

MAKING CURRENT ACCOUNT ADJUSTMENT IN EUROPE GROWTH FRIENDLY

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Rebalancing and Reforms

The analysis in the previous chapters focuses on how to enhance the functioning and the efficiency of countries' economies. However, repairing balance sheets in the private and public sectors, and implementing reforms to product and labor markets, will not only help economies reach their full potential—these actions can also make them more competitive, adding the “pull” from external demand to the “push” of domestic reforms to open the door to a faster, sustainable impact from the structural reforms. One important aspect of positioning countries to successfully partake in global markets is the integration with cross-border supply chains, discussed in detail in chapter 10. Another is the ongoing adjustment process of current account (CA) imbalances within the euro area (EA).

The common currency has shaped the external environment of EA countries and emerging Europe. Although not always driven by the same factors, some countries, such as Germany, accumulated ever-larger overall CA surpluses, largely with respect to non-EA countries; as CA balances worsened substantially in other EA countries, particularly those in the periphery.¹ Although Greece and Portugal already had sizable CA deficits at the time of their accession to the euro, Spain had only a moderate deficit, and Ireland a balanced CA. During 1999–2007, all of these countries except Portugal saw their CA balances worsen. Such dynamics, however, were not confined to countries inside the EA—similar dynamics played out in a number of emerging European economies outside the EA, particularly those with fixed exchange rate regimes, with CA deficits in some reaching unsustainable levels of as high as 25 percent of GDP in the run-up to the financial crisis.²

This chapter aims to explain rebalancing across European countries. Large precrisis CA deficits necessitate a correction, a task that is greatly complicated by the absence of the exchange rate as an independent policy tool. The challenge for both the EA periphery and emerging European countries

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¹ The EA periphery is defined in this chapter to comprise Greece, Ireland, Portugal, and Spain.

² The set of emerging European economies with fixed exchange rate regimes consists of Bulgaria, Estonia, Latvia, and Lithuania.

with limited exchange rate flexibility is finding the right set of policies to secure growth-friendly rebalancing and orderly adjustment.³ But there are also important differences. The EA periphery countries have more-closed economies, implying a much larger growth impact from fiscal policy, particularly during recessions, and constraints on the scope for fiscal consolidation. At the same time, unlike the emerging European countries, the EA periphery countries have access to emergency financing that can provide a cushion against private capital outflows. There are also structural differences in labor market flexibility and in export structure. Finally, the level of indebtedness, particularly for households, is considerably higher in the EA periphery countries, posing an additional challenge to the adjustment process.

The chapter proceeds as follows: The next section describes the CA boom and bust of recent years, and is followed by a section that outlines stylized facts about saving and investment. The subsequent section provides a summary of empirical results from a reduced-form estimation of CA determinants. The final section discusses policy implications discerned from the previous sections and concludes.

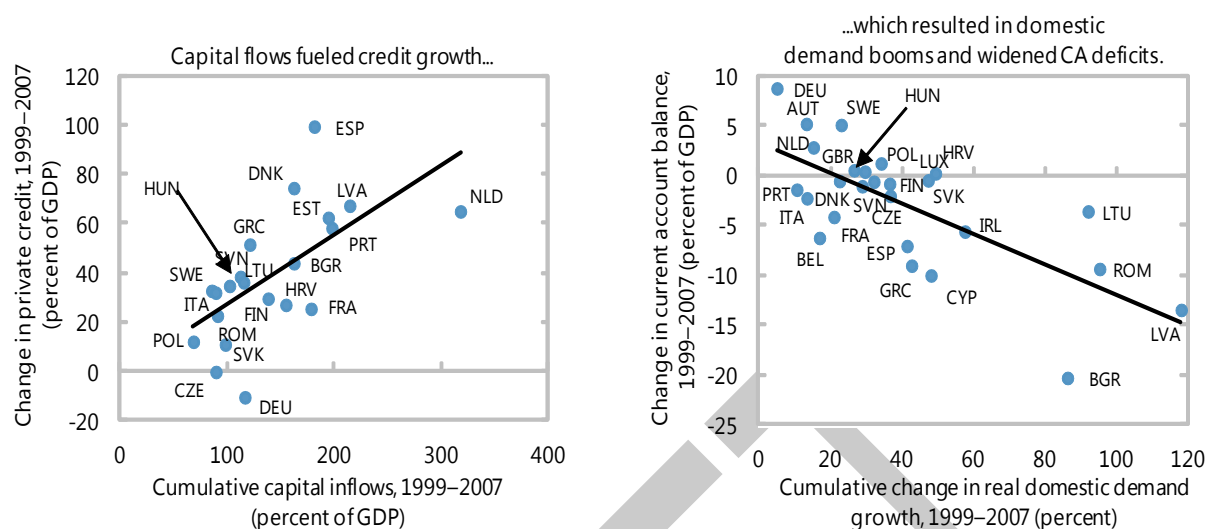
The Boom and the Bust

The story of widening CA imbalances in European countries has been well documented (e.g., Rahman, 2008; Berger and Nitsch, 2010; Jaumotte and Sodsriwiboon, 2010; Chen, Milesi-Ferretti, and Tressel, 2012; Atoyan, Jaeger, and Smith, 2012).⁴ A short summary plays like this: bank-intermediated large-scale foreign capital inflows fueled a domestic demand boom, which spilled over into imports and consequently widened the CA deficit (Figure 9.1). For countries in the EA periphery, a rapid decline in borrowing costs and abundant global liquidity further facilitated large foreign capital inflows, while for emerging Europe, accession to the European Union (EU) signaled prospects for faster income convergence and ushered in an era of abundant foreign capital flows.

Because credit benefited various nontradables sectors, ranging from construction to retail, growth was built on unsustainably high domestic demand. Moreover, large increases in wages and prices—often rooted in expectations of fast income convergence—gradually eroded the role of the tradables sector in these economies. The result was a deterioration of competitiveness and an excessive buildup of debt, mostly owed to foreigners, without corresponding debt-servicing capacity or creation of policy space to counter the inevitable downturn.

³ This chapter does not investigate whether adjustment has been “complete” against some equilibrium benchmark, but simply explains how changes in CA balances have been affected by changes in various explanatory variables. It also does not address the issue of intra-euro area imbalances and instead treats countries in the EA as individual countries without an exchange rate policy option, just like the fixed exchange rate economies in emerging Europe.

⁴ Atoyan, Manning, and Rahman (2013) provide a more detailed survey of the recent related literature.

Figure 9.1. Capital Flows and the Current Account in the European Union, 1999–2007


Sources: IMF, *International Financial Statistics*; IMF, *World Economic Outlook*; and IMF staff calculations.

