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On the origin of European imbalances in the context of
European integration

Carlos A. Carrasco; Patricia Peinado

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Authors: Carlos A. Carrasco; Patricia Peinado

Affiliations of authors: University of the Basque Country (UPV/EHU)

Abstract: We study the origin of European imbalances in the context of European integration. As a whole, the European Union and Eurozone have had nearly balanced external accounts. However, member countries have presented divergent positions. We analyse the factors underlying the presence of European external imbalances. Our results reveal the existence of divergent trends in key macroeconomic variables within the Eurozone. Moreover, the current account responds to differences in economic growth with respect to the Eurozone-12 and the nominal ULC growth rate. Finally we point out the possible existence of a structural component of the current account. This component could be related to the economic structure and the non-price competitive advantages of each country.

Key words: current account, European imbalances, European integration, competitiveness, catching-up

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Contact details: Carlos A. Carrasco (carlosalberto.carrasco@ehu.es); Patricia Peinado (patricia.peinado@ehu.es).

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University of the Basque Country (UPV/EHU)

1. Introduction

The global financial crisis and the European sovereign debt crisis have demonstrated the unsustainability of divergent external positions and key macroeconomic variables among European Union member states and, particularly, Eurozone countries (Carlos A. Carrasco and Felipe Serrano, 2014). However, while the European Monetary Union (EMU) as a whole has had a relatively balanced current account, the external positions of member countries have differed (Ruo Chen, Gian M. Milesi-Ferretti, and Thierry Tressel, 2013; Philip Lane and Gian M. Milesi-Ferretti, 2007; Oliver Blanchard and Francesco Giavazzi, 2002), especially since the adoption of the single currency. Figure 1 presents current account balances (as a share of GDP) for the Euro Area, European Union, China, Japan and the United States (U.S.). As Figure 1 indicates, the Euro Area and European Union have had a net current account that is nearly balanced. Moreover, Japan and China have had significant and sustained current account surpluses, while the U.S. has presented a negative balance with an increasingly negative trend since beginning of the 1990s until the onset of the international financial crisis.

Insert Figure 1

Differences in external positions, as reflected in the current account imbalances of EMU countries, are not the only type of imbalances. For instance, EMU countries have presented divergent inflation rates, unit labour cost trends and productivity growth (see Figure 2 and Figure 3). Regarding current account imbalances, Portugal, Spain and Greece are

particular examples of deficit countries, in contrast to Luxembourg, the Netherlands and Germany, which have been characterised by significant surpluses. Regarding inflation, southern European economies have also had higher inflation rates than countries such as Germany or the Netherlands. With respect to labour costs and productivity growth, general economic data reveal diverging trends among Euro area countries. Portugal, Greece and Spain have had significantly higher ULC growth than countries such as Germany and Austria, while in the case of productivity growth, there have been significant differences between countries, such as Germany, Finland, and Greece having higher growth and others such as Italy and Spain having lower growth, especially in the period from the adoption of the Euro to the onset of the international financial crisis.

Insert Figure 2

Insert Figure 3

The origin of European macroeconomic imbalances and their connection with the global financial crisis and the European sovereign debt crisis has been a focus of study in the economic literature. European imbalances have been associated with the European integration process and the adoption of the single currency. The economic literature has emphasised certain factors underlying the origin of European imbalances. First, the emergence of imbalances has been connected with the process of global economic and financial integration, which has increased within the EMU. Second, external European imbalances have been linked to diverging trends in price and non-price competitiveness. Third, these imbalances have been related to the fiscal positions of national governments, the so-called twin deficits. Finally, these imbalances are a consequence of the private saving-investment decision in the context of an aging population.

In this paper, we analyse the origins of the external European imbalances reflected in the net current accounts of Eurozone member states. The analysis presented in this paper attempts to contribute to the economic literature by analysing the factors underlying the

emergence of European imbalances with a particular focus on current account imbalances. Thus, after this brief introduction, the structure of the paper is as follows. In the second section, we review the economic literature regarding the origin of European macroeconomic imbalances. In section three, we quantitatively analyse the factors responsible for European imbalances in the context of European integration. Finally, in the fourth section, we present our main conclusions. According to our results, there is evidence of divergent trends in the real effective exchange rate, industrial production, harmonised index of consumer prices and current account balances, while we observed strong convergence in convergence criterion interest rates. In addition, the Eurozone countries' current accounts have responded to growth rate differentials with respect to the Eurozone-12 (catching-up) and the nominal ULC (price competitiveness). However, in addition to cyclical factors, the current account presents a structural component which did not change following the adoption of the Euro. This structural component relates to the economic structure and non-price competitive advantages of each country.

