

Adalbert Winkler\*

## Finance, Growth and Crisis – A European Perspective

The long-held truism that finance is always good for growth has been called into question by the global financial crisis. This article examines new evidence on the finance-growth nexus from a European perspective. More specifically, it compares the approach of many CESEE countries – i.e. financial deepening and integration via foreign banks – with that of the euro area, namely wholesale financial integration but without any instruments for crisis management.

The global financial crisis was preceded by strong growth and major advances in financial deepening in many mature and emerging economies. In Europe, this was the case for most countries in Central, Eastern and South-Eastern Europe (CESEE), as well as for the crisis countries of the euro area periphery. In the post-crisis period, Europe has been the continent with the largest decline in output growth, partially because the global financial crisis was followed by the euro crisis. Against this background, this paper aims at answering two questions. Firstly, did the financial crisis reveal a need to reconsider the finance-growth nexus? Secondly, what has happened to the finance-growth nexus in Europe, i.e. the CESEE countries as well as the euro area, where pre-crisis growth associated with rapid financial deepening was followed by a deep post-crisis recession coupled with low and in some cases even negative credit growth rates?

We find that new econometric evidence suggests that the idea that finance is always good for growth has to be substantially qualified. Moreover, financial deepening and financial integration via foreign banks, as was pursued in many CESEE countries in the years prior to the crisis, do not guarantee stability. However, compared to the wholesale financial integration approach taken in the euro area with basically no crisis management instruments at hand, CESEE countries with banking sectors dominated by foreign banks have been in a better position to manage capital flow reversals than the euro area periphery.

The paper will briefly review both old and new empirical evidence on the finance-growth nexus before taking a closer look at the role of foreign banks in the pre-crisis financial deepening and post-crisis financial bust in CESEE countries. We will then compare the finance-growth nexus before and after the crisis in CESEE countries with that of the euro area periphery.

### Finance and growth – a new post-crisis perspective?

The pre-crisis empirical finance and growth literature, pioneered by King and Levine,<sup>1</sup> was largely read as having a simple message: finance is good for growth. This message was derived from the results of cross-country regressions suggesting that a country with a higher level of financial development, for example measured by the ratio of private sector credit to GDP, records higher growth rates than a country with a lower level of financial development.<sup>2</sup> While the causality of the relationship remained open,<sup>3</sup> few papers contained results qualifying the general message.<sup>4</sup>

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- 1 R.G. King, R. Levine: Finance, entrepreneurship, and growth, in: *Journal of Monetary Economics*, Vol. 32, 1993, pp. 513-542.
- 2 See T. Beck: Finance and growth: Too much of a good thing?, 2013, <http://www.voxeu.org/article/finance-and-growth>. The positive effects can be explained by the beneficial functions of finance which a more developed financial system is better able to exploit; see R.C. Merton, Z. Bodie: *Financial Infrastructure and Public Policy: A Functional Perspective*, Harvard Business School Working Paper, No. 95-064, 1995.
- 3 T. Beck: The Econometrics of Finance and Growth, in: T. Mills, K. Patterson (eds.): *Palgrave Handbook of Econometrics*, Vol. 2, Houndsmill 2009, Palgrave Macmillan, pp. 1180-1211.
- 4 See e.g. J. De Gregorio, P.E. Guidotti: Financial Development and Economic Growth, in: *World Development*, Vol. 23, No. 3, 1995, pp. 433-448; and F. Rioja, N. Valov: Does one size fit all?: a reexamination of the finance and growth relationship, in: *Journal of Development Economics*, Vol. 74, No. 2, 2004, pp. 429-447.

Adalbert Winkler, Frankfurt School of Finance & Management, Germany.

The finance-growth nexus analysed in the pre-crisis literature is a medium- to long-term phenomenon. Short-term developments, including instable boom-bust phenomena, are dealt with in the financial crisis literature.<sup>5</sup> The main message, namely “speed kills”,<sup>6</sup> is a simple one and has been confirmed by new evidence indicating that rapid credit growth is one of the most significant indicators explaining financial crises.<sup>7</sup> This holds, in particular, if financial development is accompanied by large capital inflows that are vulnerable to “sudden stop” phenomena.

