor content of trade flows or on the specialisation pattern. Then, new trade theories show that each country will produce fewer product varieties within an industry to take advantage of increasing returns to scale (Krugman, 1979; Ethier, 1982). And thirdly, new economic geography theories show that vertical linkages between industries will result in the agglomeration of these industries in one location (Krugman and Venables, 1996). Even if empirical studies on industrial patterns in Europe have produced conflicting results, industrial structures are undoubtedly affected by regional integration.

What sets this paper apart from existing research is that, to the best of my knowledge, it is the first attempt to rationalise the effect of trade costs on current account dynamics in a trade framework. Regarding the effect of institutional integration on trade, Vicard (2009) provides evidence that while the existence of a regional trade agreement favours trade, the depth of the agreement, however, has no additional pro-trade effect. This paper finds that the depth of regional agreements matters insofar as it shapes the response of current accounts to changes in trade costs.

3. THEORY

I provide a partial equilibrium model that is based upon Jin's (2012) model in which trade costs are introduced, following Markusen and Venables's (2007) multiproduct and multicountry trade structure with trade costs. The baseline set-up for firms and consumers is therefore similar to Jin (2012). The world is composed of two countries, A and B. Each country is characterised by an overlapping generation economy made of consumers living for two periods. Each country uses identical technology. I depart from this baseline model by differentiating the two countries by their factor supply differences. I use the same parametrisation of preferences and technology as Jin (2012).

a. Trade Costs

The aggregate national production of good j in country i is given by Y_{jt}^{i} and $b_j^i(w,r)$ represents the constant unit cost of producing j. The comparative advantage is expressed with the value of b_j: a high b_j means a comparative disadvantage in the production of good j. The export price of good j is p_j/τ, while the import price for the same good is $p_j\tau$. τ is assumed such that, for a particular j:

$$p_j\tau \geq b_j(w,r) \geq p_j/\tau.$$

This equation states that trade costs affect the level and the sectoral composition of the trade structure. The same inequalities are true for the other country. Γ_{Ajt} is defined as the share of the world production of good j that takes place in country A at time t:

$$\Gamma_{Ajt} = \left(\frac{Y_{Ajt}}{Y_{jt}^{A} + Y_{jt}^{B}} \right). \tag{1}$$

Classical trade theory implies that for each sector the relative production level is the result of the interaction of comparative advantage and trade costs. Here, the following functional form for this relationship is assumed:

$$\Gamma_{Ajt} = c((b_{jt}^{B} - b_{jt}^{A})(\tau^{\max} - \tau)), \tag{2}$$

with $c > 0$ a scale parameter. This functional form has convenient properties which are consistent with standard comparative advantage-based trade theories. By differentiating this equation with respect to τ:

$$\frac{\partial \Gamma_{Ajt}}{\partial \tau} = -c(b_{jt}^{B} - b_{jt}^{A}). \tag{3}$$

Therefore, a reduction in trade cost implies an expansion in country A's production of j, relative to the world production only if country A has a comparative advantage in the production of good j.

b. Investments and Current Accounts

We know from Jin (2012)[1] that the investment in sector j in country i at time t is as follows:

$$I_{ijt} = I_{t}^{W} \cdot \rho_{j} \cdot \Gamma_{ijt}, \tag{4}$$

where I_{t}^{W} is the world investment level, ρ_{j} is sector j capital requirements, and Γ_{ijt} measures the share of country i in the world production of good j. $\rho_{j} = \gamma_{j}\alpha_{j} / \sum_{j} \gamma_{j}\alpha_{j}$ is defined as the measure of the relative capital intensity of sector j.

Finally, country i's share of the world investment, Λ_{it}, is such that $I_{it} = I_{it}^{W}\Lambda_{it}$ where

$$\Lambda_{it} = \sum_{j} \frac{\gamma_{j}\alpha_{j}}{\sum_{j} \gamma_{j}\alpha_{j}} \Gamma_{ijt},$$

which implies

$$I_{it} = I_{t}^{W} \sum_{j} \frac{\gamma_{j}\alpha_{j}}{\sum_{j} \gamma_{j}\alpha_{j}} \Gamma_{ijt}(\tau). \tag{5}$$

This equation allows translating changes in trade costs τ into changes in investment through changes in Γ_{ijt}. This mechanism is an analytical contribution of the paper. Focusing on country A, we obtain:

$$I_{At} = I_{t}^{W} \sum_{j} \frac{\gamma_{j}\alpha_{j}}{\sum_{j} \gamma_{j}\alpha_{j}} c\left(\left(b_{jt}^{B} - b_{jt}^{A} \right) \left(\tau^{\max} - \tau \right) \right). \tag{6}$$

Derivating over τ, we obtain:

[1] See equations (18), (20) and (21) in Jin (2012).

$$\frac{\partial I_{At}}{\partial \tau} = I_t^W \times \sum_j \rho_j \times c\left(b_{jt}^A - b_{jt}^B\right). \tag{7}$$

A change in τ leads to an increase in investment in country A if, across all sectors, changes in τ induce changes in the specialisation patterns such that aggregate capital requirements increase. Conversely, a decrease in τ leads to higher investment in A if $\sum_j \rho_j b_{jt}^B > \sum_j \rho_j b_{jt}^A$.

Country i's share in the world production of good j increases when Γ_{ijt} increases, which can be a consequence to a change in τ. Aggregating over all goods, and weighting by the relative capital intensity of each sector, an increase in Γ_{ijt} leads to national investment level variations, which are likely to affect current account balances.

