

# CASE Network Studies & Analyses

## Financial Integration in Emerging Europe: an Enviably Development Opportunity with Tail Risks

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## **Abstract**

This paper draws on the experience of emerging Europe and argues that foreign capital is an enviable development opportunity with tail risks. Financial integration and foreign savings supported growth in the EU12 and EU candidate countries. We argue that this was possible because of EU membership (actual or potential) and its role as an anchor for expectations. In contrast, the eastern partnership states did not benefit from the foreign savings-growth link. But financial integration also led to a buildup of vulnerabilities and now exposes emerging Europe to prolonged uncertainty and financial deleveraging due to eurozone developments. Nonetheless, we believe that external imbalances should not be eradicated—nor should emerging Europe pursue a policy of self-insurance. Instead, what we refer to as an acyclical fiscal policy stance could serve to counterbalance private sector behavior. Going forward, a more proactive macroprudential policy will also be needed to limit financial system vulnerabilities when external imbalances are large.



## 1. Introduction

In the two decades that preceded the global financial crisis, emerging Europe became a more integrated region.<sup>1</sup> This was not only a case of integration to western Europe; there was also an expansion in trade and economic links with other world regions (Gill, Raiser, and others 2012). For countries in emerging Europe, and leaving aside differences across these countries, economic and political change happened swiftly. Different privatization options were followed—from voucher privatization in the Czech Republic to the sale of state assets to inside management in the Yugoslav republics. The outcomes might have not always been optimal, but the share of private activity in GDP steadily grew across the region. Building credibility in macroeconomic management was initially an area of uneven progress. But, by the turn of the new century, transition countries had managed to stabilize inflation and were experiencing high rates of economic growth. The buildup of new institutions, including dealing with the central planning legacy of banking sector problems, proved to be challenging, but had also largely been addressed by the early 2000s. It was a learning-by-doing process in the path from plan to market.

These changes took place against the backdrop of a process of economic and political integration to the European Union. This was indeed the single most important driver of change, one that had a catalyzing effect in all areas of economic management. And the single market for capital was one of the unique features of this process of EU integration. In the boom years leading up to the financial crisis of 2008–09, western European banks moved aggressively into the region. The promise of a converging emerging European region was too attractive to ignore. Austrian, Italian, and Swedish banks were active; Belgian, French, and Greek banks a little less—and a little later. And profits were made. By the time the global financial crisis erupted, almost 80 percent of the banking sector in some of the countries that looked to Europe for trade and finance—such as Bulgaria, Croatia, the Czech Republic, and FYR Macedonia—were foreign

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<sup>1</sup> Emerging Europe comprises three country groups: EU12 (Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovak Republic, and Slovenia), EU candidate countries (Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Kosovo, Montenegro, Serbia, and Turkey), and eastern partnership states (Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine); throughout this paper western Europe is understood as the EU15 countries, and EU cohesion countries are understood as Greece, Ireland, Portugal and Spain.



owned. A fifth of the loans of Sweden's biggest bank, Swedbank, were to customers in the Baltics.

Was this process of financial integration good for growth? This paper examines this experience in an attempt to draw policy lessons. We indeed find that this process of financial integration was good for growth. Eastern Europe reaped the benefits from being near—physically and financially—to a developed system of banks. And these savings-starved countries instituted policies good enough to get the best out of western European finance. In fact, as discussed in this paper, finance in Europe has an enviable and unique feature—capital flows downhill, as economic theory argues it should. Financial flows also go from richer, slower-growth countries to less developed, fast growers. This close integration of the wealthy and the dynamic is an underappreciated attribute of European integration.

While a massive pullout of finance, in particular bank financing, was expected at the beginning of the global financial crisis, this did not happen. This paper argues that deep ownership links to western Europe proved to be a source of stability. Downside risks remain, however, as emerging Europe is now vulnerable to the consequences of prolonged uncertainty and financial deleveraging in the eurozone.

Yet, there are lessons for macroeconomic management from the buildup of vulnerabilities that naturally follow from the large capital inflows that characterized emerging Europe's financial integration. The excesses observed in the precrisis period include large maturity mismatches in the balance sheets of banks and unusually large levels of FX lending to unhedged borrowers such as households. This paper concludes that external imbalances need to be managed through a blend of cyclically sensitive fiscal and macroprudential policies. Policymakers should do what they can to "boom-proof" public finance and "crisis-proof" private finance. Still, the availability of foreign capital in European countries with lower incomes than their neighbors to the west is an enviable development opportunity integral to Europe's income convergence engine. Managing external imbalances is thus not equivalent to self-insurance.



## 2. Financial integration of emerging Europe with the West

After many years with large fiscal imbalances and high and volatile inflation, macroeconomic outcomes in emerging Europe improved in the late 1990s. Increased economic interdependence raised the credibility of policymakers by anchoring institutional development to the known structures in western Europe—the EU accession process. Countries in Central and Eastern Europe (CEE) joined the European Union in 2004 and 2007. Others in South-Eastern Europe (SEE) became more recently official (or are expected to soon become) EU candidate countries.

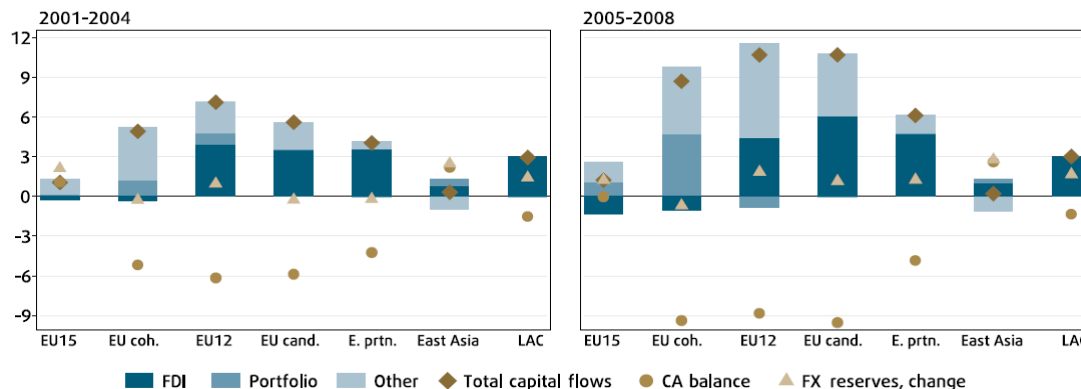
Financial integration was a key component of this increased interdependence. The sum of foreign assets and liabilities as a share of GDP jumped from around 80 percent in 1993 to more than 150 percent in 2008 in the EU12, and from around 30 to around 110 percent among the EU candidates.<sup>2</sup> Foreign direct investment (FDI) was higher than in other emerging markets (figure 1). Banking and other flows, which recorded a sharp increase in the EU12 and EU candidate countries in 2005–08 relative to the preceding four-year period, also played a key role. To a lesser degree, this is the case in the eastern partnership states. But debt flows must be carefully interpreted. Many of these resulted from flows of parent corporations and banks in Western Europe to their subsidiaries in emerging Europe and have unique FDI-like features as they combine the risk-sharing features of FDI and the lower costs of debt financing—for short, this paper refers to these flows as financial FDI. FDI and financial FDI inflows to emerging Europe were particularly large when compared to East Asia and the developing countries in Latin America and the Caribbean, especially in the run-up to the global financial crisis of 2008–09.