Despite some common themes, demand booms and associated widening of CA deficits were driven by somewhat different factors in the EA periphery and emerging Europe. Large precrisis CA deficits in emerging Europe were predominantly a private sector undertaking, resulting from actions by both households and nonfinancial corporates (NFCs), and the public sector recorded a small surplus everywhere except Lithuania (Figure 9.2). In the EA periphery, the private sector also played an important role—household imbalances were large in Greece and Ireland, resulting from a consumption and housing boom, and NFCs’ imbalances were significant drivers of CA deficits in Portugal and Spain. But especially in Greece and Portugal, public sector imbalances also contributed significantly to precrisis CA deficits.

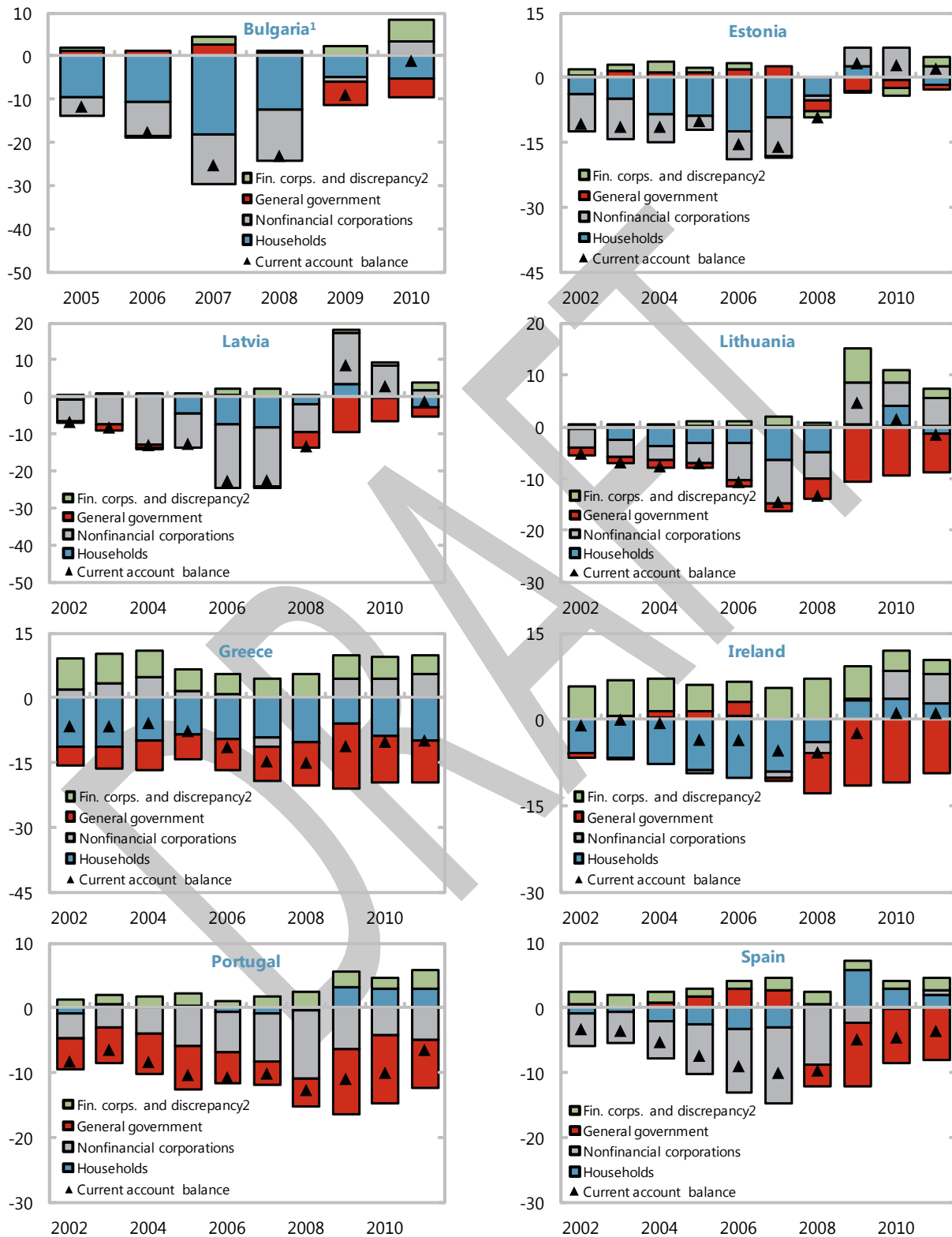
Stylized Facts about Sectoral Saving and Investment

Before the Crisis

A disaggregation of sectoral saving and investment in these countries for 1999–2007 shows important cross-country differences: CA widening was caused predominantly by an investment boom in emerging Europe, whereas it was driven by a consumption boom (i.e., reduced saving) in the EA periphery countries (Figure 9.3).

- For emerging European countries with fixed exchange rates, the widening CA deficits during 1999–2007 mostly reflected increasing corporate investment and declining household saving. Many of these economies were still undergoing transition during the years leading up to the financial crisis. The associated investment needs, including from privatization efforts, were in large part met by foreign direct investment inflows rather than debt. Except for Estonia, which also experienced a housing boom, increasing investment was mostly undertaken by NFCs. All four emerging European countries also experienced large declines in household saving because of increased consumption.

Figure 9.2. Euro Area Periphery and Emerging Europe: Sectoral Current Account Balance, 2002–11 (Percent of GDP)