2. Literature review on the factors underlying European imbalances

The global financial crisis and the European sovereign debt crisis have demonstrated the unsustainability of macroeconomic imbalances among European Union member states and, particularly, Eurozone countries. The economic literature has highlighted certain factors responsible for external European imbalances. The first factor relates to the process of economic and financial integration in the Eurozone. In this regard, external imbalances are consequence of a real convergence process in which EMU countries with relatively low levels of development are converging toward highly developed countries (Blanchard and Giavazzi, 2002; Birgit Schmitz and Jürgen von Hagen, 2011; José M. Campa and Angel Gavilan, 2011; Ansgar Belke and Christian Dreger, 2013). In this case, according to the neoclassical theory of economic growth, capital would flow from more-developed to less-developed countries in the EMU to obtain higher marginal returns due to baseline differences in capital-to-labour ratios (Blanchard and Giavazzi, 2002). The trends would cease once the catching-up process had been completed and convergence achieved. In

addition, in the context of a global process of economic and financial integration, which is more extensive in the EMU, countries such as France, Germany or the Netherlands served as financial intermediaries between global financial markets and southern European countries (Chen, Milesi-Ferretti, and Tressel, 2013; Schmitz and von Hagen, 2011). The positive impact of the introduction of the Euro (Lane and Milesi-Ferretti, 2007; Philip Lane, 2013), namely, eliminating exchange rate risk and decreasing uncertainty, in addition to the relative homogeneity of the financial markets in EMU countries, which have a high degree of sophistication and high institutional quality, encouraged capital flows towards the southern European economies, creating diverging imbalances in the external positions of EMU countries.

The second factor concerns the diverging trends in price and non-price competitiveness with a loss of relative competitiveness in the convergence countries of the EMU with respect to the core countries (Belke and Dreger, 2013). The diverging trends in competitiveness within the Eurozone are related to three interconnected characteristics of the Eurozone: significant differences in economic structures, different economic strategies and the current economic policy design of the EMU. For instance, according to Eckhard Hein (2013-14), European countries can be grouped into three types of growth strategies during the financialisation period. The first group (Greece, Ireland and Spain) is characterised by debt-led consumption demand. The second group (Austria, Belgium, Finland, Germany and the Netherlands) follows a neo-mercantilist, export-led growth strategy, in which export surpluses are used to stabilise aggregate demand. Finally, the third group (France, Italy and Portugal) is characterised by a domestic demand-led growth strategy. This unbalanced overall growth strategy is accompanied by a deterioration in the income distribution that is temporarily corrected by the accumulation of debt in certain countries (Jorge Uxó, Jesús Paúl and Eladio Febrero. 2011). These diverging strategies are reflected in the different trends in productivity growth, ULC and inflation rates among Eurozone member states. On the one hand, by depressing internal demand, neo-mercantilist, export-led growth countries secure gains in competitiveness, increasing their exports and financing the current accounts of debt-led consumption demand countries. On

the other hand, growth in certain southern countries is based on debt-led consumption, partly encouraged by the low cost of funding originating in the core countries. These capital flows exert downward pressures on the price of money and upward pressures on prices and wages and contribute to a loss of competitiveness in debt-led consumption countries.

Regarding the current economic policy design of the EMU (Eckhard Hein, Achim Truger and Till van Treeck, 2012), the adoption of the single currency and the entrance into the Eurosystem fully transferred monetary policy competences from EMU member states to common monetary authorities, while fiscal policy was established based on coordination rules framed in the Stability and Growth Pact (SGP), whilst other economic policies, such as income policy, are subject to a soft coordination scheme. In the absence of a proper synchronisation of business cycles and a relatively heterogeneous economic structure among members of the EMU, the threshold imposed by the SGP limits the ability to respond to changes in the business cycle and contributes to the creation of diverging trends in inflation and ULC. In addition, external imbalances are connected to errors in the design of the EMU or design faults (Philip Arestis and Malcolm Sawyer, 2011), for instance, in the convergence criteria, which focused on nominal rather than real variables while failing to consider the nominal exchange rates at which countries enter the EMU or differences in inflation mechanisms between countries.

The third factor underlying the external imbalances is based on differences in population structure and old-age-dependency ratio projections (Joshua Aizenman and Rajeswari Sengupta, 2011; AFM Hassan, Ruhul Salim and Harry Bloch, 2011; Sebastian Barnes, Jeremy Lawson and Artur Radziwill, 2010), that is, countries with higher expected old-age-dependency ratios exhibit higher savings rates, while those countries having reached the "old" society stage would present lower or even negative savings rates (dissaving process). This excess of savings would then have been channelled to countries with higher marginal returns, and this would be manifested in the different external positions of EMU countries. This factor has been highlighted in the case of global imbalances. However, in the case of the Eurozone, this factor has not been deeply explored in the economic literature.

Finally, the fourth factor underlying the emergence of European imbalances pertains to the fiscal position of government budgets, the so-called twin deficits. In this case, evidence from EMU countries does not present a common pattern: for some countries, fiscal positions have contributed to current account imbalances, while this relationship does not exist for others (Nikolina E. Kosteletou, 2013; Hein, Truger and van Treeck, 2012; Barnes, Lawson and Radziwill, 2010; Sophocles N. Brissimis et al., 2010; Oliver Blanchard, 2007). Certain contributions analyse this relationship and its connection with fiscal consolidation in the context of the EMU. John C. Bluedorn and Daniel Leigh (2011) demonstrate that a fiscal consolidation of 1% of GDP improves current account balances by 0.6% of GDP. Roel Beetsma, Massimo Giuliadori and Franc Klaassen (2008) report that an increase in public expenditures of 1% of GDP worsens the current account balance by 0.5% of GDP, and over the next two years, this increases to up to 0.8% of GDP. Kosteletou (2013) provides evidence supporting the twin deficits hypothesis in southern European countries. However, this relationship is not confined southern European countries but is also present in the core countries, suggesting that a coordinated fiscal policy scheme should be implemented to address the external imbalances. Barnes, Lawson and Radziwill (2010) observe a relationship between fiscal policy and current accounts but with effects that are lower than a one-to-one relationship. While some economic policy discussions following the onset of the great moderation argue that government fiscal problems cause European imbalances, at least in the countries of southern Europe, Hein, Truger and van Treeck (2012) argue that this is not the case. When examined in detail, external imbalances in peripheral EMU countries are rooted in private saving-investment decisions. However, once the crisis began, the high indebtedness of the private sector forced a restructuring of private sector balance sheets to deleverage. This change forced the governments of these countries to increase the level of public expenditure and, therefore, public debt in an attempt to compensate for and mitigate the effects of private sector adjustment on the economy.