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<sup>2</sup> Median values; source Lane and Milesi-Ferretti 2007.



**Figure 1. Capital flows in 2001-04 and 2005-08 (percentage of GDP, period average of group median values)**

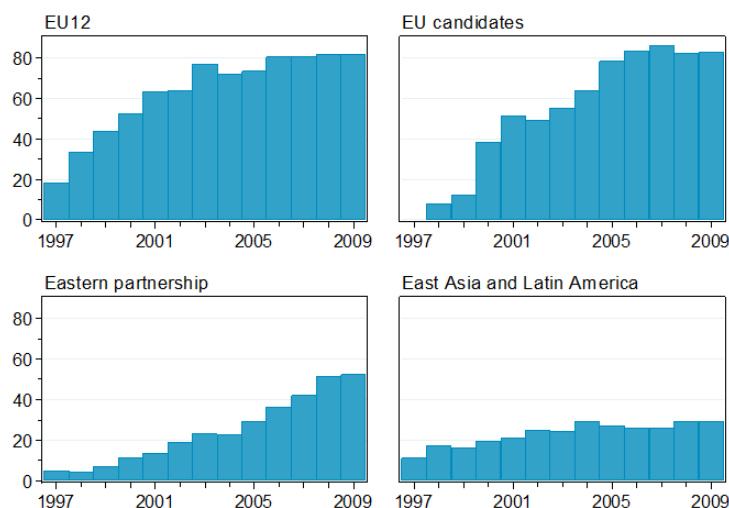


Note: "EU coh." refers to the EU cohesion countries; "EU cand." refers to EU candidate countries; "E. prtn." refers to EU eastern partnership states; LAC refers to the Latin America and the Caribbean region. CA stands for current account and FX is foreign exchange. Source: Authors' calculations, based on IMF World Economic Outlook.

This process of financial integration was in part the result of the opportunities generated by the close links to western Europe. Firms from western Europe established operations in the transition countries; in much the same way this process had occurred in Ireland during the 1990s. Western European banks also set up subsidiaries in emerging Europe. As early as 2001, 41 major EU15 banking groups had already 15 branches and 76 subsidiaries in the former candidate countries (Baudino and others 2004).<sup>3</sup> By 2008, around 80 percent of banking system assets in the EU12 and EU candidates was foreign-owned, and around 50 percent in the eastern partnerships states; in contrast, it was less than 30 percent in East Asia and Latin America (figure 2). Dominance of credit by foreign banks weakened the destabilizing link between government-owned banks and enterprises that had earlier led to quasi-fiscal bailouts. As noted by Mitra, Selowsky, and Zalduendo (2010), the change in the governance structure of the banking system was crucial in achieving the macroeconomic stability that had eluded emerging European countries in the early years of transition.

<sup>3</sup> As of 2001 the candidate countries included Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovak Republic, and Slovenia.

**Figure 2. Ownership of banking sector assets by foreign banks (percentage of banking system assets, median values)**



Source: Claessens and van Horen 2012.

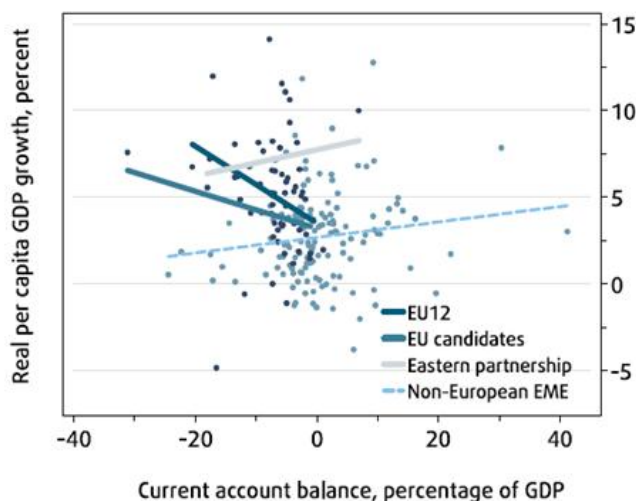
## 2.1. In Europe capital flows ‘downhill’

According to economic theory, developing countries with high productivity growth and low capital-labor ratios should attract large capital inflows. By running current account deficits, poor countries are supposed to invest more and, consequently, should be able to grow faster. However, allocation of capital across the world does not seem to ‘flow downhill’. Prasad, Rajan, and Subramanian (2007) find a positive correlation between current account balances and growth among developing countries. Similarly, Gourinchas and Jeanne (2009) argue that, in practice, capital flows to countries with lower investment and lower growth—they refer to this as the ‘allocation puzzle’.

There are a few possible explanations for these a priori unexpected facts. Emerging economies may be unable to absorb foreign financing due to underdeveloped financial markets. Rapid capital inflows might also lead to overvaluations and sudden withdrawal of funds, as seen in the East Asian crisis of 1997–98. As a result, countries might pursue economic policies that favor self-insurance by introducing policies that allow them to accumulate foreign exchange reserves and, consequently, limit the absorption of foreign capital. Finally, political stability, quality of institutions and economic policies might affect the returns to capital, resulting in lower inflows of funds to developing nations.

But Europe is different. In Europe capital flows from rich to poor economies; this enables countries close to the European Union to grow faster and converge to higher incomes (figure 3).<sup>4</sup> However, foreign financing supported growth in emerging Europe to varying degrees. The link seems stronger in the EU12 than is the case for EU candidate countries (figure 3). Moreover, in the eastern partnerships states, as is also the case in non-European emerging markets, foreign financing has not yet contributed to growth. These results may imply that a quicker transition to a market economy, as well as closer integration with the European Union, could be the underlying factors behind the foreign savings-growth link. A more formal analysis is carried out by Stojkov and Zalduendo (2011); they indeed find substantial heterogeneity across emerging European countries (appendix table 1, columns 1 and 2).<sup>5</sup>

**Figure 3. Current account deficits and per capita income growth, 1997–2008**



Note: Average values calculated using 3 four-year periods in 1997-2008. Source: Authors' calculations, based on IMF World Economic Outlook.