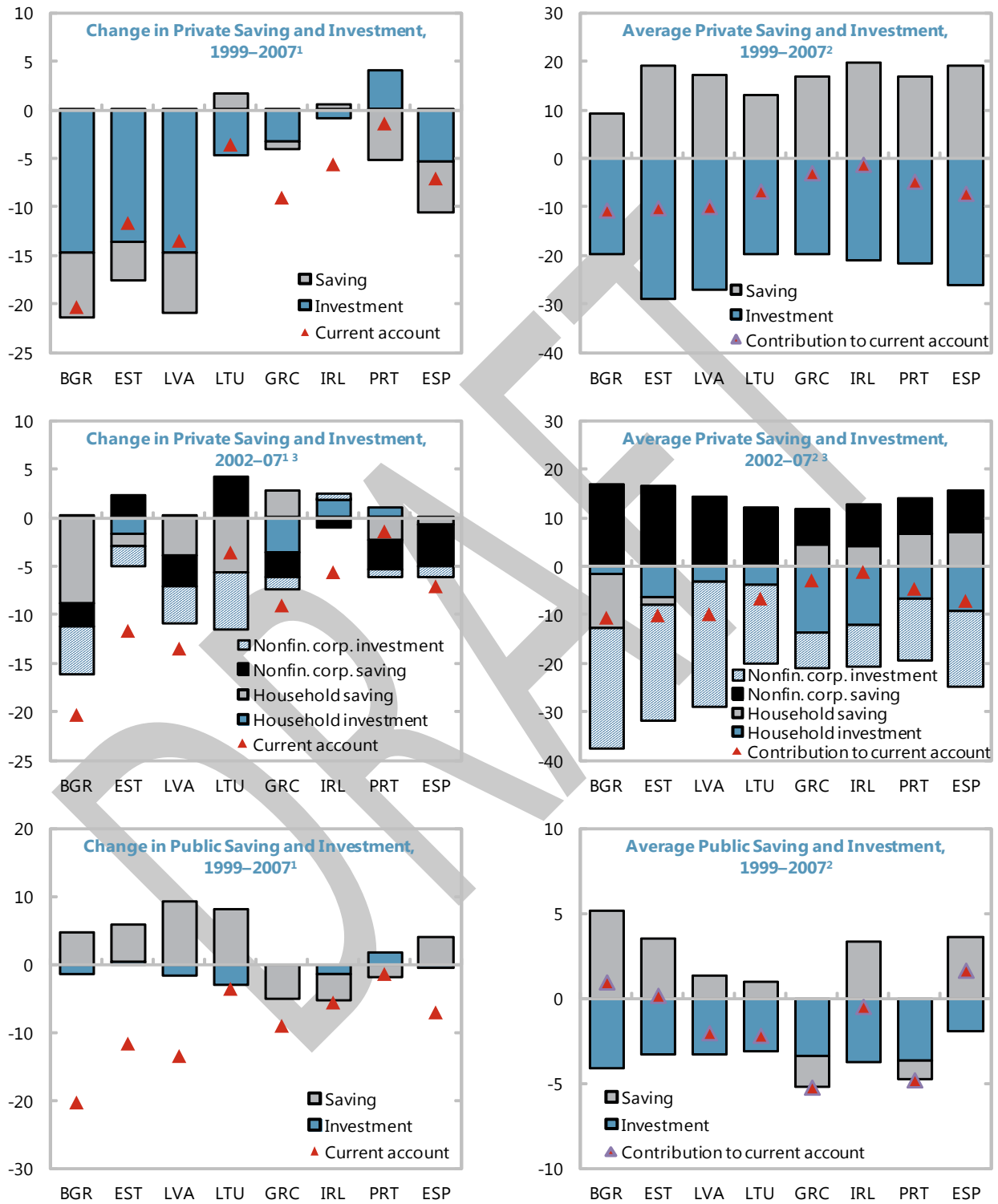


Sources: Eurostat; Haver Analytics; IMF, World Economic Outlook; and IMF staff estimates.

¹Data for Bulgaria only available from 2005 onward.

²Some discrepancy arises from comparing the current account balance to saving - investment data.

Figure 9.3. Euro Area Periphery and Emerging Europe: Contribution of Saving and Investment to Changes in Current Account, 1999–2007 (Percent of GDP)



Sources: Eurostat; Haver Analytics; IMF, *World Economic Outlook*; and IMF staff calculations.

¹A decline in savings and increase in investment recorded as a negative number.

²Positive investment recorded as a negative number.

³Private sector components available only from 2002 onward. Data for Bulgaria only available from 2005 onward.

- For EA periphery countries, the rise in the CA deficit during 1999–2007 mostly reflected declining private sector saving with saving in NFCs declining everywhere, and in Portugal (and more modestly in Spain), household saving also falling. Changes in private investment were more mixed because household investment increased substantially in Greece, but fell in Ireland and Portugal. Investment by NFCs increased modestly during the boom period everywhere except Ireland.

Public sector imbalances were important in some EA periphery economies as discussed above, but played mostly a secondary role in the precrisis CA widening episodes in emerging Europe:

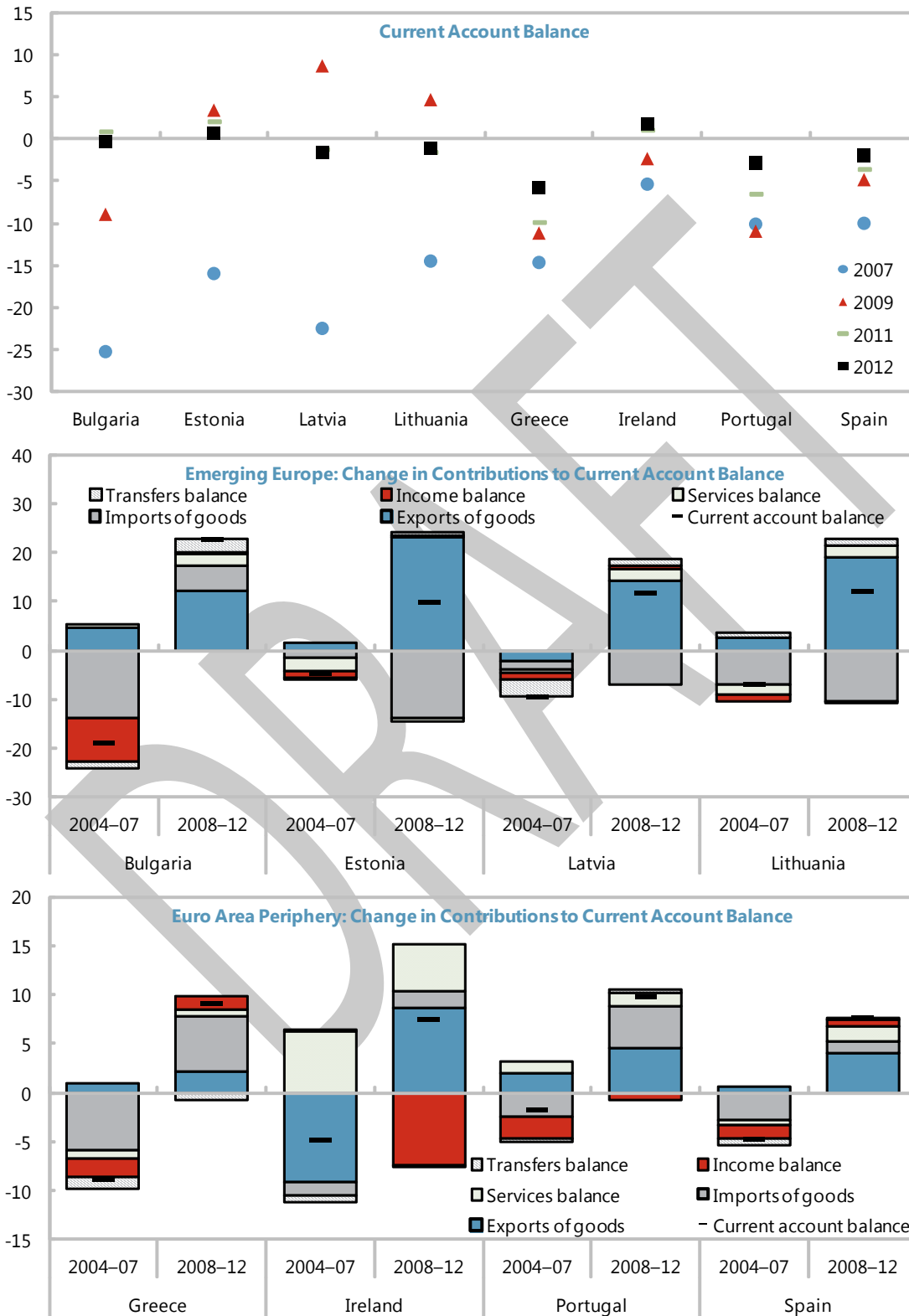
- In the EA periphery, public sector investment showed little movement during the boom period whereas public saving declined everywhere but Spain, indicating a largely procyclical fiscal widening.
- Conversely, emerging Europe experienced an increase in public sector investment, although much lower than the increase in private sector investment. Public sector saving also improved, benefiting from windfall revenues from booming domestic demand on the back of abundant foreign financing. Small and improving public sector balances during the precrisis boom, however, masked a procyclical fiscal stance in most countries (Rahman, 2010). Pursuing a procyclical fiscal policy during these years had medium-term consequences: not only did fiscal policy fail to dampen the growing and unsustainable domestic demand boom, it hampered the ability of countries to provide the needed fiscal support once the boom turned to bust. However, unlike in the EA periphery, private capital inflows were of such magnitudes that even a more conservative fiscal policy would not have been sufficient to lean against the wind in these countries (Atoyan, Jaeger, and Smith, 2012).