The emerging market crises of the 1990s provided ample evidence for the view that despite the positive medium- to long-term effects of finance on growth, the trajectory path for getting to a higher level of financial development might be bumpy. However, while a consensus emerged to limit the vulnerabilities of rapid financial deepening linked to strong capital inflows, countries chose different instruments to reach this goal (see Table 1).

In broad terms, emerging Asia opted for a policy approach that relies to a considerable extent on self-insurance against sudden stops via a massive foreign exchange reserve buildup and a more cautious capital account liberalisation.<sup>8</sup> By contrast, the CESEE countries opted for a complete liberalisation of cross-border capital flows. Moreover, their financial integration was based on a unique institutional footing, namely the dominant presence of foreign banks from the “old” EU member countries. These banks – it was hoped – would support financial development and thus growth, while at the same time limiting the fragility of rapid financial deepening through their unimpaired access to global financial markets via their parent banks, including access to the relevant international lenders of last resort, i.e. the Federal Reserve and the ECB.<sup>9</sup>

5 E. Mendoza, M. Terrones: An anatomy of credit booms: evidence from macro aggregates and micro data, IMF Working Paper, No. 08/226, 2008.

6 E. Kraft, L. Jankov: Does speed kill? Lending booms and their consequences in Croatia, in: Journal of Banking and Finance, Vol. 29, No. 1, 2005, pp. 105-121.

7 M. Schularick, A.M. Taylor: Credit booms gone bust: monetary policy, leverage cycles, and financial crises 1870-2008, in: American Economic Review, Vol. 102, No. 2, 2012, pp. 1029-1061; H. Rey: Dilemma not trilemma: the global financial cycle and monetary policy independence, paper presented at the Jackson Hole Symposium, August 2013, <http://www.kansascityfed.org/publications/research/escp/escp-2013.cfm>.

8 S. Herrmann, A. Winkler: Financial markets and the current account: emerging Europe versus emerging Asia, in: Review of World Economics, Vol. 145, No. 3, 2009, pp. 531-550; M. Obstfeld, J.C. Shambaugh, A.M. Taylor: Financial stability, the trilemma, and international reserves, in: American Economic Journal: Macroeconomics, American Economic Association, Vol. 2, No. 2, 2010, pp. 57-94.

9 F.S. Mishkin: Financial policies and the prevention of financial crises in emerging market economies, World Bank Policy Research Working Paper No. 2683, 2001; C. Broda, E. Levy Yeyati: Dollarization and the Lender of Last Resort, mimeo, 2002, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.198.3117&rep=rep1&type=pdf>.

Table 1

### Preparations for a sudden stop in the pre-crisis period: Emerging Asia, CESEE and the euro area

	Restrictions to capital account openness	Foreign exchange reserve accumulation	Foreign banks	Macro-prudential policies
Emerging Asia	+	+	-	-
CESEE	-	(+)	+	(+)
Euro area	-	-	-	-*

\* Dynamic provisioning in Spain

Source: Own compilation.

In addition, several countries increasingly took recourse to macroprudential instruments in order to limit domestic credit growth and capital inflows,<sup>10</sup> and they boosted the level of foreign exchange reserves.

Before the subprime turmoil, financial crisis episodes among mature economies had been rare events. Moreover, disruptions, such as the Scandinavian banking crisis, had been mainly related to currency crises triggered by a violation of the impossible trinity. However, this kind of crisis could be avoided if countries with open capital accounts opt for a corner solution, i.e. give up monetary policy autonomy and establish a hard peg or maintain monetary autonomy with a flexible exchange rate.<sup>11</sup> Although largely for different reasons,<sup>12</sup> EU countries followed this policy recommendation by creating the euro.<sup>13</sup> Thus, in stark contrast to the CESEE countries, a financial crisis of the emerging market variety was not on the radar screen of euro area policy makers.<sup>14</sup> Early warning indicators, such as rapid credit growth based on rising cross-border flows, were not seen as policy challenges but “as part of a well-functioning monetary union”.<sup>15</sup> As a result, with the possible exception of dynamic provisioning in Spain, euro area policy makers basically did not make any preparations for preventing or fighting sudden stop and credit boom-bust phenomena.