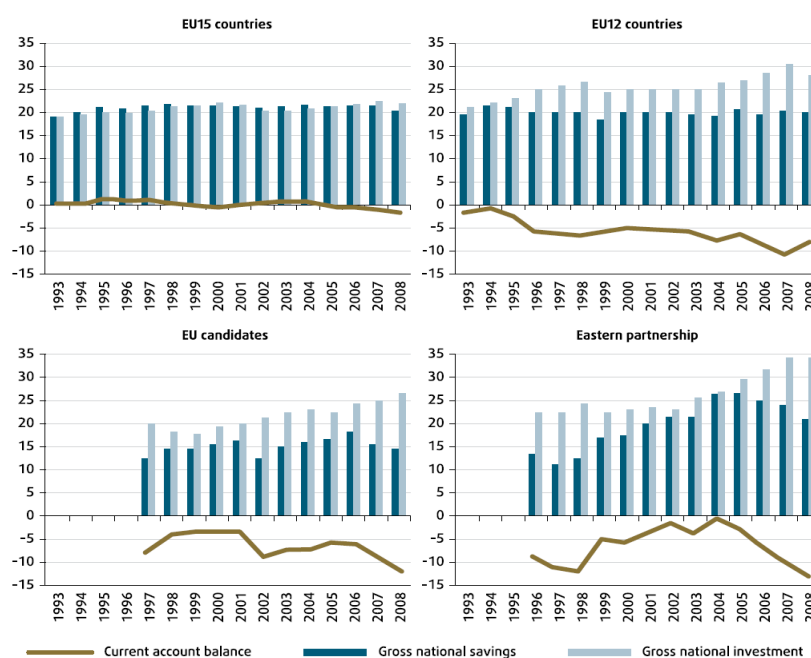
To draw lessons from emerging Europe's financial integration experience and its links to growth, it is therefore necessary to understand the role of foreign savings as a composite measure of the net foreign capital flowing into a country. Stojkov and Zalduendo (2011) find that the foreign savings-growth link seems to derive from the relationship between investment and growth (appendix table 1; column 3) and does not depend on domestic savings (appendix table 1, column 4). Specifically, when analyzing the saving and investment patterns in emerging Europe, a very limited substitution of foreign and domestic savings is observed; for instance, savings in

<sup>4</sup> A similar argument is made by Prasad, Rajan, and Subramanian (2007), Abiad, Leigh, and Mody (2009), and EBRD (2009) for all transition countries.

<sup>5</sup> The table in the appendix presents regression results between real GDP per capita growth (in PPP terms) and current account balances in the EU12, EU candidates and eastern partnership states after controlling for endogeneity. See Stojkov and Zalduendo (2011) for a detailed discussion of the estimation methodology.

the EU12 remained stable in the last two decades — and in spite of growing external imbalances in the decade prior to the crisis (figure 4). In the EU candidate countries and in eastern partnership states savings rose in 2000–06 and declined slightly before the crisis. Therefore, whereas in non-European developing countries foreign savings may substitute for domestic savings, in some emerging European countries capital does support growth because foreign savings complements domestic savings. This, in turn, appears to enable the pursuit of investment opportunities that would otherwise remain unfunded.

**Figure 4. Saving-investment balances, unweighted averages in percentage of GDP, 1993–2008**



Note: The averages are not presented for some years in the early 1990s because at least one observation is missing. Source: Authors' calculations, based on IMF World Economic Outlook and World Development Indicators.

## 2.2. Why is Europe different? EU membership as “a tractor beam”

Why does capital flow ‘downhill’ in Europe? Two factors could lead to negative relationship between current account balances (or negative foreign savings) and growth: financial development or institutional development. A well-developed financial system provides an efficient intermediary for foreign funds, enabling a smoothing of consumption and investment.<sup>6</sup>

<sup>6</sup> Stojkov and Zalduendo (2011) assume that financial system needs to reach certain threshold of development to achieve a foreign savings-growth link; they also experiment with alternative threshold measures.



By the same token, weak institutions may cause financial frictions—i.e. inefficiencies—and disrupt the absorption of foreign funds.

What is the empirical evidence? Despite deep financial integration between western and emerging Europe, financial development does not appear to explain foreign savings-growth link; a similar conclusion is reached by EBRD (2009). Indeed, when financial development thresholds are added to the same estimation specification as the one shown in appendix table 1, the link between foreign savings and growth remains practically unchanged; the coefficient on the current account balance for the EU close countries changes from  $-0.164$  to  $-0.169$  (columns 1 and 2 in table 1). On the other hand, including thresholds of institutional development into the estimation methodology weakens the impact of foreign savings (the coefficient changes from  $-0.674$  to  $-0.505$ ; columns 3 and 4 in table 1). It should also be noted that the foreign savings-growth link remains statistically significant among the EU12 and EU candidate countries.

Thus, institutional efficiency appears to play a partial role in the foreign savings-growth link. However, since the regressors built on the basis of the proximity to the European Union remain statistically significant, this suggests that EU membership (actual or potential) might still play a role. Exactly how the EU proximity affects the foreign savings-growth link remains a subject for further research; we suspect it reflects the role of EU integration in anchoring investors' expectations. This role is present even if institutional development in practice falls short of the EU standards. In this regard, as noted in Gill, Raiser, and others (2012), EU rules and regulations might act as a 'tractor beam' that gives an institutional pull to countries closest to the EU. EU12 and EU candidate countries benefited from this pull, while the eastern partnership states have yet to reap these benefits.

**Table 1. Testing the role of EU proximity and investment-driven versus savings-substitutions effects**

Dependent variable is growth in GDP per capita (PPP terms)	Financial development		Financial frictions (institutional development)	
Current account balance (CAB)	0.032 0.034	0.029 0.040	0.019 0.038	0.016 0.041
EU 12 and EU candidates x CAB	-0.164*** 0.051	-0.169*** 0.060	-0.674** 0.255	-0.505* 0.264
EU Eastern Partnership x CAB	0.488*** 0.082	0.476*** 0.107	0.498*** 0.086	0.499*** 0.074
CAB x dummy for financial development in top quartile		-0.025 0.077		
CAB x dummy for institutional development in top quartile				-0.037 0.055
Observations	329	329	208	208
Number of Countries	88	88	59	59
P value of Hansen statistic	0.305	0.269	0.511	0.720
Number of instruments	37	46	37	46

Note: Robust standard errors are presented below the corresponding coefficients. \*, \*\*, and \*\*\* denote statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Source: Based on Stojkov and Zaldendo (2011).