The Crisis and Beyond

Since the peak of the crisis, these two regions adjusted at different paces (Figures 9.2 and 9.4). Whereas most countries in emerging Europe saw a sharp and quick adjustment in their CA deficits, rebalancing in EA periphery countries progressed at a slower pace, with CA balances starting to pick up only in 2012. On average, the four emerging European countries showed a CA adjustment of 4.9 percentage points of GDP per year from 2008 through 2011, with most countries adjusting enough to reverse their entire precrisis widening (starting in 2000) by 2011. After a sharp adjustment, the household sector in the Baltic countries even returned to a deficit in 2012, signaling a resumption of private consumption and an end of household deleveraging (Figure 9.2). The sharp adjustment was due to a sudden stop of capital inflows from parent companies and banks, which had funded the precrisis, investment-led CA widening and credit boom. Credit growth came to a halt from double-digit levels, choking off domestic demand.

CA deficits in the EA periphery, particularly in Greece and Portugal, while smaller as a share of GDP than in emerging Europe, have adjusted at a slower pace. For Greece, the household sector remains a large contributor to the CA deficit, and in Portugal, adjustment by NFCs has been much slower than elsewhere. In Ireland and Spain, the private sector reached a balanced position by 2009 or

Figure 9.4. Euro Area Periphery and Emerging Europe: Contributions to Current Account, 2004–12 (Percent of GDP)



Sources: Haver Analytics; IMF, *International Financial Statistics*; IMF, *World Economic Outlook*; and IMF staff calculations.

2010, and CA deficits are now mainly accounted for by large public sector deficits that were nonexistent before the crisis. Because the balance sheet adjustments of these countries' highly indebted households and NFCs will have negative consequences for growth, the public sector is likely to continue to record deficits, reflecting both weak revenues and the need to provide support to the economy.

The composition of adjustment has also been different across countries. For emerging Europe, rebalancing during 2008–12 was primarily export led (Figure 9.4). Although there was an initial import compression because sudden stops or withdrawals of foreign capital halted financing and choked demand for imports, wage adjustment in the tradables sector and growth in trading partners—the EA in the early phase, and non-EA countries later—supported exports. Purfield and Rosenberg (2010) conclude that the internal devaluation strategy pursued by these countries relied on an unprecedented fiscal and nominal wage adjustment. This strategy allowed for a more growth-enhancing adjustment and may also have reflected their stronger integration with vertical cross-border supply chains (see also Chapter 10). In contrast, import compression was stronger in the EA periphery, acting as the main contributor to rebalancing during 2008–12 in Greece and Portugal, while exports have been a significant factor in rebalancing in Spain and Ireland (Figure 9.4).

Steps to preserve financial sector stability and efforts to facilitate private sector debt restructuring also played key roles in improving external balances and competitiveness in these economies. In the EA periphery countries, imports contracted much less than in emerging Europe, if at all, but more important, exports did not provide the needed support, at least not until 2012. The weaker export performance in most EA periphery countries, between which much trade takes place, reflects weaker import demand in partner countries, a smaller share of tradable goods in production, and slower wage and price adjustments.

The slower import contraction in the EA periphery is also partly explained by availability of financing. In the run-up to the crisis, deficits, both public and private, were financed by cheap private credit made possible by falling interest rates that converged to the EA average because investors assumed EA membership signaled a low risk of default. As private financing began to slow during the bust, deficits continued to be financed by the European Central Bank through its Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET 2) facility, thus dampening the need for import contraction. Sinn and Wollmershaeuser (2011) and Merler and Pisani-Ferry (2012) document that without TARGET 2 support, many of the EA periphery countries would have experienced a balance of payments crisis. Indeed, until mid-2012 the CA deficits of Greece and Portugal were almost entirely financed by TARGET 2 credits, while TARGET 2 support for Ireland accommodated major capital flight in excess of fully covering the CA deficit.⁵

⁵ See Atoyan, Manning, and Rahman (2013) for details.

There are also differences in rebalancing in these two regions with regard to saving and investment behavior (Figure 9.5). Most of the rebalancing in the EA periphery is taking place via declining private sector investment while private saving has not improved much, except in Spain and Portugal. Given that declining private saving was the main force behind CA widening in the EA periphery, the current composition of rebalancing has not addressed the source of CA excesses built up during the boom period. Moreover, an adjustment that relies heavily on investment cuts has negative implications for growth and potential growth in these economies. Adjustment in emerging Europe has been driven by a combination of declining investment and increasing saving. Large saving by households in emerging Europe probably reflects sizable declines in house prices, which is not the case for EA periphery countries except Ireland. For the public sector, the saving-investment position worsened in both groups of countries as one would expect during recessions. For both groups, expenditure increased as a proportion of GDP, whereas revenue performance differed, reflecting the length of the recession and fiscal measures.