10 J. Vandenbussche, E. Detragiache, U. Vogel: Macroprudential policies and housing prices: a new database and empirical evidence for Central, Eastern, and South-Eastern Europe, IMF Working Paper WP/12/303, Washington DC 2012.

11 S. Fischer: Exchange rate regimes: is the bipolar view correct?, in: Journal of Economic Perspectives, Vol. 15, No. 2, 2001, pp. 3-24.

12 European Commission: One market, one money: an evaluation of the potential benefits and costs of forming a monetary union, European Economy 44, October 1990.

13 T. Padoa-Schioppa: The European Monetary System: a long-term view, in: F. Giavazzi, S. Micossi, M. Miller (eds.): The European Monetary System, Cambridge 1988, Cambridge University Press, pp. 369-384.

14 M. Obstfeld: Finance at Center Stage: Some Lessons of the Euro Crisis, European Economy – Economic Papers 493, Brussels 2013.

15 D. Gros, C. Alcidi: Country adjustment to a ‘sudden stop’: Does the euro make a difference?, European Economy – Economic Papers 492, Brussels 2013, p. 3.

The global financial crisis has led to a change in thinking on the finance-growth nexus in various ways. Firstly, new research, benefitting from longer time series, has strengthened the case for taking a qualified view of the growth effects of financial deepening. Given the negative growth effects of financial crisis episodes in the 1990s, Rousseau and Wachtel find that the impact of finance on growth seems to have become weaker.<sup>16</sup> Secondly, several studies suggest that the relationship between finance and growth is non-linear.<sup>17</sup> Some studies identify the threshold at which further deepening leads not to higher but to lower growth at a credit-to-GDP ratio of about 100 per cent,<sup>18</sup> while others point to a substantially lower level.<sup>19</sup> From a policy perspective, this is a relevant issue. If the threshold were 100 per cent, the level of financial development in CESEE countries would not have been a reason for concern in the pre-crisis period, with the exceptions of Latvia and Estonia. Things would have been different for the euro area crisis countries (see Figure 1). If, however, the threshold were 60 per cent, several CESEE countries would have been either close to or beyond it in 2008. Thus, policy makers could have concluded that further advances in financial deepening would not foster but retard growth.

Given that many CESEE countries recorded substantial rises in their credit-to-GDP ratios in the pre-crisis period (Figure 2), several observers raised concerns based on the aforementioned findings.<sup>20</sup> By contrast, similar warnings with regard to financial deepening and integration in the euro area were largely absent.

With the collapse of Lehman Brothers, the global financial system was hit by a near-universal sudden stop of cross-border capital flows.<sup>21</sup> Overall, the Asian approach of foreign exchange reserve accumulation and a cautious opening of

16 P. Rousseau, P. Wachtel: What is happening to the impact of financial deepening on economic growth?, in: *Economic Inquiry*, Vol. 49, Issue 1, 2011, pp. 276-288.

17 While there is no consensus view yet as to which factors and channels contribute to the non-linearity of the relationship, two explanations – in addition to the crisis argument already referred to above – rank prominently in the literature. The first explanation is that credit has been increasingly granted to “non-productive” borrowers, i.e. households using the funds for non-productive purposes, i.e. housing. The second explanation asserts that high salaries in the financial sector have led to a brain drain from more productive real sectors to the financial sector; see S.G. Cecchetti, E. Kharroubi: *Reassessing the impact of finance on growth*, BIS Working Papers No. 381, 2012.

18 J.-L. Arcand, E. Berkes, U. Panizza: *Too much finance?*, IMF Working Papers 12/161, International Monetary Fund, 2012.