### 2.3. Risks: booms and excesses

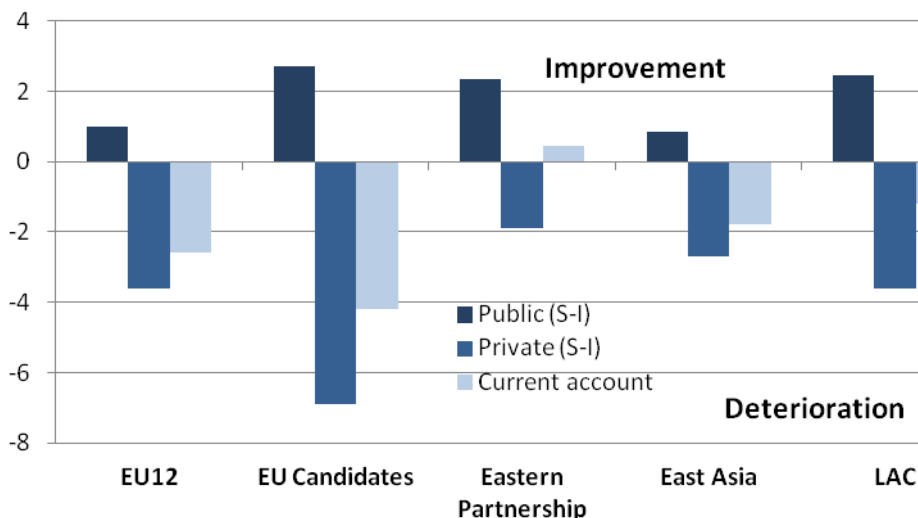
Assessing growth outcomes without recognizing the potential buildup of vulnerabilities could bias the conclusions regarding the foreign savings-growth link. Indeed, large external imbalances in some emerging European countries before the crisis made them particularly vulnerable. However, Stojkov and Zaldendo (2011) show the foreign savings-growth link remains valid even when periods of excessive growth—and excessive vulnerability—are excluded from the analysis.

And yet, differences in growth and vulnerability are also present across countries in emerging Europe. To examine these differences, countries can be classified along two dimensions. The first is institutional: the proximity to the EU—the EU12, EU candidates, and the eastern partnership country groups. The second dimension is monetary, using the exchange rate regime of each country (based on the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions [AREAER] classification): flexible, intermediate, and fixed.<sup>7</sup> The analysis distinguishes two four-year periods prior to the crisis: 2001–04 and 2005–08 (figure 5).

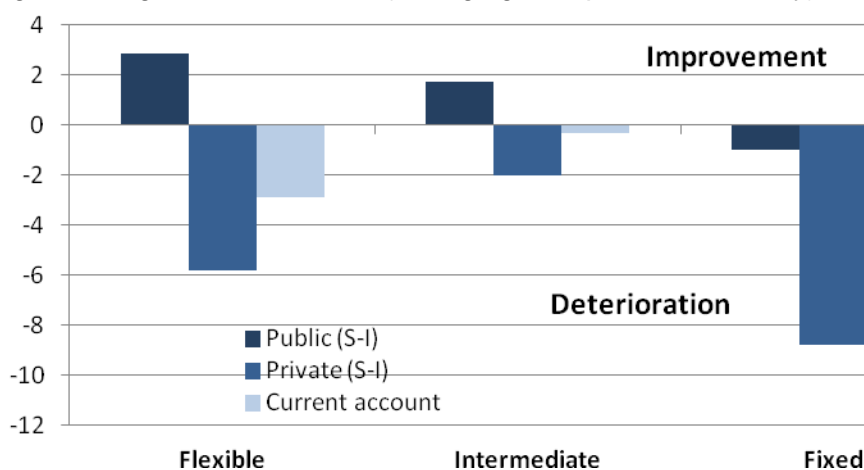
<sup>7</sup> The IMF's AREAER (2010) is aggregated into three groups of countries: group 1 (flexible or independent floating): Albania, Armenia, Czech Republic, Moldova, Poland, and Turkey; group 2 (intermediate, including basket, peg within bands, crawling peg, crawling band, and managed floating): Azerbaijan, Belarus, Croatia, Georgia, Hungary, FYR Macedonia, Romania, Serbia, the Slovak Republic, and Ukraine; and group 3 (fixed, which includes countries with no legal tender, currency boards, and conventional pegs): Bosnia and Herzegovina, Bulgaria, Estonia, Latvia, Lithuania, Montenegro, and Slovenia. Both de jure and de facto classifications of these choices are used, but the conclusions

**Figure 5. Savings-investment and current account balances (% GDP), change between 2001-04 and 2005-08**

A. Institutional classification



B. Exchange rate regime classification (emerging Europe countries only)



Note: LAC stands for the Latin America and the Caribbean region. S stands for savings and I stands for investment. Source: Authors' calculations, based on IMF World Economic Outlook and IMF (2010).

Three broad conclusions emerge from the comparison of savings-investment balances in the two four-year periods defined and across the two dimensions mentioned above; a fuller discussion can be found in Gill, Raiser, and others (2012).

- External imbalances in emerging Europe were largely private. Public sector imbalances declined in most countries. However, the improvement in public savings-investment

are similar. To make the presentation simpler, only the de jure classification results are discussed. Following Tsangarides (2010), alternative definitions and periods of interest are used. For classification purposes, the regime in place at the end of 2007 is assumed to remain valid throughout the 2004–10 period in the figure.



balances is potentially misleading as it also reflects buoyant tax revenues during the precrisis boom years.

- Countries in emerging Europe with fixed exchange rates recorded a sharper decline (deterioration) in their current account balance and private savings-investment balances during the precrisis period; this decline is largely due to lower private savings and an increase in public and private investment.
- Institutional characteristics influence the observed evolution of public and private sector savings-investment balances. As already noted, EU12 and EU candidate countries, in contrast to non-European emerging markets, show moderately increasing savings and increases in investment.

Did rapid capital inflows cause excessive exchange rate appreciation in emerging Europe? Real exchange rates appreciated gradually in most emerging European economies, consistent with the so-called “Balassa-Samuelson” effect (figure 6).<sup>8</sup> But, as noted by Bakker and Gulde (2010), in several European countries wage inflation exceeded productivity gains. The loss of competitiveness led to further capital inflows to cover resulting external imbalances. Where this happened, sustainability was at risk.