What can we determine from these findings? The entry into the third stage of the Economic and Monetary Union, characterised by the adoption of the Euro, which reduced exchange rate risks and placed business in the institutional framework of the EU, incentivised capital

flows from the core countries to periphery countries in the Eurozone in a search for higher marginal returns due to the expected process of real convergence and, to some extent, the overestimation of future growth in the peripheral economies. Those capital flows exerted downward pressure on nominal interest rates and encouraged the creation of a debt-led consumption bubble in the periphery countries. In addition, these capital flows contributed to the development of a bubble in the residential investment sector while exerting demand-side pressure on prices and wages in the southern countries. Capital flows also contributed to the formation of sectorial imbalances. The development of the bubble in the construction sector diverted resources from other sectors. For instance, stronger wage growth in this sector attracted workers from other sectors or even students who entered the labour force to work in construction. The construction sector is characterised by limited potential for productivity increases, which was reflected in low overall productivity growth. Moreover, the core countries of the Eurozone have been characterised by depressed domestic demand and growth in prices and wages below the level of productivity growth, thereby securing gains in competitiveness relative to the countries of the periphery. Additionally, non-price competitiveness reflects differences in economic structure and specialisation between peripheral and core countries, whereby core countries have a relative advantage in the high-added value sector and export-based industries.

In addition to the above-mentioned factors, the design of economic policies in the Eurozone permitted the continuation of divergent trends in key macroeconomic indicators. First, given the lack of complete synchrony in the business cycle among the countries of the Eurozone, the common monetary policy has been ineffective overall. For instance, as southern countries expand due to the expectation of a catching-up process and core countries exhibit slow economic growth, expansionary monetary policy would have overheated the economies of the periphery countries, creating demand-side pressures contributing to the creation of bubbles in sectors such as construction. Second, fiscal policy, framed within the limits of the SGP, has constrained the actions of national governments in the presence of external shocks, contributing to the exacerbation of the crisis and the deterioration of economic outlooks in the peripheral countries. Finally, wage

and income policies have not been coordinated to correct macroeconomic imbalances without affecting inflation rates through controlling the divergent wage growth rates among Eurozone member countries (Jesús Ferreiro and Carmen Gómez, 2014, Arestis and Sawyer, 2013, Eckhard Hein, 2002).¹

In the Euro Area, the member states have not exhibited a homogeneous or linear relationship between the deterioration of the public balance and the development of current account imbalances. In addition, while the literature has highlighted the relationship between aging and the deterioration of current account balances via private and public saving, further studies on the European economy are required. In the next section, we analyse the aforementioned factors and their relationship with the current account in Eurozone countries.

3. Empirical analysis

Convergence and divergence

Our first approach to analysing European imbalances is presented in Table 1, which reports the results of panel unit root tests for selected macroeconomic variables. We conduct these panel unit root tests to formally analyse the converging or diverging trends in a selection of macroeconomic variables. Henceforth, we restrict our analysis to Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal and Spain. We use the German economy as a benchmark given its importance in Europe and due to the lack of quarterly data in other potential benchmark economies such as the EU or Eurozone. The real effective exchange rate (REER), industrial production (IP) and harmonised index of consumer prices (HICP) are presented as logarithmic differences, while the convergence criterion interest rates (IR) are simple differences, in both cases

¹ To address the problem under the Eurozone's current economic policy design, any measures implemented must be regarded as a policy package that includes monetary, fiscal, regional, industrial and income policies. See Detzer and Hein (2014).

with respect to Germany's. Finally, we also present the current account balance as a share of GDP (CA).

Insert Table 1

We apply the panel unit root tests proposed by Kaddour Hadri (2000), Andrew Levin, Chien-Fu Lin, and Chia-Shang J. Chu (2002) and Kyung S. Im, M. Hashem Pesaran, and Yongcheol Shin (2003). In the case of REER, IP, HICP and IR, the presence of a unit root would indicate divergent trends between the indicated country and the reference country, while in the case of CA, the presence of a unit root indicates the persistent absence of a balanced current account. The results in Table 1 reveal a marked divergence in IP. In the case of REER, there is evidence of the presence of a common unit root for all of the members of the panel, while for HICP and CA, there is evidence of individual unit roots. Finally, IR is the only variable exhibiting convergence. In summary, REER, IP, HICP and CA reveal evidence of diverging trends, while there has been convergence in interest rates.