Finally, at time t, the net foreign assets of country A are the value of A's claims on the world minus the world's claims on A:

$$NFA_{it} = S_{it}^Y - \underbrace{q_{it}K_{i,t+1}}_{=I_{i,t}^{\text{imp}}}, \tag{8}$$

where $I_{i,t}^{\text{imp}}$ is the implicit value of investment in country i at time t. Country i's current account balance is the change in the net foreign asset position:

$$CA_{it} = NFA_{it} - NFA_{i,t-1}. \tag{9}$$

This result is thus consistent with the standard equilibrium condition: $X-M = S-I$, where the trade balance equalises the current account balance. In other words, I adopt the now standard vision of trade balance as the net factor service incorporated in trade, suggesting that theoretical attention should rather be more focused on trade in the factor services than on the flows of goods and services.

c. *First Testable Prediction*

To summarise the above framework, a testable prediction is derived from the formal model about current account determinants, taking the effect of the industrial structure into account.

Testable Prediction 1: *The interaction between the capital intensity of production and trade costs should significantly and positively impact the current account-to-GDP ratio.*

A positive coefficient means that increasing trade costs for capital-intensive countries should reduce investment and lead to a current account surplus. This prediction also implies that regional integration affects the current account balance through changes in the industrial structure resulting from trade cost reductions. I do not focus on the unconditional effect of trade costs on current accounts because my model implies that this relationship is not straightforward. Suppose that we observe two countries that face an exogenous trade cost shock. Suppose also that one country is relatively labour-abundant and thus has labour-intensive activities compared to the other country, whose production is thus capital-intensive. In my framework, there is no reason for both countries' current accounts to go in the same direction. The relation between trade costs and current accounts crucially depends on specialisation patterns. Unconditionally to changes in the capital intensity of production, the relation between trade costs and current accounts has little meaning. Instead, the contribution of

the paper is to focus on the joint effect of capital intensity and trade costs on current accounts.

d. Institutional Integration and Second Testable Prediction

I further investigate the effect of regional integration on current account balances. I believe that institutional integration may affect the relationship between trade costs and current account imbalances. I argue that institutional integration has heterogeneous effects on current accounts depending on its depth. Consistently with the Balassa classification, the underlying mechanism is such that the first stages of institutional integration decrease transaction costs, while deeper trade agreements favour goods and factor mobility. Consider a country which undergoes a trade cost shock, such that its capital demand increases. The response of current accounts to the shock should be stronger when there is high factor mobility. The depth of regional trade agreements should amplify the interactive effect of trade costs and capital intensity on current accounts.

Testable Prediction 2: *The triple interaction between the capital intensity of production, trade costs and a measure of high institutional integration should significantly and positively impact the current account-to-GDP ratio.*

A positive coefficient means that changes in trade costs associated with variations in the capital intensity of production affect the current account, all the more so as the country is well integrated institutionally. More specifically, the underlying mechanism is that the depth of regional agreements affects goods and factor mobility, beyond trade cost changes. Such mobility may exacerbate the response of current accounts to changes in trade costs, conditionally on variations in factor demand.

4. EMPIRICAL STRATEGY

This section presents the econometric strategy to assess both predictions, taking endogeneity problems into account, before presenting the data sources.

a. Translating the Predictions into Empirics

The model provides predictions about the industrial structure and its link to current account dynamics. The ideal empirical assessment would be based on the industrial structure on the one hand and on current accounts on the other. However, due to a lack of data, I have to focus on trade patterns rather than on production patterns. It is assumed that production patterns can be inferred from export patterns: if a country is mainly specialised in one sector, exports are likely to be high (Romalis, 2004).[2]

b. Specifications and Econometric Issues

(i) Prediction 1

With respect to Prediction 1, the following equation is estimated:

[2] Romalis (2004) suggests that there is an isomorphism and co-movement between production and bilateral trade.

$$\mathrm{CA}_{it} = \beta_0 + \beta_1 \ln\left(Z_{it}^K\right) + \beta_2 \ln(\mathrm{GDP}_{it}) + \beta_3 \ln TC_{it} + \beta_4 \left(\ln(TC_{it}) \times \ln Z_{it}^K\right) + \phi C_{it} + \alpha_i + \lambda_t + \varepsilon_{it}, \tag{10}$$

where CA_{it} is country i's current account-to-GDP ratio at time t, $\ln\left(Z_{it}^K\right)$ is the log of the index of country i's capital intensity at time t , and $\ln(\mathrm{GDP}_{it})$ is the log of country i's current GDP. The variable TC_{it} denotes the trade costs faced by country i at time t. Two measures of trade costs are considered here: trade costs from Arvis et al. (2013) and real exchange rate volatility. The interactive term between trade costs and capital intensity, $TC_{it} \times Z_{it}^K$, is then introduced. C_{it} includes controls such as population size, savings, stock market capitalisation ratio to GDP – to control for financial development. These variables are identified by Chinn and Prasad (2003) as standard drivers of current accounts. The country's capital stock for the previous year is also controlled for, so that the regression captures the aggregate requirements for capital. Country and year fixed effects are included.

The parameters of interest are thus β_1 and β_4. β_1 should be negative, implying a negative relationship between the current account-to-GDP ratio and the capital intensity of the industrial structure. Consistently with the theoretical framework, β_4 should be positive, which signals a positive impact of changes in the industrial structure resulting from trade cost reductions on the current account-to-GDP ratio.

So as to correct the natural trend of integration with countries belonging to the same area and continent, which potentially affects standard errors, this equation is estimated by clustering at the continental level, using the Froot (1989) correction. The White correction for heteroscedasticity is also used. The results are robust to the use of the Newey–West matrix, controlling for autocorrelation.