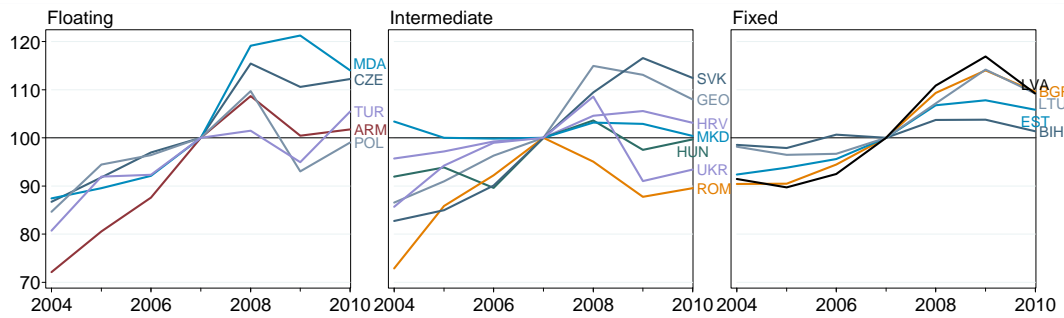
Although fixed exchange rate policies might have resulted in a loss in competitiveness, the inconsistency of fixed exchange rate regimes with other policies—fiscal policy in particular and generally complacent policies in the presence of massive external imbalances—is the most important driver of the boom-bust cycle that some emerging European countries appear to have experienced. Unusually liquid global markets during the precrisis period certainly would have strained the toolkit available to any government authority. But the presumption that a convergence-driven “new Europe” was at hand also resulted in complacency on the part of both bankers and bureaucrats. Not surprisingly, countries with the greatest precrisis external imbalances experienced also deeper slumps in domestic demand. At the same time, in countries where credit was mostly dependent on foreign funding, private sector credit grew slower during the recovery, suggesting that leaving external imbalances unmanaged may potentially lengthen or deepen the impact of the crisis (Gill, Raiser, and others 2012).

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<sup>8</sup> This arises from faster productivity growth in the tradable goods sector than in nontradables. Wages are determined in the tradable goods sector in line with productivity and hence unit labor costs in the economy as a whole increase causing a real appreciation.



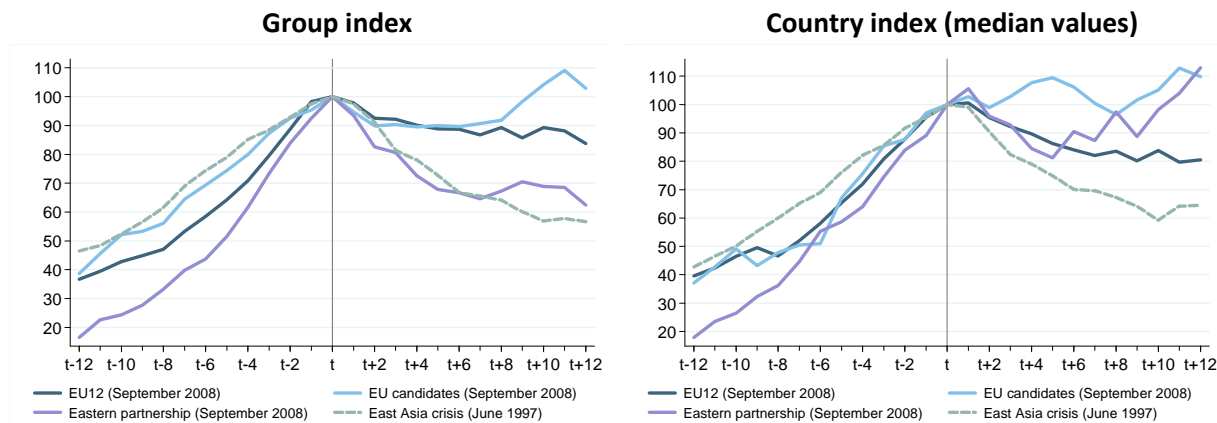
**Figure 6. Emerging Europe’s real effective exchange rates appreciated (2007=100)**



Source: Authors’ calculations, based on IMF International Financial Statistics and IMF (2010).

On a more positive note, foreign ownership structures in the banking sector were also a source of stability during the crisis. In contrast to the East Asian crisis of 1997–98, bank financing proved to be stable. Cross-border flows did come to an abrupt stop, but did not go into reverse as did happen during the Asian crisis (figure 7). The one exception are the eastern partnership states (largely driven by developments in Ukraine); a similar reversal was also observed in other CIS (Commonwealth of Independent States) countries.

**Figure 7. The closer a country gets to the European Union, the more stable its bank financing (banking flow stocks to emerging markets, quarterly data; t = 100)**



Note: Based on quarterly data as of March 2012. Values are exchange rate adjusted. Crisis timing date is defined in parentheses. Asian crisis countries are Indonesia, the Republic of Korea, Malaysia, the Philippines, and Thailand. The group index is based on aggregate group values. The country index is the median value of the values of individual countries within the group. Source: Authors’ calculations, based on the locational banking statistics by the Bank for International Settlements.

Why were banking flows a source of stability? There could have been several factors at play. Moral suasion efforts, such as the Vienna Initiative, probably played a role. Provision of liquidity and public financial support from western banks to their parent institutions also helped—as did large financial support to emerging European countries from the IMF and the EC as well as the



World Bank and EBRD. But the close links in bank financing to ownership structures is emerging Europe's distinctive feature. As noted above, the one exception are the CIS countries in eastern Europe where foreign banks had a less dominant position and short-term wholesale funding sources were largely de-linked from ownership stakes.<sup>9</sup> Yet, the vulnerabilities in the EU cohesion countries and their impact on Europe's banking system now leaves these countries exposed to significant downside risks. Ultimately, the health of the banking sector in emerging Europe is closely linked to the balance sheet strength of western European banks.

In conclusion, private sector external imbalances in 2006–08 supported growth but also contributed to consumption booms, asset bubbles, and unhedged FX borrowing in some emerging European countries. In fact, the experience of emerging Europe points to heterogeneity in the buildup of external and domestic vulnerabilities. Some countries sustained high growth rates without growing imbalances, while others experienced growth with increasing vulnerabilities. For example, in Hungary, more than half of all mortgage-holders had loans denominated in foreign currencies. In Latvia, by contrast, they accounted for 80 percent of all household loans. The credit boom in Latvia resulted in a real estate bubble during 2006–07 and was followed by a collapse in property prices. In Estonia, foreign financing fueled credit to corporations and households; credit grew at an average annual rate of 30 and 45 percent, respectively, during the 2003–08 period (Sutt, Korju, and Siibak. 2011).

Going forward, managing external imbalances—not self-insurance—should be the primary lesson from the crisis for emerging European countries. To do so, policymakers have several tools at hand. Two of these are highlighted in this paper: boom-proofing public finance and crisis-proofing private finance.