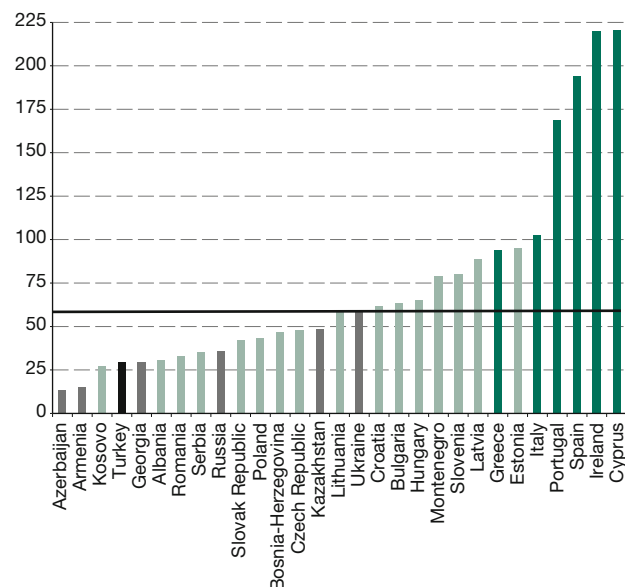
19 S. Manganelli, A. Popov: *Financial dependence, global growth opportunities, and growth revisited*, in: *Economics Letters*, Vol. 120, No. 1, 2013, pp. 123-135.

20 See, for example, C. Enoch, I. Ötoker-Robe (eds.): *Rapid Credit Growth in Central and Eastern Europe – Endless Boom or Early Warning?*, International Monetary Fund, Houndmills, Basingstoke 2007, Palgrave Macmillan.

21 See e.g. M. Giannetti, L. Laeven: *The flight home effect: evidence from the syndicated loan market during financial crises*, in: *Journal of Financial Economics*, Vol. 104, pp. 23-43.

Figure 1  
Private credit by deposit money banks, 2008

in % of GDP



Source: World Bank.

domestic financial sectors seems to have worked better in limiting vulnerabilities related to strong capital inflows than the CESEE approach of financial liberalisation and the presence of foreign banks.<sup>22</sup> However, while CESEE countries have been facing deep recessions, they did not experience full-fledged banking crises like in the 1990s and early 2000s. By contrast, the euro area was hit by both a deep and long recession and a series of banking crises, notably in the periphery countries.

### Finance, growth and crisis in CESEE countries – the role of foreign banks

Starting in the mid-1990s, several emerging markets, notably in CESEE and Latin America, began to witness a new form of financial integration, namely a rapidly rising share of foreign-owned banks in the domestic banking sector.<sup>23</sup> Indeed, in some countries foreign-owned banks had become the dominant players in their host banking sectors, controlling more than 90 per cent of total assets. Thus, it is foreign banks that were the main drivers of rapid credit growth in the region prior to 2008, challenging the traditional view, according to which foreign banks focus solely on cherry-picking large and

22 M. Goldstein, D. Xie: *The impact of the financial crisis on emerging Asia*, Paper presented at the Federal Reserve Bank of San Francisco conference “Asia and the Global Financial Crisis”, 18-20 October 2009, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.167.8560&rep=rep1&type=pdf>.

23 S. Claessens, N. Van Horen: *Foreign banks: trends, impact and financial stability*, IMF Working Papers 12/10, International Monetary Fund, 2012.

creditworthy clients from their host countries.<sup>24</sup> Against this background, the debate over the impact of foreign banks has increasingly turned to financial stability aspects, namely to the question of whether in a crisis foreign banks would act as shock absorbers or shock transmitters. The global financial crisis, which hit many countries with a sudden stop of capital flows and a credit slowdown, provided an excellent opportunity to test whether countries with a greater presence of foreign banks show a higher degree of stability in terms of cross-border capital flows and domestic credit than countries whose banking sectors are dominated by domestic banks.<sup>25</sup>

For the CESEE countries, the available evidence indicates that with regard to cross-border capital flows, foreign banks acted as shock absorbers, i.e. reducing the vulnerability to sudden stops.<sup>26</sup> Partly, this also reflected policy actions, such as the Vienna Initiative, whereby foreign banks, host and home country authorities, the EU Commission, and international financial institutions cooperated with the explicit goal of avoiding a sudden stop. In addition, home country fiscal authorities and the ECB provided support for the parent banks via equity injections, loans, guarantees and liquidity, which mitigated the panic and induced parent banks to stand by their commitments towards the region.

With regard to domestic credit growth, the evidence is mixed. No robust results emerge from a comparison of foreign bank behaviour with the behaviour of banks with domestic owners. Some studies lean towards the shock-absorbing view, suggesting that the credit supply from foreign-owned banks has been more stable than the credit supply of domestic banks.<sup>27</sup> Other studies find that foreign bank lending fell more

24 M. Giannetti, S. Ongena: Lending by example: direct and indirect effects of foreign banks in emerging markets, in: *Journal of International Economics*, Vol. 86, No. 1, 2012, pp. 167-180.