Empirical Results and Country-Specific Discussions

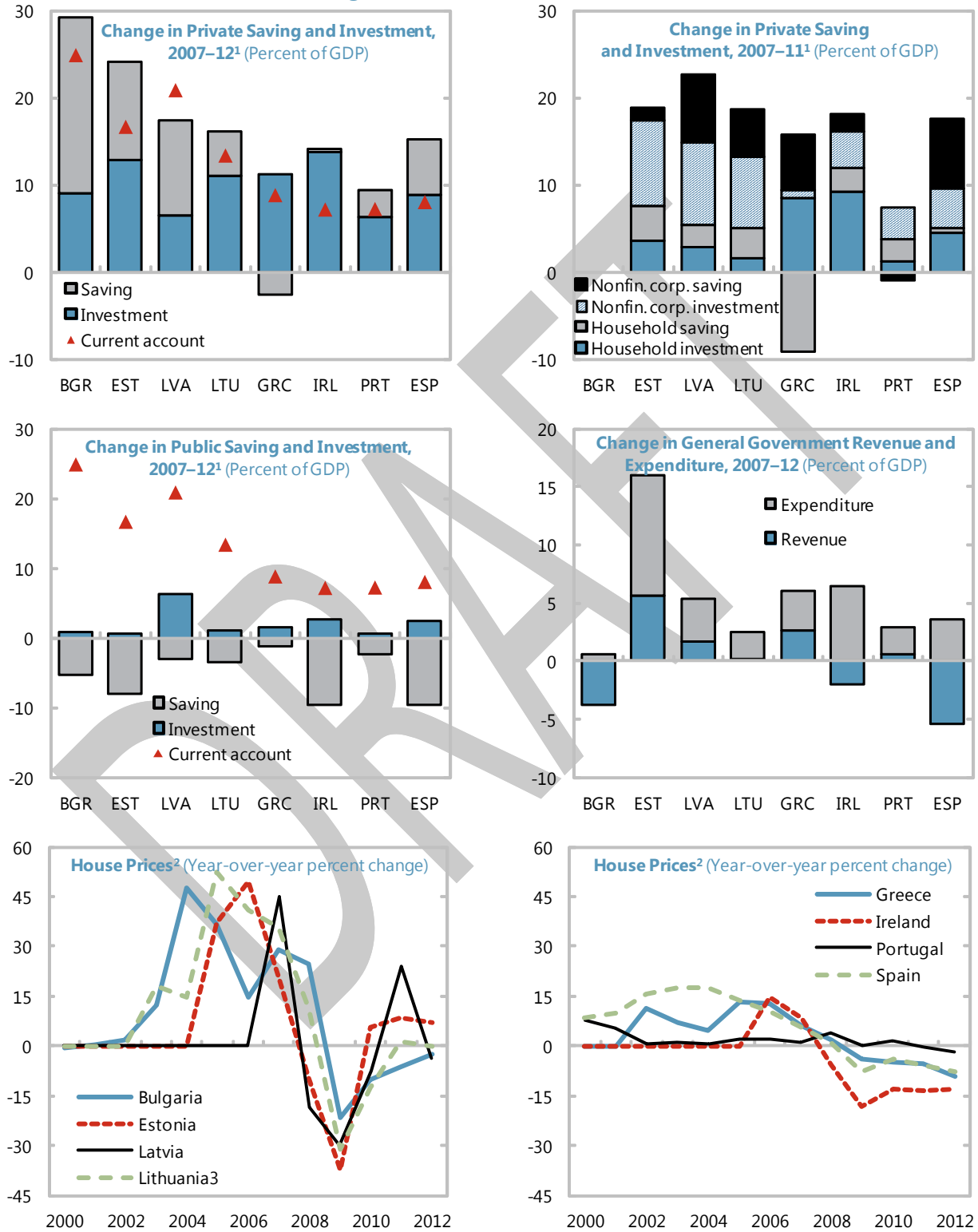
Data and Methodology

This section aims to provide an understanding of the driving forces behind the differing CA dynamics in the two groups of countries by estimating a reduced-form model of the CA. The analysis uses explanatory variables along three dimensions: an economy's cyclical position, its external competitiveness, and its external environment (Table 9.1). All three dimensions are clearly interlinked; nevertheless, this simplistic representation offers a useful and intuitive framework for analyzing the relative importance of different groups of factors for CA developments before and during the crisis.⁶

- *Cyclical position.* To account for the large cross-country variations in cyclical positions driven by the dynamics of private and public saving and investment, the model includes variables capturing capital inflows (the liability side of external financing), real credit growth to the private sector, and the unemployment rate, in addition to the overall general government balance (as a percentage of GDP).
- *External competitiveness.* To account for the diverging trends in external competitiveness, the model tests the importance of relative wages in manufacturing (expressed as a ratio of those in trading partners), and the unit labor cost-based (ULC-based) real effective exchange rate (REER). Because price competitiveness is likely to be influenced by differences in monetary policy and exchange rate regimes, a floating exchange rate regime dummy is also included.

⁶ It is important to acknowledge that some of the explanatory variables included in the empirical analysis (e.g., real effective exchange rates and capital flows) may not be purely exogenous to CA developments. Thus, the model estimates are subject to estimation bias to the extent that reverse causality exists.

Figure 9.5. Euro Area Periphery and Emerging Europe: Contribution of Saving and Investment to Changes in Current Account and House Prices, 2000–12



Sources: Eurostat; Haver Analytics; IMF, *World Economic Outlook*; and IMF staff calculations.

¹A decline in saving and increase in investment recorded as a negative number.

²Data for 2012 as of Q3.

³Data for 2012 as of Q2.

Table 9.1. European Advanced and Emerging Market Economies: Current Account Adjustment, 2000–12 1/