### **2.3.1. Boom-proofing public finance**

Public finance was not the source of external imbalances in emerging Europe prior to the 2008–09 crisis. As shown in figure 5, most countries recorded a decline (improvement) in public savings-investment balances. Two caveats are needed, however. First, the improvement in fiscal balances was partly fueled by the overperformance of revenues during the economic boom. Second, in the boom years some countries implemented permanent increases in public spending that left public finances in an unsustainable long-run path. For instance, Latvia and

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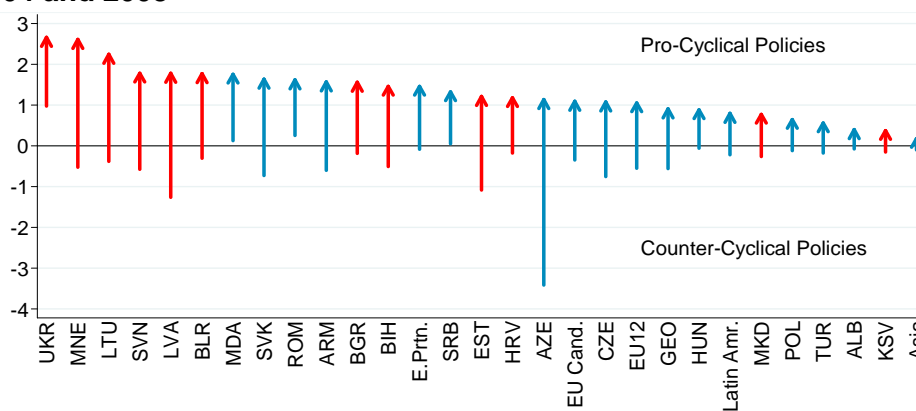
<sup>9</sup> The literature on the impact on credit reports mixed results; De Haas and others (2011) find that foreign banks constrained credit more than domestic banks while Navaretti and others (2010) find the opposite. The distinction between supply and demand factors remains a challenge, however.

Serbia approved increases in wages of civil servants and pensions shortly before the financial crisis. The postcrisis policy stance has thus focused on fiscal consolidation.

Indeed, most of the economies in the region pursued unusually procyclical fiscal policies in 2004–08 (figure 8). The revenue windfalls of high growth were spent, not saved, in most countries in emerging Europe. Similarly, countries with fixed exchange rates had on average looser fiscal policies; the opposite should have been expected given their exchange rate regime choice (namely, the red arrows in figure 8 are larger). Monetary policy was also too loose (Ghosh, Sugawara and Zaldueño 2011).

In conclusion, while public finances were not a driving factor behind the observed external imbalances, there was room for fiscal policy to counterbalance the excesses of the private sector. By pursuing an acyclical fiscal policy (i.e., the overperformance in revenue collections during a boom period need to be saved), authorities can in the future help to boom-proof public finances. In fact, in some cases even more deliberate counter-cyclical policies might be required. While fiscal surpluses cannot always fully match the imbalances of the private sector, authorities should use fiscal policy to signal the need to avoid excesses. This was not the policy stance in the precrisis period.

**Figure 8. Difference between fiscal balances and cyclically adjusted fiscal balances—2004 and 2008**



Note: The figure depicts the difference between fiscal balances and cyclically adjusted fiscal balances. Arrows begin with the fiscal stance values in 2004 and end with the fiscal stance values in 2008. Group median values are presented for EU12, candidate countries (EU cand.), and eastern partnership countries (E. prtn.). The red arrows denote countries that had, as of end-2007, fixed exchange rate regimes. Source: Authors' calculations, based on IMF World Economic Outlook and IMF (2010).



### **2.3.2. Crisis-proofing private finance**

Financial integration has benefits and risks. De Larosière and others (2009) put it well: “Integration increases contagion risks, and thereby jeopardizes financial stability; integration makes it more difficult to ensure a level playing field if rules and supervisory practices differ; integration means the development of large cross-border groups, which will require more streamlined and cost effective supervisory organization.”

The global crisis also revealed weaknesses in financial architectures. The emerging market countries in Europe were hard hit, but few experienced a collapse of their banking system. By contrast, in Ireland, the banking crisis became a sovereign debt crisis, in turn revealing weaknesses in the EU and the eurozone precrisis economic policy frameworks, surveillance arrangements, and governance mechanisms.

In this context, financial developments in Europe highlight the difficulties of concurrently pursuing financial integration, financial stability, and national sovereignty. Only two of these objectives can be attained simultaneously (Allen and others 2011). Just as the precrisis experience showed that financial integration is integral to Europe’s income convergence engine, the financial crisis demonstrated the importance of financial stability. To some degree, sovereignty appears to be the casualty of an integrated world. Yet, countries will always need to tailor their policy responses to country-specific characteristics.

What can be done to crisis-proof private finance? At a national level, macroprudential policies can play a useful role. To do so, they will have to be tailored to a country’s initial structural conditions and, in addition, to cyclical developments that at times might differ across Europe. And of course supranational approaches are also needed. Policy coordination is indeed paramount to achieve the correct balance between integration and country specificity. The alternative, not worth pursuing, is to give up on financial integration, a big part of what fuels Europe’s redoubtable income convergence machine. Nor should financial stability be compromised.

Therefore, to crisis-proof private finances, countries in Europe—and in emerging Europe in particular—will need to gauge their own development characteristics and use macroprudential policies to counterbalance emerging vulnerabilities. Supranational regulations at the EU-level might also help. This section discusses the former in detail by drawing on the experience of eight



emerging European countries during the decade that preceded the crisis; the latter are briefly discussed in the concluding section.

Traditionally, prudential policies are used to tailor risks in individual institutions and the impact these might have on the stability of the entire financial system. Macroprudential policies, on the other hand, are adjusted to developments in the economic cycle of a country. For instance, capital-adequacy ratios are a traditional prudential policy, but become macroprudential when they are adjusted in response to certain macroeconomic developments. Similarly, prudential policies may aim at creating capital and liquidity buffers, influencing credit growth by changing costs, or improving the quality of each loan that is extended. But what makes them macroprudential is their introduction in response to cyclical developments.

In the precrisis period emerging European countries used macroprudential policies to stabilize their financial system and tame system-wide risks. What can be learned from the experience of emerging Europe? The eight countries from the region we focus on can be classified into three groups according to their precrisis experience with macroprudential policies (table 2). The first group consists of countries that actively applied macroprudential policies; these were based on legally binding rules and regulations (Croatia, Macedonia FYR, and Romania). The second group consists of countries that used macroprudential policies through moral suasion (Poland, and Estonia) by relying on non-binding, informal recommendations and rules issued by the banking and supervisory authorities. Finally, countries in the third group did not use macroprudential policies (the Czech Republic, Hungary, and Turkey; however, in contrast to the Czech Republic and Hungary, Turkey did not face a credit boom; see Kenc, Turhan, and Yildirim 2011).

**Table 2. Precrisis experience with macroprudential policies in a selected group of emerging European countries**

	Czech Republic	Estonia	Croatia	Hungary	Macedonia, FYR	Poland	Romania	Turkey
Buffers and credit growth containment								
Capital-adequacy ratios		•	•		•	•		•
Risk weights		•	•		•	•	•	
Liquidity requirements			•		•	•	•	•
Constraints on total credit growth			•		•			
Regulations on FX lending			•		•		•	
Other		•	•			•	•	
Credit quality								
Loan-to-value ratios							•	
Debt service-to-income ratios							•	
Eligibility criteria							•	
Other		•			•	•		

Note: The table reflects changes during 2004-08. Source: Background papers prepared for Gill, Raiser, and others (2012).

Starting with the first group, Croatia, FYR Macedonia and Romania were quite active in the use of macroprudential policies.