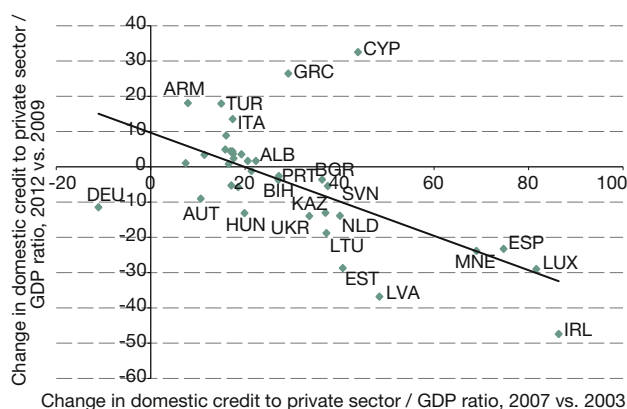
25 See e.g. N. Cetorelli, L.S. Goldberg: Global banks and international shock transmission: evidence from the crisis, in: *IMF Economic Review*, Vol. 59, No. 1, 2011, pp. 41-76; R. De Haas, I. van Lelyveld: Multinational banks and the global financial crisis: weathering the perfect storm?, DNB Working Paper 322, Amsterdam 2011; R. De Haas, N. Van Horen: Running for the exit? International bank lending during a financial crisis, in: *Review of Financial Studies*, Vol. 26, No. 1, 2013, pp. 244-285.

26 U. Vogel, A. Winkler: Do foreign banks stabilize cross-border bank flows and domestic lending in emerging markets? Evidence from the global financial crisis, in: *Comparative Economic Studies*, Vol. 54, No. 3, 2012, pp. 507-530; M. Hameter, M. Lahnsteiner, U. Vogel: Intra-group cross-border credit and roll-over risks in CESEE: evidence from Austrian banks, *Österreichische Nationalbank, Finanzmarktstabilitätsbericht* 23, 2012, pp. 76-91, [http://www.oenb.at/de/img/fmsb\\_23\\_schwerpunkt03\\_tcm14-248900.pdf](http://www.oenb.at/de/img/fmsb_23_schwerpunkt03_tcm14-248900.pdf); D. Gros, C. Alcidi, op. cit.

27 R. De Haas, Y. Korniyenko, E. Loukoianova, A. Pivovarsky: Foreign banks and the Vienna initiative: turning sinners into saints?, IMF Working Paper WP 12/117, Washington DC 2012; G.R.G. Clarke, R. Cull, G. Kisunko: External finance and firm survival in the aftermath of the crisis: evidence from Eastern Europe and Central Asia, in: *Journal of Comparative Economics*, Vol. 40, No. 3, 2012, pp. 372-392.

Figure 2  
Domestic credit to the private sector

in % of GDP



Change in domestic credit to private sector / GDP ratio, 2007 vs. 2003

Source: World Bank, own calculations.

than domestic private bank credit during the crisis.<sup>28</sup> Finally, there are studies which suggest that foreign bank presence had no significant influence on post-crisis aggregate credit growth,<sup>29</sup> at least in countries where foreign banks held more than 50 per cent of total banking sector assets.<sup>30</sup>

### Finance, growth and crisis in the CESEE countries and in the euro area – a comparison

In the euro area, some countries joined the CESEE countries in taking part in the pre-crisis credit boom (see Figure 2). Ireland, Luxembourg, Spain, Cyprus and the Netherlands each recorded a rise in their private credit-to-GDP ratios similar to the one observed in the Baltic countries or Montenegro. The boom was similarly followed by a bust, as the credit-to-GDP ratios of several euro area countries fell in the post-crisis period by more than ten percentage points.