(ii) Prediction 2

To assess the second prediction regarding the effect of the depth of institutional agreements, the following equation is regressed:

$$\begin{aligned}\mathrm{CA}_{it} = {} & \beta_0 + \beta_1 \ln\left(Z_{it}^K\right) + \beta_2 \ln(\mathrm{GDP}_{it}) + \beta_3 \ln TC_{it} + \beta_4 (\mathrm{RTA\ HIGH})_{it} \\ & + \beta_5 \left(\ln(TC_{it}) \times \ln\left(Z_{it}^K\right)\right) + \beta_6 \left(\ln(TC_{it}) \times (\mathrm{RTA\ HIGH})_{it}\right) + \beta_7 (\mathrm{RTA\ HIGH})_{it} \times \ln\left(Z_{it}^K\right)\Big) \\ & + \beta_8 (\ln(TC_{it}) \times \ln\left(Z_{it}^K\right) \times (\mathrm{RTA\ HIGH})_{it}) \\ & + \phi C_{it} + \alpha_i + \lambda_t + \varepsilon_{it}. \end{aligned} \tag{11}$$

Again, two types of trade costs are considered: trade costs from Arvis et al. (2013) and real exchange rate volatility. With respect to previous notations, the $\mathrm{RTA\ HIGH}_{it}$ variable is introduced; it measures the number of countries with which country i has a 'common-market' agreement or a monetary union agreement. This variable is used to evaluate the depth of institutional agreements. Crucially, the main interest of disentangling high-level regional agreements and lower-level agreements is the following: the existence of common-market agreements is beneficial to factor mobility, which is not the case with lower-level agreements. In other words, common-market agreements act like a threshold above which factor mobility is favoured. Moreover, when countries have a common currency agreement, the exchange rate risk is lowered so that this type of agreement suppresses the transaction costs associated with capital movements. Both types of agreements are thus beneficial to factor mobility (and especially capital).

The main interest lies in the estimation of coefficient β_8, associated with the triple interaction between trade costs (respectively, RER volatility), the measure of institutional integration and the capital intensity of production. This coefficient should be positive, meaning that there is a magnifying effect of the interaction of trade costs and of the capital intensity of production on current accounts for countries with highly integrated institutions.

This equation is estimated with OLS, and all regressions are clustered at the continental level. The White correction for heteroscedasticity is also used. The results are robust to the use of the Newey–West matrix, controlling for autocorrelation.

(iii) Econometric Issues

Due to obvious simultaneity concerns and an omitted variable bias in the estimation, endogeneity is controlled for using instrumental variables (IV) in a two-stage least squares estimation (2SLS). It is now widely recognised that institutional quality is a strong determinant of growth, a significant part of the effect is channelled through investment (Acemoglu et al., 2001, 2005). I use the World Governance Indicators from Kaufmann et al. (2010)'s data on institutional quality as instruments for capital intensity of production. More precisely, I use the estimated world ranks of 'rule of law quality' and 'corruption level', as well as the first lag of capital intensity, as instruments for the capital intensity of production.

The validity of the instruments is checked using different statistics. Hansen's J-test of over-identification is robust to heteroscedasticity and clustering and is unable to reject our set of instruments in all cases. The F-stat form of the Kleibergen-Paap statistic is also reported, as well as the heteroscedastic and clustering robust version of the Cragg-Donald statistic suggested by Stock and Yogo (2005) as a test for weak instruments. All statistics are above the critical values, confirming that the instruments are strong predictors of capital intensity. The next step is to perform the Durbin–Wu–Hausman test for exogeneity of regressors. Statistically, the null hypothesis of exogeneity cannot be rejected in most specifications. In such a case, Pagan (1984) suggests relying on OLS estimates since they are more efficient. However, I decided to report both OLS and 2SLS estimates to check the robustness of the results.

c. Data Sources and Stylised Facts

The sample is composed of observations from 34 OECD member countries, among which 21 are members of the European Union and 15 belonged to the euro area in 2013. The empirical analysis relies on yearly data from 1990 to 2010.

Current account balances in values are extracted from the OECD Balance of Payments (MEI) Database.

(i) Exports

I use yearly export data, at the sector–country level, from 1988 to 2012 from the OECD International Trade by Commodity Statistics Database. I use sectoral export data, consistently with the 1988 Harmonized System classification[3]. I then construct sectoral share patterns, s_{ijt}:

[3] I use the two-digit level classification, thus exhibiting 97 categories, which all have strictly positive export patterns.

$$s_{ijt} = \frac{X_{ijt}}{\sum_j X_{ijt}},$$

where s_{ijt} is the share of sector j in country i's exports at time t and X_{ijt} measures country i's exports in sector j at time t.

(ii) Sectoral Factor Content

I also use data containing the sectoral factor content included in the production, which proxies the capital stock in the production of a given sector. The data are taken from the factor intensities data set built by the UNCTAD and are then aggregated by sector, to obtain a value of the capital stock for each sector in the 1988 Harmonized System two-digit classification. 2007 is the base year in the sample, implicitly assuming that technology is constant over time and is homogeneous across countries, as in Vanek (1968) or Bowen et al. (1987). I assume that the capital stock in one sector remains constant over the sample time period and that the sectoral capital stock requirement is the same in each country and is similar to the American one.

(iii) Capital Intensity of Production

The capital intensity of exports is measured at the country-year level: it is a proxy for the 'capital content' of a country's exports, in terms of the physical capital that is included in the production process. The index is constructed this way:

$$Z_{it}^K = \sum_j s_{ijt} K_{jt}, \tag{12}$$

where Z_{it}^K measures country i's capital content of exports, s_{ijt} is the previously defined share of sector j in country i's total exports, and K_{jt} is the capital stock included in the production of good j ($\forall i$). The higher the index, the more specialised the country is in capital-intensive activities.

(iv) Trade Costs

Two types of trade costs are considered: total trade costs and exchange rate volatility. In a first step, I use trade cost data from Arvis et al. (2013), which has recently become available in World Bank data sets.[4] These data result from their paper in which trade costs are inferred from the 'inverted gravity' method (Novy, 2013). I thus use data from 1995 to 2010 for the OECD countries.