- Croatia experienced substantial inflows of financial FDI. The foreign ownership of banks jumped from 7 percent in 1998 to 90 percent in 2002, remaining around this level ever since. Credit to households grew at an annual average of 23 percent in 2000–08. The exchange rate regime largely ruled out the use of monetary policy, while large structural budget deficits reduced the potential for fiscal policy. Croatia introduced macroprudential policies already in 2003, mostly to limit lending in foreign currencies. The macroprudential toolkit included adjustments in capital-adequacy ratios, risk weights, liquidity requirements, constraints on credit growth, and rules on lending in foreign currencies as well as measures to address credit quality (Kraft and Galac 2011). Because banks tried to circumvent lending restrictions, authorities pursued a “trial and error” strategy, amending the rules whenever necessary. For example, in 2003 the authorities adopted higher liquidity requirements for liabilities in foreign currencies. To avoid the stricter rules, banks started to offer deposits in local currency but indexed to foreign currencies. Consequently, Croatian regulators amended the rules in 2006 and FX deposits as well as those indexed to foreign currencies were subject to stricter liquidity requirements.
- As of the end of 2010, foreign-owned banks in the FYR Macedonia accounted for 93 percent



of total assets. Credit-to-GDP ratio increased from 20 percent in 2004 to 40 percent in 2008 (Celeska, Gligorova, and Krstevska 2011). The first macroprudential policies were deployed in early 2008 and were targeted at credit growth, credit quality, and banks' liquidity. Yet, credit growth picked up in FYR Macedonia later than in other emerging European countries, and the impact of the crisis on credit growth—as opposed to the effectiveness of macroprudential policies—remains unclear.

- In Romania authorities used monetary as well as prudential policies to strengthen the stability of the financial system (Popa 2011). Proactive monetary policy was implemented to keep inflation low, and the financial system stable. Macroprudential tools included reserve requirements on domestic and foreign currency liabilities, changes to risk weights in some business lines, and adjustments overtime to the level and coverage of debt service-to-income ratios.

In the second group, Estonia and Poland applied macroprudential policies primarily through what we refer to as moral suasion.

- In Estonia credit to corporations grew by 30 percent and to households by 45 percent; in both cases on average during the period 2003–08. Authorities used moral suasion to manage risks, including recommending a partial elimination of the tax deduction on mortgage interest payments. In late 2005, the Bank of Estonia implemented regulatory measures to raise the risk weight for housing loans (Sutt, Korju, and Siibak 2011). Capital buffers were maintained at higher levels than in advanced economies. Later the reserve requirement was increased to 15 percent. The authorities also collaborated with Swedish counterparts, due to high presence of Swedish banks in the country. It seems likely that these many measures started to have an impact as the credit slowdown precedes the global financial crisis. Still, given credit developments in Estonia in the precrisis decade, more should have been done.
- In Poland authorities introduced stricter capital-adequacy ratios for new banks and applied moral suasion to secure a rapid build in capital buffers prior to the crisis. Macroprudential rules had an informal character, such as Recommendation S on good practices for mortgage-secured loan exposures, and lacked automatic mechanisms for corrective action in the case of noncompliance (Kruszka and Kowalczyk 2011). In line with Recommendation S, banks were advised to require higher credit worthiness for mortgages in foreign currency.



Banks were also required to present loan offers first in local currency and, only after, in a foreign currency.

Finally, the Czech Republic and Hungary did not use macroprudential policies.

- In the Czech Republic, credit to households grew by an annual average of around 30 percent in 2002–08. But Czech authorities perceived this development as in line with the country's income convergence (Frait, Geršl and Seidler 2011). Czech households did not take loans denominated in foreign currencies. The main reason behind the limited presence of FX loans was the existence of low interest rates. In sum, the credibility of the Czech National Bank in achieving monetary stability, fiscal consolidation efforts after 2004, and low local currency yields led to a virtuous cycle.
- In Hungary, authorities perceived that high credit growth was in line with country's income convergence to the EU. There were some concerns on mortgage lending in foreign currencies, but the authorities did not impose any restrictions. Mortgage lending in foreign currencies to households increased after 2004, surpassing the rate justified by convergence in income and leading to a credit boom during 2007–08 (Banai, Király, and Nagy 2011). Given developments in Swiss franc loans to households, the authorities' lack of early action proved costly. The authorities introduced first regulatory measures during the crisis, including restrictions on system-wide FX risks.

### **2.3.3. Assessing the effectiveness of macroprudential policies in the region**

The experience with macroprudential policies in the eight emerging European countries discussed above shed some light on the effectiveness of these measures. The policy measures used may be classified into two groups: hard and soft. Hard-type macroprudential measures refer to buffers and credit growth containment tools, and include the use of credit quality measures such as loan-to-value ratios. Soft-type measures relate, for instance, to the qualification criteria for household to borrow in foreign exchange.

How effective are macroprudential tools? Their effectiveness appears to vary across business lines and types of financial institutions. In general, macroprudential policies had an impact, although sometimes this was the case only during a short period of time. Initial conditions also appear to impact their effectiveness, thus a variety of experiences—and results—across emerging Europe were observed.





More precisely, drawing on the experiences of the eight countries mentioned, it can be safely stated that capital buffers seem to have been the most effective of all the macroprudential tools applied. Higher buffers helped to cushion losses when the crisis of 2008–09 hit the emerging European region. It is indeed well-recognized that emerging Europe entered the crisis with a well-capitalized banking sector.

Direct limits on credit growth had a mixed impact—and were ultimately less effective. In both Croatia and FYR Macedonia, measures to limit credit growth decreased the transparency of the financial system. In this regard, a key lesson regarding macroprudential policies is that the toolkit needs to be adjusted as loopholes emerge; see Mitra, Selowsky, and Zalduendo (2010) for a thorough discussion. For instance, when Croatian authorities introduced credit growth limits in 2003 (primarily through increasing the costs to banks of exceeding the limits set on credit growth), banks circumvented these restrictions by transferring credit from their local subsidiaries to the parent institution. Some also encouraged their clients to take leases instead of loans. As Croatia identified the change in banks' practices, the regulations limiting credit were reintroduced with amendments during 2007. The new rules worked better because they captured banks' use of leasing companies, but they still failed to control operations between parent banks and their subsidiaries. But here also the effectiveness varied across business lines. For example, limitations on credit growth led to a deviation in corporate lending; by contrast, household lending was in effect curved down as parent banks were less inclined to book these loans cross-border. Revised regulations are also not without costs. For instance, in Croatia, the credit restrictions discouraged the development of small banks that are more likely to service a different type of borrowing clients (e.g., small firms).