Despite this similarity in boom-bust patterns, there are a number of key differences between CESEE and euro area countries. Firstly, both the crisis and the adjustment process started earlier in the CESEE countries. Secondly, in the immediate post-Lehman period, CESEE recorded larger output losses than the euro area did. Thirdly, while CESEE countries have now recovered from the crisis and resumed positive growth trajectories, the growth prospects for the euro area

28 See e.g. R. Cull, M.S. Martínez Pería: Bank ownership and lending patterns during the 2008-2009 financial crisis: evidence from Latin America and Eastern Europe, *World Bank Policy Research Paper* 6195, Washington DC 2012; S. Ongena, J.L. Peydro, N. van Horen: Shocks abroad, pain at home? Bank-firm level evidence on the international transmission of financial shocks, DNB Working Paper No. 385, Amsterdam 2013.

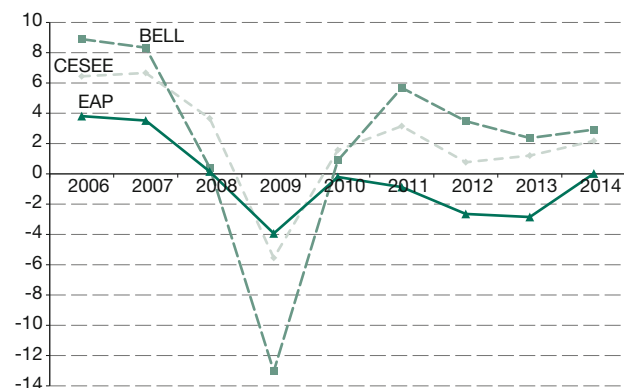
29 U. Vogel, A. Winkler, op. cit.

30 S. Claessens, N. Van Horen: Impact of Foreign Banks, in: *Journal of Financial Perspectives*, Vol. 1, No. 1, 2013, pp. 29-42.



**Figure 3**  
**Real GDP growth, 2006-2014**

in % p.a., unweighted group averages



Note: Euro area periphery (EAP): Cyprus, Greece, Ireland, Italy, Portugal, Spain. Central, Eastern and South Eastern Europe (CESEE): Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, FYR Macedonia, Poland, Romania, Serbia, Slovak Republic, Slovenia. BELL: Bulgaria, Estonia, Latvia, Lithuania.

Sources: IMF, WEO Database autumn 2013, own calculations.

as a whole, and notably for the euro area periphery (EAP), are marginal at best (see Figure 3).

The differences between the CESEE and EAP countries are even more pronounced when focusing on those CESEE countries that used a hard peg exchange rate regime (with the euro as the anchor currency) in the pre-crisis period, i.e. Bulgaria, Estonia, Latvia and Lithuania, abbreviated as BELL by Gros and Alcidi.<sup>31</sup> The BELL countries can be regarded as the closest benchmark with which to assess the performance of the EAP in terms of adjustment after a credit boom, as both country groups operate under a hard peg exchange rate regime.<sup>32</sup> As a result, any differences in the adjustment process should reflect factors other than the exchange rate regime.

Gros and Alcidi conduct an in-depth analysis of these factors, i.e. economic and structural country characteristics, including the pattern of financial integration. They find that the BELL countries benefitted from a higher degree of labour market flexibility as well as by being smaller, and hence more open, economies. Moreover, they had more fiscal space, because their outstanding government debt as a percentage of

GDP was substantially lower than in the EAP countries. At the same time, capital inflows as a percentage of GDP were much higher in the pre-crisis period in the BELL group than in the EAP, indicating that the vulnerability to a sudden stop was considerably larger there than in the EAP. By contrast, with the exception of Italy, foreign debt was larger in the EAP countries than in the BELL ones.

However, financial integration in the BELL countries was characterised by a high degree of foreign ownership in the domestic banking sector, notably via euro area parent banks. Thus, a substantial part of cross-border flows was channelled towards an internal capital market within the same bank. In such an internal market, “the incentive for the foreign lenders to withdraw, instead of internalizing losses in case of a crisis, is much lower” than in the open, wholesale markets characterising financial integration in the euro area.<sup>33</sup> Accordingly, while the BELL countries were more vulnerable to a sudden stop, this was partly compensated by a form of financial integration that is comparatively crisis-resilient. Indeed, in the immediate post-Lehman period, the BELL countries could rely to a substantial extent on the shock-absorbing capacities of euro area parent banks, which, in turn, were backed by euro area governments and the ECB in terms of solvency and liquidity, as mentioned above. By contrast, the EAP had to rely purely on public shock absorbers, namely the EFSF, the ESM, the IMF and the ECB, as the euro area banking sector is not dominated by banks operating throughout the entire euro area, but instead by banks “headquartered, and very frequently entirely operating” in individual euro area member states.<sup>34</sup> Thus, there was no internal capital market that could have mitigated the sudden stop, and after the crisis, the lack of banks operating throughout the entire euro area contributed to the emerging fragmentation of the euro area banking sector. As a result, local financial conditions in the EAP do not reflect euro area-wide conditions but the exposure of the respective euro area member states to the euro crisis. By implication, (average) EAP credit growth has nosedived since the outbreak of the euro crisis, and since mid-2012 it has been even weaker there than in the BELL countries (see Figure 4).