Factors behind the European imbalances

As mentioned above, the four factors that may have any influence on the development of European imbalances are the catching-up process, price competitiveness, differences in population structure and old-age-dependency ratio projections, and the fiscal position. In this section, we analyse the effect that each factor may have on European imbalances. To do so, we estimate the standard two-way fixed effects model as described by expression (1).

$$(1) \quad CA_{it} = \beta_0 + \beta_1 GD_{it} + \beta_2 ULC_{it} + \beta_3 DR_{it} + \beta_4 FP_{it} + \eta_i + \lambda_t + u_{it}$$

Where differences in GDP growth are measured by the variable GD_{it} , which reflects the catching-up process. We can identify these differences in growth rates in each period t for each country i as the difference between the growth rate and the average growth rate of a certain group of countries as in expression (2).

$$(2) \quad GD_{it} = (g_{it} - \bar{g}_t)$$

Where g_{it} is the growth rate of country i in the year t and \bar{g}_t represents the average of the growth rates in the specified area, that is, the Eurozone-12 (EA-12). The effect of differences in price competitiveness is explained as the growth rate of the nominal unit labour costs associated with country i at time t (ULC_{it}). Population ageing is captured by the Dependency Ratio of country i in period t (DR_{it}). Finally, variable FP_{it} explains the type of fiscal policy followed by the corresponding country i in each year t . This last variable is defined as a dummy variable that takes value one when the cyclically adjusted public budget is negative (expansive discretionary fiscal policy) and zero otherwise.

Unfortunately, data for all the variables are only available on an annual basis. Therefore, we use annual data for the period 1996-2012. Current account, growth rates and dependency ratios are obtained from Eurostat, while nominal unit labour costs are taken from AMECO. Panel unit root tests (Im, Pesaran and Shin, 2003 and Levin, Lin and Chu, 2002) for the variables in our model indicate that CA_{it} is I(1), GD_{it} , ULC_{it} and FP_{it} are I(0) and DR_{it} is I(2)². Given this features, the specification of the model we finally estimate is given by expression (3):

$$(3) \quad \Delta CA_{it} = \beta_0 + \beta_1 GD_{it} + \beta_2 ULC_{it} + \beta_3 \Delta^2 DR_{it} + \beta_4 FP_{it} + \eta_i + \lambda_t + u_{it}$$

² Results are available upon request of the authors.

Where ΔCA_{it} represents current account increases from period $t-1$ to period t ; $\Delta^2 DR_{it}$ is the second difference of the dependency ratio for country i at time t . These two variables have been transformed to warrant stationarity. However, for simplicity, we will explain the results using the expression “current account” for the former and “dependency ratio” for the latter. The remaining variables are those explained in model (2) above.

Column (1) in Table 2 reports the results from estimates.³ The coefficients are jointly significant,⁴ and the adjusted R^2 amounts to 33.8 per cent. GDP growth differentials and ULC growth are statistically significant. However, after controlling for these two factors, the remaining variables, namely, the old-age dependency ratio and fiscal policy are not significant factors in explaining current account differentials.

Insert Table 2

From Table 2, we can conclude that both the catching-up process and price competitiveness are key variables in explaining differences in current account imbalances. Once these variables are included, the ageing structures and fiscal positions of the countries analysed do not appear to contribute additional relevant information to our model. As a consequence, and to improve efficiency, we continue our analysis while only including the variables GDP differentials and ULC in the model, as in expression (4), where the variables are those explained above for specifications (1) and (3).

³ Estimates are performed by fixed effects. Standard errors are computed using Driscoll-Kraay's formula to correct for the presence of contemporaneous correlation and heteroskedasticity. Pesaran and Breusch-Pagan LM test of independence reveal the existence of contemporaneous correlation. Wald test for heteroskedasticity reveals non-homoscedasticity. Shapiro-Wilk test for normality does not reject the normality assumption for the estimates of the error term. Results are available upon request of the authors.

⁴ Wald test reveals significance at 1%. The results are available from the authors upon request.

$$(4) \quad \Delta CA_{it} = \beta_0 + \beta_1(g_{it} - \bar{g}_t) + \beta_2 ULC_{it} + \eta_t + \lambda_i + u_{it}$$

The results⁵ from this last specification are presented in the column (2) of Table 2. A 1 per cent increase in GDP growth differentials is associated with a decline in the current account equal to 0.235 points, while higher ULC differentials result in a decrease in the current account, equal to 0.205.

Robustness of the model to the introduction of the Euro

We are interested in determining whether the model developed above would also be appropriate for explaining current account imbalances when the analysis is constrained to period in which the single currency (Euro) has been in place. The Euro was introduced in 1999. This event is expected to have impacted current account imbalances and the effect that GDP differences and ULC have on them (see section 2).

Column (3) in Table 2 reports the estimates for the period 1999-2012. As the results indicate, when the analysis is constrained to the period following the introduction of the Euro, the results do not differ significantly from those presented above. Both GDP differences and ULC are significant and negatively affect current account balances. After constraining the period, we can conclude that a 1 per cent increase in GDP growth differentials reduces the first differences of the current account by 0.239 points, while higher ULC differentials result in a decrease in the first differences of the current account equal to 0.211 points. The variables continue to be jointly and individually significant, while the adjusted R² is equal to 33 per cent.

⁵ Estimates are performed by fixed effects. Standard errors are computed using Driscoll-Kraay's formula to correct for the presence of contemporaneous correlation and heteroskedasticity. Pesaran and Breusch-Pagan LM test of independence reveal the existence of contemporaneous correlation. Wald test for heteroskedasticity reveals its existence. Shapiro-Wilk test for normality does not reject the normality assumption of the errors from estimates. Results are available upon request of the authors.