Dependent variable: Current account balance (percent of GDP)	R1	R2	R3	R4	R5	R1	R2	R3	R4	R5	R1	R2	R3	R4	R5
	All Countries in Sample					Advanced Economies 2/					Emerging Markets 3/				
Cyclical factors															
General government balance (percent of GDP) 4/	0.098	0.176	0.031	0.147	0.217**	0.300**	0.439***	0.288**	0.427***	0.619***	-0.043	-0.184	-0.094	-0.148	-0.398***
Interacted with crisis dummy	0.338***	0.285**	0.360***	0.344***	0.292**	0.002	0.089	0.003	0.156	0.201	0.218	0.281	0.228	0.186	0.394***
Real private credit growth (year-over-year percent change) 5/	-0.070***	-0.051**	-0.028	-0.042**	-0.056***	-0.123***	-0.138***	-0.096**	-0.185***	-0.151***	-0.018	-0.002	-0.005	0.002	-0.015
Interacted with crisis dummy	-0.161***	-0.117***	-0.162***	-0.129***	-0.078**	-0.168***	-0.139	-0.084	-0.044	-0.212*	-0.034	-0.015	-0.027	-0.026	0.002
Unemployment rate (percent)	...	0.758***	0.545***	0.649***	0.926***	...	0.410***	0.522***	0.394**	0.701***	...	0.320**	0.243	0.253*	0.237
Interacted with crisis dummy	...	-0.336	-0.358*	-0.416**	-0.670***	...	-0.254	-0.314	-0.110	-1.059***	...	0.151	-0.005	-0.018	0.092
Total capital inflows (percent of GDP)	-0.028***	-0.028**	-0.026***	-0.024*	-0.017	-0.033***	-0.026***	-0.026***	-0.023***	-0.021	-0.353***	-0.367***	-0.357***	-0.343***	-0.386***
Interacted with crisis dummy	-0.003	0.004	-0.026	-0.015	-0.021	0.003	-0.017	-0.019	-0.015	-0.046**	-0.197**	-0.136*	-0.190*	-0.162*	-0.075
External competitiveness															
Floating exchange rate regime dummy	0.381	1.631	2.810***	1.024	2.081***	3.145***	2.082**	4.491***	2.199**	3.514***	1.685	0.438	0.659	0.304	0.803
Nominal effective exchange rate (year-over-year percent change) 5/	-0.027	0.036	...	...	...	0.077	0.086	...	...	...	-0.066	-0.028	...	...	...
Interacted with crisis dummy	-0.165*	-0.116	...	...	...	0.029	0.194	...	...	...	-0.071	-0.038	...	...	...
GDP deflator to trade-weighted GDP deflator (year-over-year percent change)	-0.408***	...	...	...	...	0.025	...	...	...	...	-0.181**	...	...	...	...
Interacted with crisis dummy	-0.046	...	...	...	...	0.193	...	...	...	...	-0.019	...	...	...	...
Manufacturing wages to trade-weighted manufacturing wages (hourly, euro) 6/	-0.116***	-0.082**	...	...	...	-0.079***	-0.080***	...	...	...	0.223*	0.178	...	...	...
Interacted with crisis dummy	0.089**	0.074*	...	...	...	0.100**	0.038	...	...	...	-0.108	-0.127	...	...	...
ULC-based real effective exchange rate (year-over-year percent change) 5/	...	...	-0.064**	-0.077**	-0.081**	...	...	0.054	0.091	-0.039	...	...	-0.072**	-0.073***	-0.081**
Interacted with crisis dummy	...	...	-0.087**	-0.065**	-0.044	...	...	-0.125**	-0.109**	-0.152*	...	...	-0.001	-0.003	0.016
External environment															
Partners' GDP growth (year-over-year percent change)	-0.210	...	-0.265**	...	...	-0.248	...	-0.231**	...	...	...	...	0.011	...	...
Interacted with crisis dummy	-0.032	...	-0.197	...	...	1.510***	...	0.866***	...	...	...	...	-0.280	...	...
Partners' import growth (year-over-year percent change)	...	-0.032	...	-0.009	-0.046	...	-0.082*	...	0.001	-0.128***	-1.481***	0.004	...	-0.072	-0.043
Interacted with crisis dummy	...	-0.096	...	-0.037	0.011	...	0.558***	...	0.183**	0.244*	1.259***	-0.091	...	0.002	-0.021
VIX	-0.090**	-0.083**	-0.113***	-0.031	-0.056	-0.153***	-0.127***	-0.105***	-0.070*	-0.113***	-0.145**	-0.051	-0.083	-0.092*	-0.130***
Other															
Household liabilities (percent of gross national income)	...	...	-0.125***	...	...	...	...	-0.089**	...	...	...	...	-0.000	...	...
Interacted with crisis dummy	...	...	0.025	...	...	...	...	0.022	...	...	...	...	-0.031	...	...
Number of observations	286	286	264	300	300	165	165	154	180	180	121	121	110	120	120
R ²	0.663	0.684	0.762	0.716	0.471	0.771	0.785	0.835	0.800	0.410	0.887	0.890	0.865	0.887	0.848
Country dummies	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No

Note: ULC = unit labor cost; VIX = Chicago Board Options Exchange Volatility Index.

1/ Unless otherwise indicated, all variables are expressed in changes from 2000 levels.

2/ Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

3/ Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia.

4/ Cash balance for Ireland excludes bank recapitalization.

5/ Data for 2012 as of 2012:Q3.

6/ Data as of 2011.

*, **, and *** indicates variable is statistically significant at the 10 percent, 5 percent, and 1 percent levels, respectively.

- *External environment.* The model accounts for movements in trading partners' demand as proxied by the growth in trade-weighted real GDP or imports. The overall market sentiment toward risk is also controlled for through inclusion of the Chicago Board Options Exchange Market Volatility Index (VIX index).

In addition, household indebtedness is included to capture balance sheet effects on private sector saving and investment decisions. To account for potential crisis-driven nonlinearities and to explicitly differentiate between the driving forces during the boom and crisis periods, the model includes interaction terms between explanatory variables and a crisis dummy variable.⁷ This inclusion is important to accommodate the interplay of additional possible effects of heightened stress in the financial markets, a collapse in export demand, or changes in attitudes toward consumption-saving decisions of economic agents. To assess the relative importance of factors explaining changes in the CA balance, the estimation strategy developed by Fernandez-Arias (1996) and Atoyán, Jaeger, and

⁷ The crisis dummy variable is equal to 1 in 2008–11 and zero in other years.

Table 9.2. Emerging and Advanced Europe: Variables Affecting Pre- and Postcrisis Current Account Adjustment

	Emerging Europe¹	Advanced Europe²
Precrisis Capital Account Developments	<i>Capital flows, REER-ULC</i>	<i>Fiscal balance, real private credit growth, exchange rate regime, unemployment rate, and capital flows</i>
Postcrisis Capital Account Developments	<i>Capital flows</i>	<i>Real credit growth, REER-ULC, partner country import growth</i>

Note: REER-ULC = real effective exchange rate–unit labor cost.

¹Sample includes Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia.

²Sample includes Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

Smith (2012) is followed. The reduced-form equation for the CA deficit is estimated by ordinary least squares using annual data for 2000–12 for a panel of 28 European countries (EU members). Country-specific effects are treated as unobservable. These effects are estimated as the residual movements in the CA balance that are not accounted for by other variables in the model. To facilitate cross-country comparisons without relying on an implausible assumption of structural similarity, all variables in the model are expressed as deviations from 2000 levels. This transformation eliminates structural differences across countries and the model explains the changes in CA deficit (i.e., CA adjustment) in terms of changes in the explanatory variables, taking 2000 as a benchmark.

Results

In summary, CA dynamics in emerging Europe and advanced Europe were driven by different factors. The precrisis CA developments in emerging Europe were driven by capital flows and competitiveness, as captured by the REER-ULC, whereas precrisis CA developments in advanced Europe were driven by the fiscal balance, real credit growth, capital flows, the exchange rate regime, and the unemployment rate (Tables 9.1 and 9.2).⁸ These differences partly reflect the relative roles of private investment and consumption in the widening of CA deficits in these two groups, and the differing roles of fiscal policy.⁹ During the postcrisis adjustment, for emerging Europe, capital inflows

⁸ See Atoyan, Manning, and Rahman (2013) for a detailed discussion of the estimation results.

⁹ An interesting observation is that fiscal balance does not seem to have a statistically significant impact during the boom period for the whole sample or the emerging market subsample. This is either because headline fiscal balances
(continued)

made a difference highlighting the significance of financing or capital account developments in determining the CA in emerging economies. For advanced Europe, postcrisis CA developments have been affected by competitiveness (REER-ULC), real credit growth, and import demand from partner countries.