When directly comparing the adjustment processes in the BELL and EAP countries, Gros and Alcidi find that the BELL countries recorded somewhat smaller declines in output and employment but underwent deeper adjustment processes, as represented by changes in their current account balances, than the EAP countries did (see Table 2).<sup>35</sup>

<sup>31</sup> D. Gros, C. Alcidi, op. cit.

<sup>32</sup> However, in a footnote, D. Gros, C. Alcidi, op. cit., p. 7 f. note a substantial difference between the groups, namely that for the BELL countries, a “country can break its commitment to keep the exchange rate fixed without causing any problems for the country to whom the currency had been pegged (...). However, in the case of the euro, the exit of any country would have a profound impact on the other member states of the currency area.”

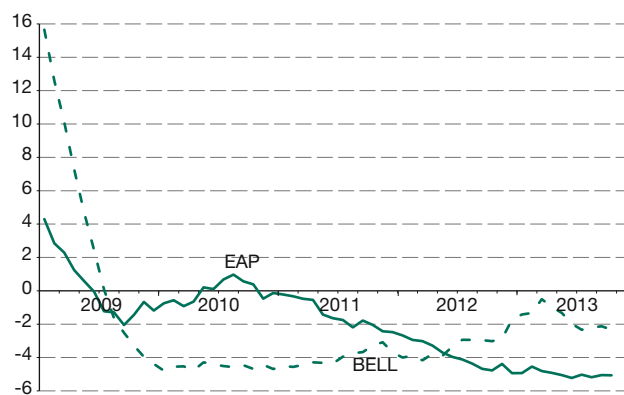
<sup>33</sup> D. Gros, C. Alcidi, op. cit., p. 19.

<sup>34</sup> C.A.E. Goodhart: Lessons for monetary policy from the Euro-area crisis, in: *Journal of Macroeconomics*, in press, 2013.

<sup>35</sup> D. Gros, C. Alcidi, op. cit.

Figure 4  
Nominal credit growth, 1/2009-11/2013

in % p.a., unweighted country averages



Note: Euro area periphery (EAP): Cyprus, Greece, Ireland, Italy, Portugal, Spain. BELL: Bulgaria, Estonia, Latvia, Lithuania.

Source: ECB, own calculations.

They explain this difference – in addition to the factors referred to above – by arguing that the public shock absorbers in the EAP have been less strict with regard to adjustment requirements than the private shock absorbers in the BELL countries. Since adjustment is inevitable and “a less sharp and longer correction process does not seem to be necessarily less painful”,<sup>36</sup> this raises the question of whether the euro, by “softening” the budget and liquidity constraints of the EAP, has contributed to a highly inefficient post-crisis recovery process. This view has prominent followers. For example, Sinn argues that the euro is ill-designed and causes unnecessary hardship in the EAP by precluding adjustment via exchange rates.<sup>37</sup> Accordingly, he calls for a “fresh start” for the euro, through a redesign of the common currency as a kind of fixed exchange rate regime, allowing countries in need of adjustment to exit the common currency temporarily.

The above analysis suggests an alternative interpretation for the comparatively poor adjustment and growth performance of the EAP throughout the euro crisis.<sup>38</sup> It is based on the following observations: Firstly, the lack of private shock

<sup>36</sup> Ibid., p. 7.

<sup>37</sup> H.-W. Sinn: Neustart für den Euro [A fresh start for the euro], in: Handelsblatt, 11 February 2014, p. 48.