I then consider effective exchange rate volatility. Monthly effective (trade-weighted) exchange rate data are from the Bank of International Settlement Dataset. The exchange rate volatility is computed as the yearly standard deviation of the monthly log differences in the real effective exchange rate.

(v) Other Variables

Regional trade agreements data come from Vicard (2009). Unless otherwise mentioned, other macro variables come from the Penn World Tables. Table 1 provides the descriptive statistics for the sample.

[4] The database is available at http://data.worldbank.org/data-catalog/trade-cost

TABLE 1
Summary Statistics: Key Variables

Variable	*Mean*	*SD*	*Min*	*Max*
Current account-to-GDP ratio	0.004	0.063	−0.379	0.312
Capital intensity (Z_{it}^K)	9.925	0.797	6.023	11.795
Trade costs	70.723	21.572	2.775	122.757
Real exchange rate volatility	2.052	1.754	0.221	16.734

Note:
Sources in text.

5. RESULTS

The results for the assessment of the two predictions are presented in this section.

a. Prediction 1: Trade Costs and Current Accounts

I estimate equation (10). The OLS and 2SLS estimation results are, respectively, presented in Tables 2 and 3. I present the results from the OLS estimation. The results are also robust to the 2SLS estimation. It can be inferred from these results that Prediction 1 is verified.

In each table, column 1 is the baseline specification in which the current account-to-GDP ratio is regressed on capital intensity, GDP, controls for openness, savings and financial development. Variables that allow for the empirical validation of the first prediction are then added. The trade cost variables are thus sequentially introduced, in columns 2 and 4, as well as their interactive term with capital intensity, in columns 3 and 5.

The estimates confirm that capital intensity is a current account determinant. The β_1 coefficient is significantly different from 0 and is negative. This means that countries which have a high capital intensity of production also run current account deficits. This is in line with the first prediction. This result is present in other specifications departing from the baseline estimation, although its magnitude varies. The estimated OLS elasticities are around −0.2. The result is robust to the 2SLS estimation, taking the endogeneity of the associated variable of interest into account. In column 1 of Table 3, the estimated β_1 is significantly negative. The estimated elasticities are around the same value as the 2SLS estimates.

The negative and significant effect of GDP on current accounts is robust to different specifications and is in line with the standard 'convergence' representation of current accounts: countries that grow more also run current account deficits. The results in both tables suggest that both GDP level and capital intensity are current account determinants. The global allocation of capital is thus driven by two interacting, opposite forces: convergence and composition. The direction of capital flows is determined by the relative strength of these two forces.

Regarding the first prediction, in each table, columns 2 and 3 present the results of the estimation when the specification includes trade costs from Arvis et al. (2013). Columns 4 and 5 display the results when the specification takes real exchange rate volatility into account.

The unconditional effect of trade costs on current accounts is null (β_3 is not significantly different from 0). This coefficient can be interpreted as follows: for the average country in the sample, trade costs have no effect on the current account. Instead, the interactive term between trade costs and capital intensity has a positive and significant effect on the current account (β_4 is positive and significant). What can be inferred from this result is that changes in capital intensity which occur through changes in trade costs affect the current account.

TABLE 2
Regression of the Current Account-to-GDP Ratio – OLS

	(1)	*(2)*	*(3)*	*(4)*	*(5)*
Ln GDP	−0.232***	−0.120***	−0.119***	−0.120***	−0.083
	(0.011)	(0.042)	(0.042)	(0.042)	(0.058)
Ln capital intensity	−0.088***	−0.216**	−1.055***	−0.216**	−1.610***
	(0.027)	(0.092)	(0.147)	(0.092)	(0.336)
Ln capital stock$_{t-1}$	0.045	0.054	0.065	0.054	0.068
	(0.037)	(0.084)	(0.087)	(0.084)	(0.044)
Ln savings	0.030***	0.014***	0.014***	0.014***	0.014***
	(0.001)	(0.003)	(0.002)	(0.003)	(0.001)
Ln population	−0.145	−0.154	−0.159*	−0.154	−0.002
	(0.128)	(0.103)	(0.097)	(0.103)	(0.010)
Ln trade costs		0.003	−2.256***		
		(0.015)	(0.437)		
Ln capital intensity × Ln trade costs			0.195***		
			(0.036)		
RER volatility				0.001	−0.847***
				(0.004)	(0.168)
Ln capital intensity × RER volatility					0.073***
					(0.015)
Observations	373	373	373	373	366
R^2	0.157	0.202	0.274	0.149	0.230
Country Fixed Effects			Yes		
Year Fixed Effects			Yes		

Notes:
(i) Heteroscedasticity-consistent (White correction) standard errors, in parentheses, are clustered at the continental level.
(ii) Intercept not reported.
(iii) ***, **, *respectively denote significance at the 1%, 5% and 10%.

A country where the industrial structure is oriented towards capital-intensive activities following a fall in trade costs is more likely to run a current account deficit. Conversely, a country that faces lower trade costs and that is labour-intensive is more likely to have a current account surplus, insofar as its aggregate capital requirements decrease.

I then investigate the effect of changes in RER volatility – the alternative measure of trade costs – on current account balances. The estimates of the unconditional effect of RER volatility are negative but non-significant. Crucially, when the interactive term is added to the regression, the OLS estimate of β_4 in column 5 is significantly positive. This result can be interpreted as evidence of a joint effect of RER volatility changes and production structure evolutions on current accounts, which confirms the second prediction. This positive correlation between the interaction variable and the current account-to-GDP ratio means that decreasing real exchange rate volatility for capital-intensive countries increases investment, and leads to larger current account deficits. Trade liberalisation should then reinforce investment in countries where the industrial structure is oriented towards capital-intensive activities, leading to larger current account deficits.