Although these empirical findings are useful for describing the qualitative characteristics of the CA dynamics, individual developments are important for understanding the heterogeneity of the driving forces in each country. Therefore, the estimated model is used to decompose CA adjustments into proximate causes. The decompositions are constructed by taking the value of each explanatory variable for the country in each period (measured as the change from its 2000 level) and multiplying by the corresponding estimated coefficient in the preferred model specification (regression 4 in Table 9.1) using the whole sample. Four EA periphery countries: Ireland, Greece, Portugal, and Spain (Figure 9.6a), and four emerging European countries with fixed exchange rate regimes, Estonia, Bulgaria, Latvia, and Lithuania (Figure 9.6b) are discussed in more depth below.

EA periphery

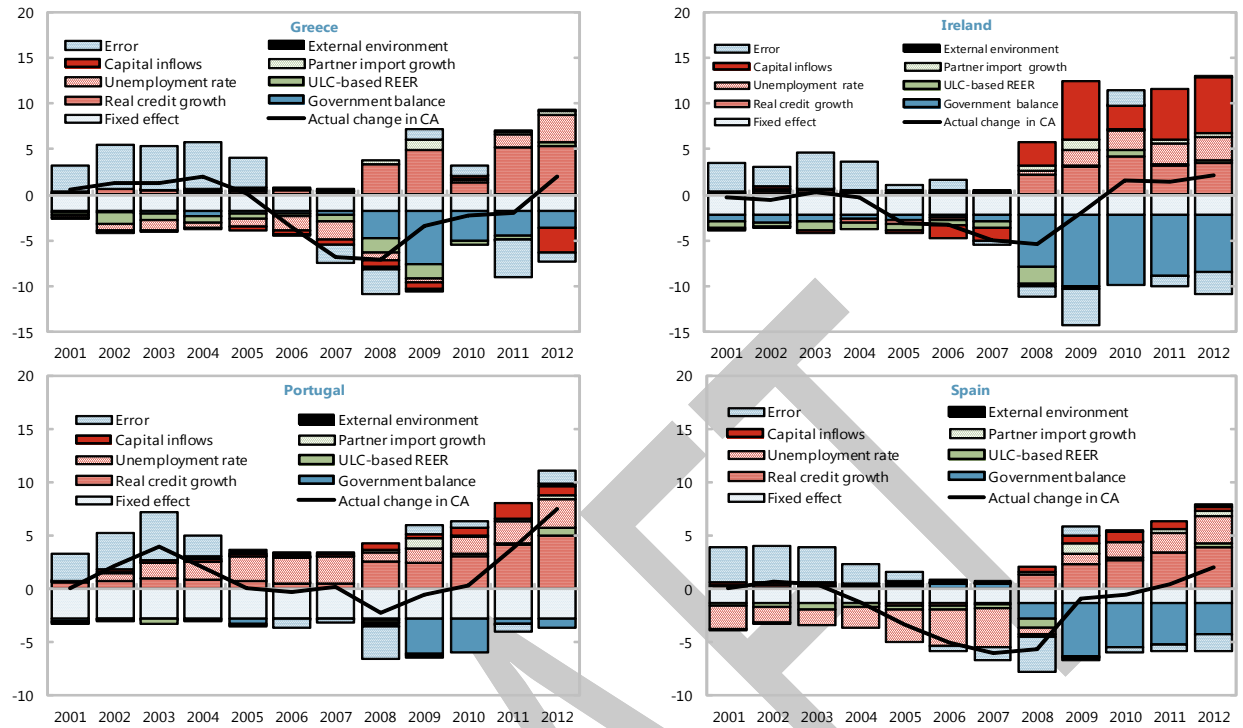
Ireland, CA imbalances widened during 2004–08, then sharply improved during 2009–10, closing the gap completely. During 2006–08, capital inflows seemed to matter in CA widening. The contribution of the household sector, which was the main driver of precrisis widening, does not seem to take place through lower unemployment but through higher wages and real credit growth. The sharp adjustment in the postcrisis years was driven by credit contraction, capital flow reversal, rising unemployment, and rising partner country demand for Irish imports.

Greece has seen a more modest and slower adjustment. Precrisis widening during 2004–07 was largely the result of lower unemployment and capital inflows. An appreciating REER-ULC contributed to the widening until 2009. Postcrisis adjustment has been aided by credit contraction, and from 2011 onward, higher unemployment, causing the household sector to adjust. The fiscal position and slow private sector adjustment financed by deposit outflows is keeping CA imbalances wide. A positive contribution from wage adjustment has just begun to kick in in 2012.

Portugal's CA imbalances were very large in early 2000. Thus, the dependent variable, which measures the CA as deviations from its 2000 level, does not show a large widening. Portugal is the only country in which unemployment contributed to CA adjustment during the precrisis years. This is consistent with the fact that, unlike in the other three countries, the household sector contributed

did not vary much during the boom years, masking pronounced deterioration in structural fiscal positions, or their movements were relatively small compared with the movements in other cyclical variables, such as capital inflows or credit growth. For advanced Europe, headline fiscal balances affected CA developments significantly during the boom period, reflecting greater variability and possibly a higher impact of fiscal policy in this group, given the relatively low degree of trade openness in some economies.

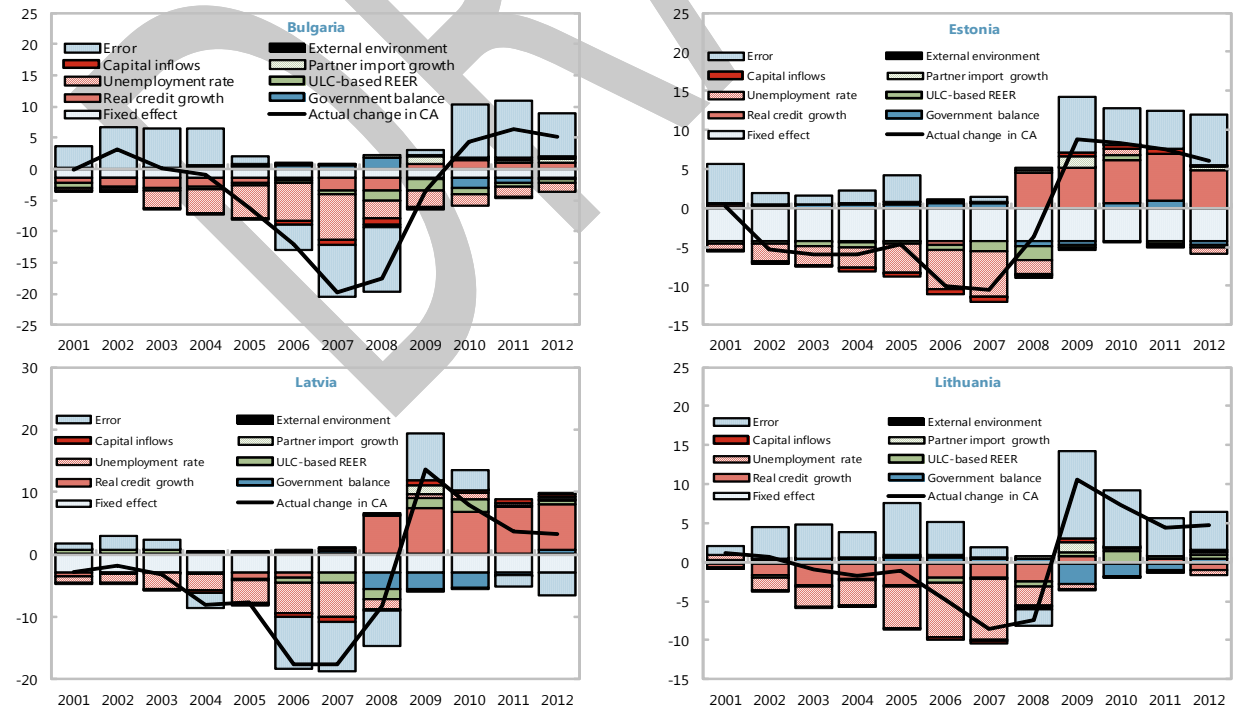
Figure 9.6a. Euro Area Periphery: Empirical Decomposition, 2001–12
(Percent changes from 2000)