Structural component of Current Account

Estimates above show the importance of GDP differences and ULC to explain current account increases. However, much of the variance remains unexplained, as revealed by the value of the adjusted R^2 (33 per cent). What factors drive these results? There are several reasons to suspect from the existence of a strong structural component of the current account. Examples of these are country-level specialisation and other non-price competitiveness factors affecting the current account. For instance, if we include lagged values of the current account as explanatory variable the estimation (column 4 in Table 2) the variable shows statistical significance and negative sign. This could be interpreted as a correction of temporary cyclical deviations toward the structural trend. This is the four periods lagged value of current account differences proves to be negative and significant⁶ giving evidence of an existing structural component of the current account. In this regard, there is need for deeper analyses about the structural origin of the current account imbalances. However, we would like to highlight two facts. On the one hand, differences among countries could be associated with the structural component of the current account imbalances, namely, country-level specialisation and non-price competitiveness. For instance, if we plot high-technology exports (proxy for non-price competitiveness) against the current account period average, as in Figure 4, we observe a positive relationship between those variables. A country with a structural non-price competitive advantage tends to exhibit a current account surplus.

Insert Figure 4

On the other hand, if we plot the average current account in the period preceding the adoption of the Euro versus the average for the Euro period, as in Figure 5, we observe a positive relationship between the average current account in both the pre- and post-Euro

⁶ We have also tested many other lags. The only one that is significant is the fourth. Results are available upon request of the authors.

periods. This is, countries' average current account during the Euro period is significantly positively related to the average current account in the pre-Euro period, which reaffirms the possible existence of a structural relationship beyond the cyclical effects considered in the models above and the effects of the introduction of the single currency. Notwithstanding, this does not imply that the euro adoption has not had any effects on the current account.

Insert Figure 5

What implications do our results have for with respect to policy interventions to address the external imbalances if current account does eventually show a structural component? The primary implication is that restrictive fiscal and monetary policy would only correct the cyclical component of the external imbalances. Second, policies addressing external imbalances should focus on sectorial incentives and long-run dynamics, i.e., industrial policies to develop a long-run economic structure in those countries currently experiencing a deficit that encourage the development of industries that provide non-price competitive advantages. Finally, as part of the external imbalances is related to labour cost growth that exceeds the rate of productivity growth, income-policies could be effective if they warranted a rate of growth of the ULC in peripheral countries not exceeding that of the core countries.

4. Final remarks

In this paper, we study the origins of European imbalances. Following a literature review on the factors responsible for the imbalances, we present evidence of the diverging trends in the Eurozone concerning certain key macroeconomic variables such as the real effective exchange rate, industrial production and the harmonised index of consumer prices, while interest rates exhibit convergence.

In addition, we quantitatively analyse the effects of growth rate differentials with respect to the EA-12 average (catching-up factor), the rate of nominal ULC growth (non-price competitiveness factor), the old-age-dependency ratios (population structure factor) and the fiscal position of the government budget (twin deficits) on the current account. Our results demonstrate the importance of the two first variables in explaining current account imbalances. This result is robust to the introduction of the single currency (Euro).

In addition to cyclical factors, our results point out to the possible presence of a structural component of the current account. Although more research is necessary to reach appropriate conclusions, this fact would imply the adoption of specific policy measures focused on this structural component.

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Figure 1: Current Account (% of GDP) for selected countries and regions. Source: IMF.

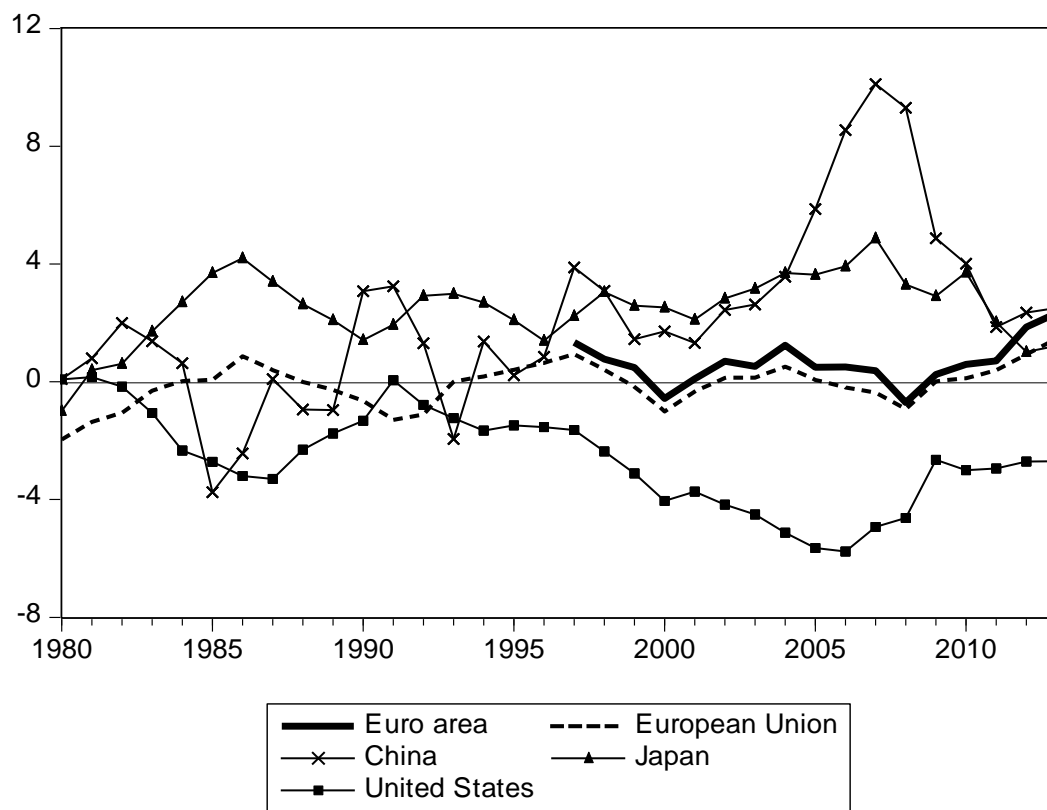


Figure 2: Current Account (% of GDP) and Inflation Rates. Source: OECD Statistics