Both unconditional effects of trade costs are found to be null. What can be inferred from this null coefficient is that the average elasticity of current accounts to trade costs is 0. This confirms not only that the relation between trade costs and current accounts is not straightfor-

TABLE 3
Regression of the Current Account-to-GDP Ratio – 2SLS

	(1)	*(2)*	*(3)*	*(4)*	*(5)*
Ln capital intensity	−0.018	−0.244	−0.270	−0.275	−4.879**
	(0.132)	(0.179)	(0.181)	(0.185)	(2.350)
Ln GDP	−0.249***	−0.284***	−0.280***	−0.283***	−0.237***
	(0.061)	(0.060)	(0.061)	(0.060)	(0.057)
Ln population	−0.262***	−0.172	−0.211	−0.256	−0.266
	(0.076)	(0.172)	(0.173)	(0.173)	(0.167)
Ln capital stock$_{t-1}$	0.066	0.141**	0.143**	0.156**	0.239***
	(0.041)	(0.069)	(0.070)	(0.067)	(0.065)
Ln savings	0.017*	0.006	0.006	0.006	0.005
	(0.010)	(0.006)	(0.006)	(0.006)	(0.005)
Ln trade costs		−0.003	−0.008**		
		(0.003)	(0.004)		
Ln capital intensity × Ln trade costs			0.003**		
			(0.001)		
RER volatility				0.003	−2.656**
				(0.003)	(1.310)
Ln capital intensity × RER volatility					0.229**
					(0.113)
Observations	340	282	282	282	282
R^2	0.313	0.265	0.273	0.252	0.156
Country fixed effects			Yes		
Year fixed effects			Yes		
Hansen stat.	1.382	4.013	4.607	2.244	3.055
p-value	0.501	0.1345	0.0999	0.3257	0.2171
Kleibergen-Paap stat.	12.794	10.283	10.635	27.756	16.3
Critical value (10%)	9.08	9.08	11.12	9.08	11.12
Durbin–Wu–Hausman	0.664	1.276	0.712	1.439	2.514
p-value	0.4151	0.2586	0.3987	0.2302	0.1128

Notes:
(i) Heteroscedasticity-consistent (White correction) standard errors in parentheses.
(ii) Intercept not reported.
(iii) Instruments: institutional quality data, first lag of capital intensity.
(iv) ***, **, *respectively denote significance at the 1%, 5% and 10%.

ward, but also that my conditional approach is relevant. Taking specialisation patterns into account is necessary to assess the effect of trade costs on current accounts. If these patterns are not taken into account, the effect is only the average (null) one.

b. Prediction 2: Institutional Integration, Trade Costs and Current Accounts

The effect of regional integration on current accounts is further investigated, taking institutional integration into account. I investigate whether institutional integration and its depth affect the shape of the relation between trade cost changes and current account imbalances. I estimate equation (11). The OLS and 2SLS estimation results are, respectively, presented in Tables 4 and 5. Prediction 2 is verified. In each table, columns 1 to 3 present the results of the estimation when the specification includes trade costs from Arvis et al. (2013). Columns 4 to 6 display the results when the specification takes real exchange rate volatility into account as a measure of trade costs.

TABLE 4
Regression of the Current Account-to-GDP Ratio – OLS

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Ln capital intensity	−0.179***	−4.572***	−9.030***	−0.224***	−5.182***	−10.445***
	(0.033)	(1.335)	(2.446)	(0.082)	(1.486)	(2.669)
Ln GDP	−0.209**	−0.222***	−0.221***	−0.192**	−0.222***	−0.192***
	(0.081)	(0.069)	(0.068)	(0.076)	(0.069)	(0.055)
RTA HIGH	−0.011	−3.733**	−19.205***	−0.003	−3.771**	−20.881***
	(0.010)	(1.716)	(4.122)	(0.013)	(1.725)	(4.663)
Ln savings	0.018***	0.014***	0.014***	0.013***	0.014***	0.013***
	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)
Ln population	−0.241***	−0.283***	−0.317***	−0.181*	−0.283***	−0.310***
	(0.078)	(0.085)	(0.066)	(0.093)	(0.085)	(0.043)
Ln capital stock$_{t-1}$	0.064	0.086	0.091	0.083	0.086	0.084
	(0.131)	(0.120)	(0.119)	(0.111)	(0.120)	(0.114)
Ln trade costs		−9.609***	−21.261***			
		(2.420)	(5.307)			
Ln capital intensity × Ln trade costs		0.815***	1.825***			
		(0.206)	(0.458)			
Ln trade costs × RTA HIGH		0.051***	3.588***			
		(0.013)	(0.670)			
Ln capital intensity × RTA HIGH		0.305**	1.646***		0.305**	1.794***
		(0.144)	(0.356)		(0.144)	(0.403)
Ln capital intensity × Ln trade costs × RTA HIGH			0.307***			
			(0.058)			
RER volatility				0.003	−2.402***	−5.215***
				(0.003)	(0.605)	(1.284)
Ln capital intensity × RER volatility					0.204***	0.449***
					(0.052)	(0.111)
RER volatility × RTA HIGH					0.013***	0.813***
					(0.003)	(0.186)
Ln capital intensity × RER volatility × RTA HIGH						0.070***
						(0.016)
Observations	350	350	350	350	350	350
R^2	0.312	0.378	0.396	0.306	0.304	0.306
Country fixed effects				Yes		
Year fixed effects				Yes		

Notes:
(i) Heteroscedasticity-consistent (White correction) standard errors, in parentheses, are clustered at the continental level.
(ii) Intercept not reported.
(iii) ***, **, *respectively denote significance at the 1%, 5% and 10%.