Source: IMF staff estimates.

Note: CA = current account; REER = real effective exchange rate; ULC = unit labor cost. Empirical decomposition discounts actual data by estimated coefficients found in R4 of Table 9.1. In the case of interaction with the crisis dummy, actual data are discounted by the estimated coefficient for the crisis dummy. The contribution to changes in the current account shown is the sum of both discounts (coefficients of explanatory variable and the crisis dummy).

Figure 9.6b. Emerging Europe: Empirical Decomposition, 2001–12
(Percent changes from 2000)



Source: IMF staff estimates.

Note: CA = current account; REER = real effective exchange rate; ULC = unit labor cost. Empirical decomposition discounts actual data by estimated coefficients found in R4 of Table 9.1. In the case of interaction with the crisis dummy, actual data are discounted by the estimated coefficient for the crisis dummy. The contribution to changes in the current account shown is the sum of both discounts (coefficients of explanatory variable and the crisis dummy).

little to the precrisis widening because high unemployment held back household consumption. Nonetheless, the household sector made positive contributions to CA adjustment after the crisis. Until recently, large fiscal deficits, even with private sector adjustment resulting from higher unemployment and credit contraction, have prevented CA adjustment. A depreciating REER-ULC's contribution to adjustment increased in 2012.

For *Spain*, the precrisis CA widening was driven mostly by domestic demand as captured by declining unemployment. Postcrisis CA adjustment has taken place through a reversal in unemployment and through credit contraction, both of which have affected private consumption and investment. The large, significant, and persistent role of Spanish unemployment since the crisis may reflect the particular role the construction sector played in the economy's precrisis growth and employment. Given that some of the construction jobs may be permanently lost, a high unemployment rate may persist and continue to contribute to higher household saving and CA adjustment, unless jobs are created in other sectors. Large fiscal deficits, which are, in part, a result of poor growth, are acting as a drag on the CA adjustment.

Emerging Europe

In *Bulgaria*, large CA imbalances resulted, in part, from sharply falling unemployment rates and credit growth. Capital flows were another significant driver of the CA during 2000–08. During the postcrisis years, Bulgaria's adjustment—the largest in Europe—has been helped by a slowdown in credit growth. It is important to note, however, that a significant part of CA movements in Bulgaria, both before and in the aftermath of the crisis, remains unexplained by the model.

For the three *Baltic countries*, precrisis developments are, to a degree, similar to those of Bulgaria, given the strong role of declining unemployment. Whereas an appreciating REER-ULC played more of a role in CA widening for Estonia and Latvia, real credit growth aided the widening in Lithuania. During the postcrisis years, lower demand caused by a credit crunch, capital outflows, and higher unemployment helped with the sharp CA adjustment in Estonia and Latvia. CA adjustment in the Baltic countries also benefited from higher exports through diversification away from the EA.

Finally, although the overall explanatory power of the estimated model is strong, unexplained residuals are larger at the peak of the crisis (2008–09), particularly for countries that experienced abrupt and large reversals in CA deficits. This outcome seems to suggest the likely presence of additional nonlinear effects that go beyond what is modeled here.

Policy Implications and Conclusions

This chapter's analysis of CA developments in Europe suggests that, generally speaking, similar dynamics played out in the EA periphery and emerging European countries with fixed exchange rate regimes during the precrisis years, when strong private sector-led domestic demand booms created large CA imbalances. In emerging Europe, rising investment played a stronger role than declining saving. In the EA periphery, CA imbalances were mostly due to declining private sector savings.

Public sector deficits contributed to external imbalances in the EA periphery countries of Greece and Portugal, but not in emerging Europe. However, fiscal policy during the boom years was procyclical and failed to dampen overheating or to create the needed policy space to offset the economic downturn that followed.

A dramatic swing in market sentiment during the global financial crisis left countries with no choice but to adjust. CA imbalances declined throughout the region, but adjustment relied largely on expenditure reduction. The key finding of this chapter is that adjustment has been facilitated mainly by import compression induced by credit crunches and skyrocketing unemployment as well as—to a larger extent in emerging Europe—by large upfront fiscal adjustment forced by a lack of financing. Relying on import compression alone, however, has had severe contractionary effects for these economies, especially in the EA periphery, just when growth was needed to improve the fiscal balance and restore market confidence.

The adjustment was somewhat faster, and the adverse impact of import compression somewhat mitigated, in emerging Europe, where significant wage adjustment, enabled by relatively more flexible labor markets, aided export competitiveness and allowed for faster export growth. At the same time, lower levels of household indebtedness helped with the return of private sector consumption. This, in turn, has allowed output and domestic demand to rebound much more quickly than in the EA periphery. In contrast, adjustment in the EA periphery initially relied heavily on import compression, although exports later played a more important role in rebalancing in Spain and Ireland. Structural problems in the tradables sector, the small tradables base, and weak supply chains have cast a shadow over the export sector's recovery in some periphery countries, particularly Greece. A larger share of intra-periphery trade and an external environment of tepid global growth further exacerbated these problems.

The comparative experiences of these two groups highlight the importance of the appropriate mix of policies, both macroeconomic and structural, especially when monetary policy is constrained by a fixed exchange rate. In particular, some of the characteristics that structural reforms seek to establish will also help with external adjustment. For example, flexible conditions in the labor market can facilitate wage adjustment without placing most of the burden of adjustment on employment. But such price adjustments can also contribute to external competitiveness and help achieve rebalancing needs in a growth-friendly manner, which would also support medium-term growth. As the next chapter shows, wage and price adjustments can play an important role in helping develop, or strengthen, a country's position in global production chains—and plugging into these supply chains is an important channel through which countries can benefit from growth in world trade.

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