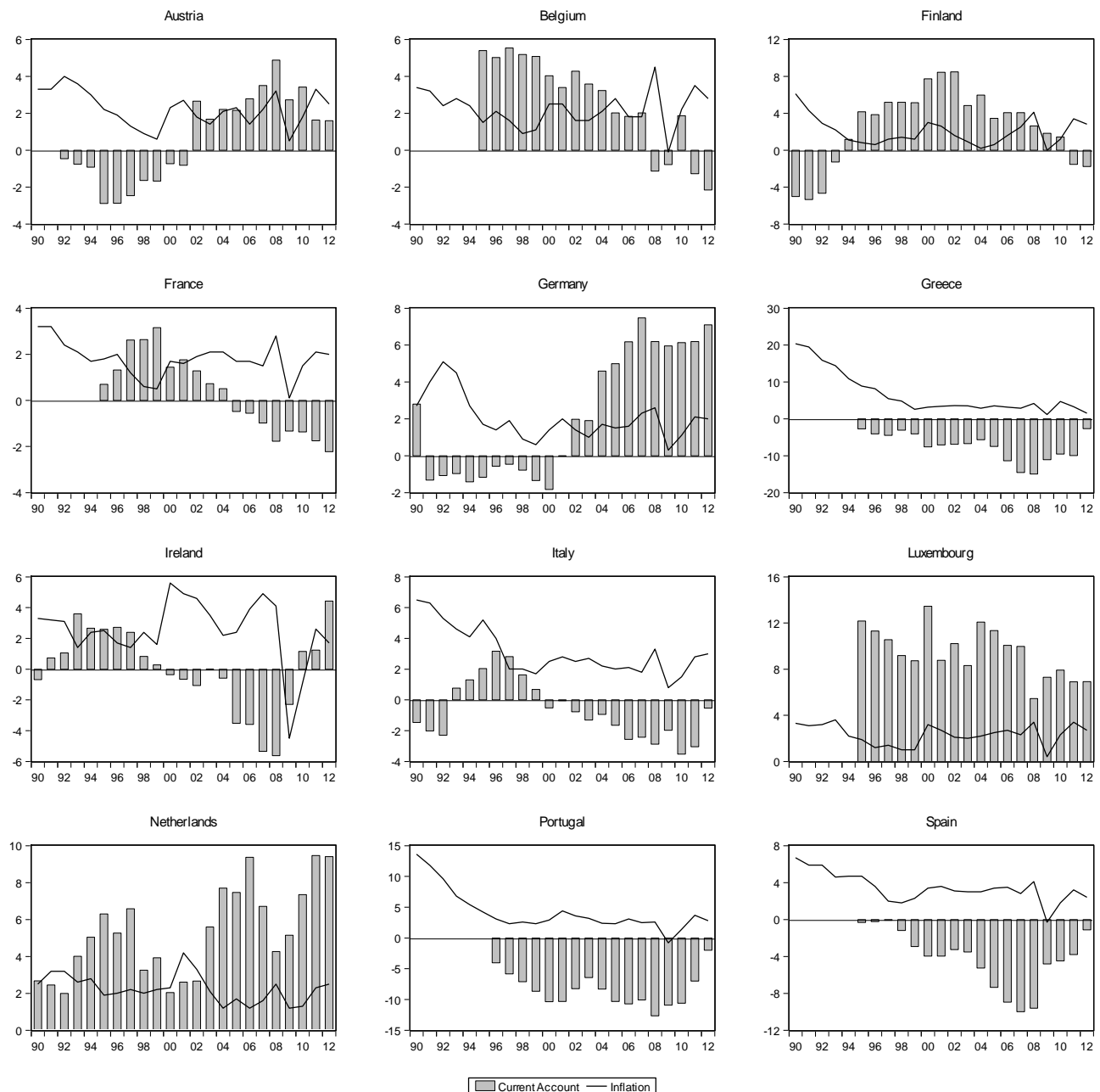
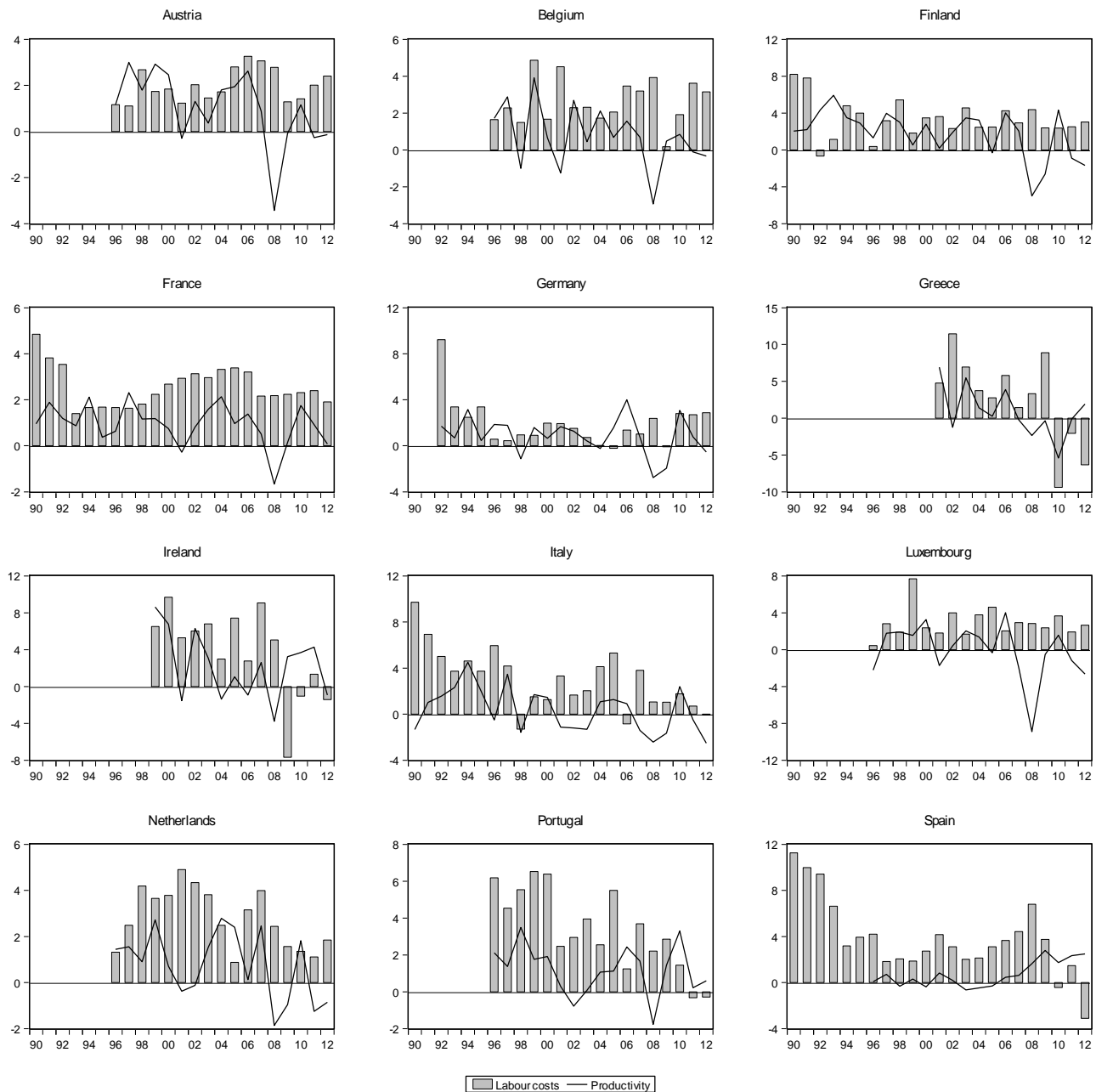