The noteworthy result from this table is that both triple interactions have a positive and significant effect on current accounts. The joint effect of trade costs and capital intensity on current accounts is magnified by high institutional integration. In other words, countries that have decreasing trade costs and increasing capital demand run larger current account deficits, all the more so as they are well integrated in terms of institutional agreements. This result is present when focusing on trade costs *à la* Arvis et al. (2013). The

TABLE 5
Regression of the Current Account-to-GDP Ratio – 2SLS

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Ln capital intensity	−0.326*	−2.696	−7.990	−0.278**	−5.548	−9.032
	(0.187)	(5.988)	(13.267)	(0.133)	(8.976)	(15.310)
Ln GDP	−0.342***	−0.320***	−0.317***	−0.155***	−0.200***	−0.317***
	(0.072)	(0.061)	(0.066)	(0.047)	(0.044)	(0.066)
Capital stock$_{t-1}$	0.163**	0.170**	0.183**	0.030	0.042	0.183**
	(0.080)	(0.070)	(0.079)	(0.053)	(0.048)	(0.079)
Ln savings	0.008	0.008	0.008	0.013*	0.014*	0.008
	(0.008)	(0.006)	(0.005)	(0.007)	(0.007)	(0.005)
Ln population	−0.400**	−0.274*	−0.331*	−0.207*	−0.253**	−0.330*
	(0.203)	(0.140)	(0.175)	(0.109)	(0.100)	(0.174)
RTA HIGH	0.004	−1.375	−13.447	−0.002	−3.941	−14.700
	(0.014)	(4.048)	(39.547)	(0.012)	(4.131)	(45.635)
Ln trade costs		−5.988	−19.017			
		(13.124)	(33.551)			
Ln capital intensity × Ln trade costs		0.508	1.644			
		(1.149)	(2.912)			
Ln trade costs × RTA HIGH		0.033	2.465			
		(0.040)	(8.628)			
Ln capital intensity × RTA HIGH		0.108	1.163		0.320	1.271
		(0.363)	(3.429)		(0.374)	(3.957)
Ln capital intensity × Ln trade costs × RTA HIGH			0.213			
			(0.749)			
RER volatility				0.003	−2.609	−4.650
				(0.003)	(4.456)	(8.320)
Ln capital intensity × RER volatility					0.222	0.402
					(0.389)	(0.722)
RER volatility × RTA HIGH					0.012	0.588
					(0.010)	(2.142)
Ln capital intensity × RER volatility × RTA HIGH						0.051
						(0.186)
Observations	222	222	222	199	199	199
R^2	0.212	0.284	0.326	0.189	0.155	0.206
Country fixed effects				Yes		
Year fixed effects				Yes		
Hansen stat.	5.438	5.772	5.337	3.256	3.296	3.456
p-value	0.142	0.123	0.148	0.353	0.348	0.326
Kleibergen-Paap stat.	10.283	20.635	17.427	13.345	14.613	15.652
critical value (10%)	9.08	11.12	11.52	9.08	11.12	11.52
Durbin–Wu–Hausman	0.268	0.11	0.19	0.527	1.52	1.67
p-value	0.6049	0.7403	0.6633	0.4678	0.2176	0.196

Notes:
(i) Heteroscedasticity-consistent (White correction) standard errors in parentheses.
(ii) Intercept not reported.
(iii) Instruments: institutional quality data, first lag of capital intensity.
(iv) ***, **, *respectively denote significance at the 1%, 5% and 10%.

2SLS results confirm this positive coefficient associated with the triple interaction, even if the statistics mean that the 2SLS estimates are less efficient and provide noisier estimates than OLS. What can be inferred from these results is that regional agreements matter in terms of factor mobility insofar as it shapes the response of current accounts to changes in trade costs.

The positive coefficient associated with the triple interaction including RER volatility is, however, not significantly different from 0 in both estimations. This result is probably driven by the fact that having a high number of agreements generates benefits which are already captured in lower real exchange volatility. Countries which belong to the euro area, thus sharing the same currency and low real exchange rate volatility due to zero nominal volatility, are those which have a high number of agreements, with other European partners in particular.

6. ROBUSTNESS

In this section, I test the sensitivity of the above results to several sources of bias and perturbation, namely using first-difference estimators and investigating potential lagged effects of capital intensity and trade costs on current accounts.

TABLE 6
Regression of the Current Account-to-GDP Ratio – First Difference

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Δ Ln GDP	−0.235***	−0.180***	−0.179***	−0.240***	−0.163***	−0.167***
	(0.027)	(0.028)	(0.026)	(0.031)	(0.040)	(0.038)
Δ Ln capital intensity	−0.042	−0.065	−1.129**	−0.045	−0.039	−1.429***
	(0.048)	(0.057)	(0.540)	(0.052)	(0.039)	(0.509)
Δ Ln capital stock$_{t-1}$	0.062	0.076	0.079	−0.093	0.128*	0.083
	(0.041)	(0.053)	(0.056)	(0.116)	(0.069)	(0.085)
Δ Ln savings	0.009***	0.004***	0.005***	0.009***	0.005***	0.005***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Δ Ln population	−0.095	−0.005	−0.023	−0.107	−0.323**	−0.279*
	(0.161)	(0.096)	(0.095)	(0.148)	(0.138)	(0.150)
Δ Ln trade costs		−0.030***			−0.029	
		(0.007)			(0.026)	
Δ Ln capital intensity × Δ Ln trade costs		0.068***			0.062**	
		(0.017)			(0.029)	
Δ RER volatility			−0.613**			−0.799***
			(0.293)			(0.282)
Δ Ln Capital intensity × ΔRER volatility			0.053**			0.069***
			(0.025)			(0.025)
Observations	256	332	232	256	232	232
R^2	0.132	0.105	0.123	0.167	0.125	0.144
Country fixed effects	No	No	No	Yes	Yes	Yes
Year fixed effects	No	No	No	Yes	Yes	Yes