The experience of these eight emerging European economies also reveals that initial conditions matter. This can be observed in the experience of the Czech Republic and Hungary. Neither of these countries used macroprudential policies prior to the crisis, yet in Hungary lending in foreign currencies picked up significantly while it remained largely unchanged in the Czech Republic. The difference was largely due to the moderate level of interest rates in the latter, which in large measure reflected sound macroeconomic management in the many years preceding the financial boom. By the same token, Poland was more successful with the application of moral suasion than was the case in Estonia. In this regard, the choice of exchange rate regime might also impact the effectiveness of macroprudential policies. For example, in Estonia, the currency board arrangement, and consequent lack of an independent monetary policy, constrained the policy toolkit available to the authorities. In addition, EU membership



largely prevented the use of direct capital controls. The reputation of supervisor authorities might also play a role—this could be the reason why Polish banks largely implemented prior to the crisis what in the end were non-binding recommendations.

Finally, initial conditions change the way policymakers can respond to the presence of external imbalances once a crisis hits a country. The experience of three small economies—Iceland, Ireland, and Latvia—is in this regard illuminating.<sup>10</sup> All three small countries experienced high credit growth fuelled by international borrowing and growth of the construction sector to slightly over 10 percent of total GDP. When the crisis hit and property prices plunged, all three countries had to turn to the IMF and the European Union for financial support. They also had to apply fiscal austerity and face substantial problems in the banking sector. But the initial conditions were different, varying the approaches the authorities could undertake to address their financing needs. Eurozone membership or not dictated the availability of a devaluation as an adjustment tool; Ireland did not have this option, Latvia chose not to give up on its peg (though it could have chosen an alternative adjustment path), and Iceland chose to devalue.<sup>11</sup> The responses of the central banks in each of these countries also differed. In Iceland, the central bank had to let the banks default due to the extent of their external obligations. Irish banks received support from its central bank as well as from the ECB. The government also chose to guarantee all liabilities of Irish banks out of concern that otherwise a bank run would be triggered (Butler, Michels, and Rahbari 2011a and 2011b). Latvia had to nationalize Parex Banka—one of the few such cases in emerging Europe, highlighting the role that parent banks played in supporting their subsidiaries.

The precrisis characteristics shaped also the recovery. All three countries had current account deficits, but they became unusually large in Latvia and Iceland (over 20 percent of GDP). Consequently, improvements in the external accounts impacted demand, employment, and public finances. Latvia experienced the highest decline in GDP (–25 percent, from peak to trough), while the decline was less sharp in Iceland (–11 percent) and Ireland (–13 percent). Investment and consumption also fell. Iceland emerged from the crisis with the smallest fall in employment and a fast expansion in trade, despite the largest shock to the financial system and

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<sup>10</sup> For more details see Darvas (2011).

<sup>11</sup> As a result, Iceland's krona fell by about 50 percent and the country introduced capital controls to limit further the depreciation of the currency. Ireland and Latvia have seen small declines in their real effective exchange rates, but Latvia's is still well above its precrisis value.



a collapse of the exchange rate. In Ireland the external imbalance was the smallest, in large because the tradable sector was competitive after a decade of high levels of FDI and an enabling business environment (Darvas, Pisani-Ferry, and Sapir 2011). The problem in their case was weak banks, whose losses were passed on to the balance sheets of taxpayers.

### **3. Conclusions**

In Europe capital flows from richer to poorer economies. This is distinct to the experience of the rest of the emerging world. It proved to be beneficial for emerging Europe—foreign saving enabled them to pursue otherwise unfunded investments. But foreign savings did not support growth everywhere. Only the EU12 and EU candidates benefited; the eastern partnership states did not. Why the difference in the EU12 and the candidates with the rest of the developing world? EU membership appears to act as a ‘tractor beam’ that gives an institutional pull to integrating countries. This role is present even if the actual institutional development falls short of EU standards. Relatedly, the foreign ownership structures in the banking sector proved to be a source of stability during the crisis of 2008–09. Cross-border flows came to an abrupt stop, but banks did not withdraw, in contrast to what happened in the East Asia crisis.

But financial integration with the EU also led to a buildup of vulnerabilities in the region. Emerging European countries experienced higher external imbalances than in other regions in the world, mostly concentrated in the private sector. This paper argues that these imbalances should not be eradicated, but, instead, managed; nor should emerging Europe pursue self-insurance policies. Countries close to the EU that experience high inflows of foreign savings should manage them efficiently so they can support economic growth. To this end, pursuing an acyclical fiscal policy stance (i.e., saving the revenues collected during boom periods) serves to counterbalance private sector behavior and, of course, in certain cases more deliberate counter-cyclical policies might be required. Private finance has to be crisis-proofed as well. Macroprudential policies can thus help to limit risks to financial stability. Three of the eight emerging European countries examined did not use macroprudential policies in the years leading up the crisis 2008-09 (the Czech Republic, Hungary, and Turkey). Others applied the macroprudential toolkit through moral suasion (Poland and Estonia). In contrast, a few were



quite active in the application of macroprudential policies (Croatia, FYR Macedonia, and Romania)–and with some success.

In general, given the extent of financial integration, policymakers face challenges of balancing the European-wide regulations and developments specific to particular countries. Macroprudential tools must play a greater role in the future to limit the buildup of vulnerabilities (even though the experience of countries that used these policies suggests that their effects are in some cases transitory, and thus might require frequent modifications). At a supranational level, countries that are less financially and institutionally developed must maintain access to policy measures that might require special treatment within Europe's single market for capital. Of course maintaining conformity with single market principles remains paramount. So does accepting that structural differences, at least for now, remain. And the variety of cyclical developments across countries might at times require extraordinary interventions on the part of banking sector regulators.



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## Appendix

**Table 1. Testing the role of EU proximity—investment-driven versus savings-substitutions effects**

Dependent variable is growth in GDP per capita (PPP terms)	EU proximity and its role as a driver of capital and growth		Is it investment driven growth or savings substitution process? Mostly investment!	
	3 emerging Europe groups	2 emerging Europe groups	3 emerging Europe groups	2 emerging Europe groups
Current account balance (CAB)	0.044 0.053	0.047 0.053	0.079 0.061	-0.107 0.071
EU12 x CAB	-0.254** 0.101			
EU candidates x CAB	-0.124** 0.062			
EU 12 and EU candidates x CAB		-0.165** 0.077	-0.085 0.059	-0.141** 0.062
EU Eastern Partnership x CAB	0.485*** 0.135	0.471*** 0.130	0.495*** 0.178	0.445*** 0.129
Investment			0.318*** 0.068	
Savings				0.228*** 0.066
Observations	584	584	584	584
Number of Countries	88	88	88	88
P-value of Hansen statistic	0.204	0.204	0.188	0.062
Number of instruments	45	40	49	49

Note: Robust standard errors are presented below the corresponding coefficients. \*, \*\*, and \*\*\* denote statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively. Source: Stojkov and Zaldueño (2011).