Figure 3: Rate of Growth of Labour Costs (Labour Compensation per employed person) and Rate of Growth of Productivity (GDP per person employed). Source: OECD Statistics.



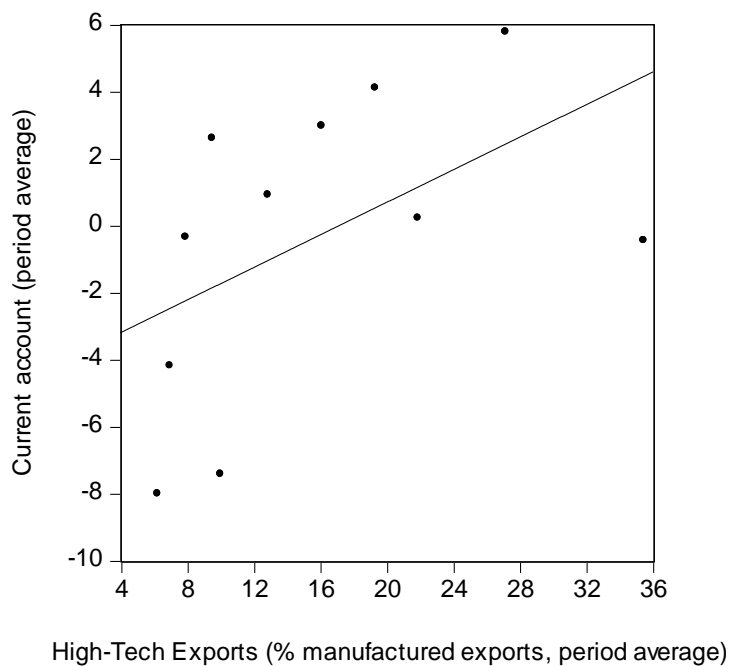


Figure 4:

Current account (period average) versus period average of high-technology exports (% of manufactured exports). Notes: period 1995-2012;