Notes:
(i) Heteroskedasticity-consistent (White correction) standard errors in parentheses.
(ii) Intercept not reported.
(iii) ***, **, *respectively denote significance at the 1%, 5% and 10%.

a. Alternative Treatment for Unobserved Individual Heterogeneity

In order to address potential omitted variable bias in the empirical exercise, first-difference estimations have been performed for the two predictions. The following equation is thus regressed:

$$\Delta \mathrm{CA}_{it} = \beta_0 + \beta_1 \Delta \ln(Z_{it}^K) + \beta_2 \Delta \ln(\mathrm{GDP}_{it}) + \beta_3 \Delta \ln TC_{it} + \beta_4 (\Delta \ln(TC_{it}) \times \Delta \ln Z_{it}^K) + \phi \Delta C_{it} + \lambda_t + \varepsilon_{it}, \quad (13)$$

where $\Delta X_{it} = X_{it} - X_{it-1}$.

TABLE 7
Regression of the Current Account-to-GDP Ratio – First Difference

	(1)	*(2)*	*(3)*	*(4)*
Δ Ln GDP	−0.186***	−0.146***	−0.162***	−0.133***
	(0.030)	(0.027)	(0.040)	(0.037)
Δ Ln capital intensity	−0.167	−7.428	−0.099	−8.672
	(0.273)	(4.827)	(0.226)	(5.959)
Δ Ln population	−0.071	−0.079	−0.131	−0.124
	(0.087)	(0.069)	(0.187)	(0.296)
Δ Ln trade costs	−0.163		−0.261***	
	(0.114)		(0.101)	
Δ Ln capital stock$_{t-1}$	0.071	0.036	0.080	0.049
	(0.066)	(0.083)	(0.106)	(0.104)
Δ Ln savings	0.005***		0.005***	
	(0.000)		(0.000)	
Δ RTA HIGH	5.056***	−19.641	5.894***	−23.099
	(0.740)	(13.120)	(1.642)	(15.454)
Δ Ln capital intensity × Δ Ln trade costs	0.033		0.398**	
	(0.150)		(0.184)	
Δ Ln trade costs × Δ RTA HIGH	−1.279***		−1.395***	
	(0.246)		(0.533)	
Δ Ln capital intensity × Δ RTA HIGH	−0.452***	1.691	−0.523***	1.989
	(0.063)	(1.132)	(0.147)	(1.338)
Δ Ln capital intensity × Δ Ln trade costs × Δ RTA HIGH	0.114***		0.124***	
	(0.023)		(0.048)	
Δ RER volatility		−4.078		−4.852
		(2.532)		(3.165)
Δ Ln capital intensity × Δ RER volatility		0.351		0.418
		(0.218)		(0.274)
Δ RER volatility × Δ RTA HIGH		0.925		1.113
		(0.581)		(0.696)
Δ Ln capital intensity × Δ RER volatility × Δ RTA HIGH		0.080		0.096
		(0.050)		(0.060)
Observations	216	252	216	252
R^2	0.142	0.117	0.163	0.146
Country fixed effects	No	No	Yes	Yes
Year fixed effects	No	No	Yes	Yes

Notes:
(i) Heteroscedasticity-consistent (White correction) standard errors, in parentheses, are clustered at the continental level.
(ii) Intercept not reported.
(iii) ***, **, *respectively denote significance at the 1%, 5% and 10%.

Standard errors are clustered by continent, and heteroscedasticity is corrected for using the White correction. The results are presented in Tables 6 and 7, respectively, regarding predictions 1 and 2. The first three columns present the results of the estimation without fixed effects, while the last three columns show the results when fixed effects are included. The results presented in Table 6 confirm the previous results. The table gives evidence of a joint effect of trade costs and capital intensity on current accounts. The coefficient associated with the interactive term between variations in trade costs (for the two measures used) and variations in capital intensity is positive and significant. This confirms the positive coefficient asso-

TABLE 8
Regression of the Current Account-to-GDP Ratio – Lagged Effects – First Lag

	(1)	*(2)*	*(3)*	*(4)*
Ln GDP	−0.177***	−0.243***	−0.246***	−0.269***
	(0.053)	(0.025)	(0.069)	(0.059)
Ln capital intensity$_{t-1}$	−0.237**	−0.082***	−1.043*	−1.200**
	(0.106)	(0.027)	(0.551)	(0.601)
Ln capital stock$_{t-1}$	0.060	0.071***	0.079	0.108
	(0.090)	(0.007)	(0.112)	(0.081)
Ln savings	0.020***	0.027***	0.020***	0.017***
	(0.003)	(0.001)	(0.002)	(0.001)
Ln population	−0.175	−0.179	−0.298***	−0.292
	(0.144)	(0.184)	(0.075)	(0.180)
Ln trade costs$_{t-1}$	−0.035		0.144	
	(0.032)		(0.094)	
Ln capital intensity$_{t-1}$ × Ln trade costs $_{t-1}$	0.066		1.462**	
	(0.043)		(0.698)	
RER volatility$_{t-1}$		−0.080		0.205
		(0.370)		(0.459)
Ln capital intensity$_{t-1}$ × RER Volatility $_{t-1}$		0.007		−0.017
		(0.032)		(0.040)
RTA HIGH$_{t-1}$			6.908***	9.145***
			(1.045)	(1.198)
Ln trade costs$_{t-1}$ × RTA HIGH$_{t-1}$			−2.523***	
			(0.470)	
Ln capital intensity$_{t-1}$ × RTA HIGH $_{t-1}$			−0.620***	−0.794***
			(0.093)	(0.102)
Ln capital intensity$_{t-1}$ × Ln trade costs $_{t-1}$ × RTA HIGH$_{t-1}$			0.224***	
			(0.043)	
RER volatility$_{t-1}$ × RTA HIGH$_{t-1}$				−0.657***
				(0.068)
Ln capital intensity$_{t-1}$ × RER volatility $_{t-1t-1}$ × RTA HIGH$_{t-1}$				0.057***
				(0.006)
Observations	275	252	259	204
R^2	0.327	0.344	0.405	0.366
Country fixed effects			Yes	
Year fixed effects			Yes	

Notes:
(i) Heteroscedasticity-consistent (White correction) standard errors, in parentheses, are clustered at the continental level.
(ii) Intercept not reported.
(iii) ***, **, *respectively denote significance at the 1%, 5% and 10%.

ciated with the interactive terms of the levels showed previously. Moreover, this result is not dependent on the presence of country and year fixed effects, even though the elasticity is slightly higher when fixed effects are included.

Table 7 presents the results of the estimation for the empirical verification of Prediction 2. Independently from the inclusion of fixed effects, both triple interactions coefficients are positive, even though the one associated with exchange rate volatility is not significant. This result can be interpreted as confirming the findings above.

TABLE 9
Regression of the Current Account-to-GDP Ratio – Lagged Effects – Second Lag

	(1) *A*	*(2)* *B*	*(3)* *C*	*(4)* *D*
Ln GDP	−0.161***	−0.240***	−0.223***	−0.245***
	(0.047)	(0.037)	(0.052)	(0.030)
Ln capital intensity$_{t-2}$	−0.228**	−0.117***	−0.957**	−1.135**
	(0.105)	(0.017)	(0.400)	(0.532)
Ln capital stock$_{t-2}$	0.032	0.062***	0.052	0.073*
	(0.068)	(0.010)	(0.077)	(0.042)
Ln savings	0.022***	0.026***	0.021***	0.018***
	(0.002)	(0.001)	(0.001)	(0.001)
Ln population	−0.219	−0.250	−0.360***	−0.378*
	(0.138)	(0.184)	(0.058)	(0.215)
Ln trade costs$_{t-2}$	−0.030		0.354***	
	(0.036)		(0.090)	
Ln capital intensity$_{t-2}$ × Ln trade costs $_{t-2}$	0.022		−2.518***	
	(0.075)		(0.682)	
RER volatility$_{t-2}$		0.109		0.897*
		(0.373)		(0.536)
Ln capital intensity$_{t-2}$ × RER volatility $_{t-2}$		−0.009		−0.077*
		(0.032)		(0.046)
RTA HIGH$_{t-2}$			5.613***	5.756***
			(0.944)	(1.891)
Ln trade costs$_{t-2}$ × RTA HIGH$_{t-2}$			−2.228***	
			(0.324)	
Ln capital intensity$_{t-2}$ × RTA HIGH$_{t-2}$			−0.513***	−0.500***
			(0.083)	(0.162)
Ln capital intensity$_{t-2}$ × ln trade costs $_{t-2}$ × RTA HIGH$_{t-2}$			0.199***	
			(0.030)	
RER volatility$_{t-2}$ × RTA HIGH$_{t-2}$				−0.467***
				(0.073)
ln capital intensity$_{t-2}$ × RER volatility $_{t-2}$ × RTA HIGH$_{t-2}$				0.041***
				(0.006)
Observations	281	225	265	204
R^2	0.320	0.362	0.395	0.348
Country fixed effects			Yes	
Year fixed effects			Yes	

Notes:
(i) Heteroscedasticity-consistent (White correction) standard errors, in parentheses, are clustered at the continental level.
(ii) Intercept not reported.
(iii) ***, **, *respectively denote significance at the 1%, 5% and 10%.

b. Lagged Effects

This subsection investigates whether changes in trade costs and in the capital intensity of production have lagged effects on current accounts. When trade cost shocks occur, it is likely that the capital intensity of production will be affected but not necessarily immediately. On the contrary, many studies have shown that factor mobility and factor allocation are sticky processes. In addition, it is well known that trade agreements are likely to have lagged effects on trade. As a result, adjusting factor use takes time and will probably lead to a lagged response of current accounts to changes in trade costs. This idea is tested by regressing the current account-to-GDP ratio on the lagged variables of interest. Two types of lag horizon are tested: the results with a one-year lag are presented in Table 8 and the results using a two-year lag are displayed in Table 9. All specifications included time and country fixed effects.

The specification based on a two-year lag is the preferred one. The results based on a specification using a one-year lag display the expected (positive) coefficients, but they are not significant. On the contrary, using a two-year lag displays positive and significant results with respect to what is expected.

The results presented in this paper are therefore robust to checks regarding unobserved heterogeneity and lagged effects.

7. CONCLUSION

A common view about current accounts has emerged over the past few years: imbalances must be corrected and adjustments must be implemented (Obstfeld, 2012). Yet, the theoretical endogenisation of current accounts occurs through trade reforms. In this paper, the theoretical model implies time-series variations for a given country, depending on the trade costs the country faces, their variations and the resulting changes in production patterns. This mechanism leads to increasing cross-country external position imbalances. Socially efficient trade reforms can produce these optimal imbalances; one may therefore wonder whether correcting them is legitimate.

In this paper, I use a recent theoretical framework that emphasises the role of industrial structure dynamics in the savings and investment decisions that are reflected in current accounts. Introducing trade costs into the discussion allows their effect on specialisation patterns to be taken into account. Regional integration therefore affects current accounts through changes in specialisation patterns and in investment needs. The theoretical predictions are supported by data for OECD countries.

The role of exchange rate volatility is emphasised in this framework. The joint effect of monetary unification and trade structures changes the outcome of integration on current accounts, in addition to the standard effects of integration previously identified by the literature. Future research should focus on a more precise understanding, at the firm level for instance, of aggregate behaviour with respect to monetary unification and changes in volatility.

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