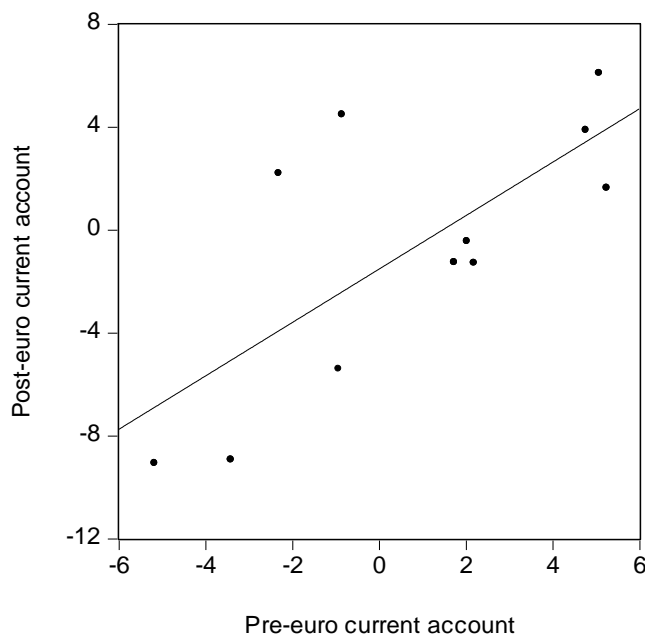


Figure 5: Post-euro average of current account (2000-2010) vs pre-euro average of current account (1995-1999).

Table 1: Panel Unit Root Tests for Selected Variables

Table 1 Panel Unit Root Tests						
		Real Effective Exchange Rate Index based on ULC (log differentials) (1)	Industrial Production Index (log differentials) (2)	Harmonised Index of Consumer Prices (log differentials) (3)	Interest rate differentials-convergence criterion (4)	Current Account balance (% of GDP) (5)
Levels						
LLC (2002)	t*-Stat (p-value)	-0.3302 (0.3706)	2.7576 (0.9971)	-5.4172 (0.0000)	-6.5903 (0.0000)	-2.5451 (0.0055)
IPS (2003)	W-Stat (p-value)	-2.5624 (0.0052)	4.5520 (1.0000)	-0.7107 (0.2386)	-3.4200 (0.0003)	0.2770 (0.6091)
Hadri (2000)	Z-Stat (p-value)	13.1337 (0.0000)	18.1015 (0.0000)	17.2118 (0.0000)	3.7558 (0.0001)	9.0634 (0.0000)
First difference						
LLC (2002)	t*-Stat (p-value)	-14.6834 (0.0000)	-26.5607 (0.0000)	-6.6075 (0.0000)	-21.0701 (0.0000)	-34.9605 (0.0000)
IPS (2003)	W-Stat (p-value)	-11.6030 (0.0000)	-26.5798 (0.0000)	-6.5290 (0.0000)	-19.1955 (0.0000)	-34.0930 (0.0000)
Hadri (2000)	Z-Stat (p-value)	0.4374 (0.3309)	6.0066 (0.0000)	7.9244 (0.0000)	0.8475 (0.1983)	2.3868 (0.0085)
Differentials with Germany. Panel data includes Austria, Belgium, Finland, France, Greece, Ireland, Italy, Netherlands, Portugal, Spain and only for Current Account Germany. Source and period: (1) IMF-IFS, 1990Q1-2013Q2; (2) IMF-IFS, 1990Q1-2012Q4; (3) Eurostat, 1996Q1-2013Q4; (4) Eurostat, 1990Q1-2013Q4; (5) Eurostat, 1996Q1-2013Q3.						



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Table 2. Results from estimates.				
	(1)	(2)	(3)	(4)
<i>GD</i>	-0.205	-0.235	-0.239	-0.208
	(0.072)**	(0.059)***	(0.072)***	(0.033)***
<i>ULC</i>	-0.198	-0.205	-0.211	-0.219
	(0.062)***	(0.055)***	(0.060)***	(0.050)***
<i>DR</i>	0.345	-	-	-
	(0.528)	-	-	-
<i>FP</i>	0.427	-	-	-
	(0.364)	-	-	-
ΔCA_{t-4}	-	-	-	-0.192
	-	-	-	(0.068)**
<i>Constant</i>	0.084	0.459	0.489	0.472
	(0.435)	(0.198)**	(0.207)***	(0.094)***
Obs.	176	187	154	143
R ²	0.446	0.433	0.433	0.468
Adjusted R ²	0.338	0.332	0.332	0.354
Note. **Shows significance at 5% level. ***Shows significance at 1% level. Robust standard errors in parenthesis: columns (1) to (3) according to Driscoll-Kraay; column (4) according to Huber-White.				

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THE ABSTRACT OF THE PROJECT IS:

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?

THE PARTNERS IN THE CONSORTIUM ARE:

Participant Number	Participant organisation name	Country
1 (Coordinator)	University of Leeds	UK
2	University of Siena	Italy
3	School of Oriental and African Studies	UK
4	Fondation Nationale des Sciences Politiques	France
5	Pour la Solidarite, Brussels	Belgium
6	Poznan University of Economics	Poland
7	Tallin University of Technology	Estonia
8	Berlin School of Economics and Law	Germany
9	Centre for Social Studies, University of Coimbra	Portugal
10	University of Pannonia, Veszprem	Hungary
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12	Middle East Technical University, Ankara	Turkey
13	Lund University	Sweden
14	University of Witwatersrand	South Africa
15	University of the Basque Country, Bilbao	Spain

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