<sup>38</sup> Another explanation could be the higher pre-crisis level of financial development in the EAP countries compared to the BELL countries. As shown in International Monetary Fund: What’s the damage? Medium-term output dynamics after financial crises, World Economic Outlook, September 2009, p. 137, <http://www.imf.org/external/pubs/ft/weo/2009/02/pdf/c4.pdf>, there is weak evidence suggesting that countries with higher levels of financial development record larger output losses when confronted with a financial crisis than countries with lower levels of financial development.

Table 2  
Output, employment and current account in the adjustment process: BELL versus EAP

	Cumulative output gap (change over baseline)	Cumulative unemployment cost (increase over baseline)	Cumulative change in current account balances relative to GDP
BELL	-17.8	31.5	68%
EAP	-21.7	40.6	24%

Note: BELL: Bulgaria, Estonia, Latvia, Lithuania. Euro area periphery (EAP): Greece, Ireland, Italy, Portugal, Spain. The cumulative output gap is derived from the sum of annual output gaps over baseline. The output gap is defined as actual GDP less potential GDP as a per cent of potential GDP. The cumulative unemployment rate is calculated as the sum of the unemployment rates between 2009 and 2014. The average unemployment rate, taken over the years 2005-2007, constitutes the baseline of our calculation. The cumulative change in the current account is calculated as the sum of current account balances (2009-2014) above the baseline (average of 2007-07).

Source: D. Gros, C. Alcidi: Country adjustment to a ‘sudden stop’: Does the euro make a difference?, European Economy – Economic Papers 492, Brussels 2013, pp. 39 f.

absorbers in the EAP countries reflects a different pattern of financial integration in the euro area compared to the BELL countries. Secondly, the same public shock absorbers that have been working openly in the euro area have also been at work in the BELL countries, though in a disguised manner, as private euro area parent banks did not withdraw capital from CESEE countries because they were supported by euro area governments and the ECB. Thus, the BELL countries indirectly benefitted from the same soft budget constraints. Thirdly, while CESEE countries were aware that they could become subject to a capital account crisis and therefore prepared for such an event, the euro area was completely unprepared, as it was operating under the assumption that the creation of a multi-country currency union as such reduces the risk of sudden stops to zero because (cross-country) sudden stops do not occur (almost by definition) within a single country.<sup>39</sup> This assumption has turned out to be wrong. The crisis has shown that it takes much more than a common currency to prevent sudden stops of capital flows.

How could the euro area have prepared for sudden stops? One answer to the question is by following the CESEE approach, namely basing financial integration on institutional integration, i.e. through banks that operate EMU-wide and that dominate the EMU banking system. A thought experiment illustrates this. If banks in the EAP had been owned by banks in the euro area core, how would the euro crisis, triggered by a revision of government debt and deficit figures in Greece, have evolved? Firstly, TARGET2 balances would

<sup>39</sup> European Commission, op. cit., p. 24.

have remained close to zero, as there would have been no withdrawal of deposits and other claims from the periphery as long as core country parent banks were considered “safe”. Secondly, government deficits and debt in key periphery countries would have been held to substantially lower levels, particularly in Ireland and Spain. Thirdly, feedback effects between banks and governments would have been limited, as the parent banks would have been domiciled in fiscally strong euro area member states. Fourthly, a banking union would only have been needed if losses in the EAP had overburdened core euro area parent banks *and* the respective banking rescue schemes had overburdened core euro area governments. However, in this case, “geographical demand patterns” for a full-fledged banking union would have been different as, under the conditions assumed, the core countries, for example Germany, would most likely have called for the swift implementation of a common resolution fund, while EAP countries would have been hesitant and argued that their taxpayers should not support core euro area banks.<sup>40</sup>

The alternative way to answer the question is to transform the incomplete EMU into a full-fledged monetary union. Such a transformation requires that all institutions fighting a “normal” banking crisis would have to be available at the union level. This holds for a central bank operating as a lender of last resort<sup>41</sup> and for moves towards a fiscal union and a banking union.<sup>42</sup> However, not only were these institutions missing when the euro crisis erupted, but the eventual creation of such institutions – like the EFSF, the ESM and the banking union – was controversial and subject to much debate. Moreover, the debate was not over fine details but rather on overarching questions of whether these institutions are needed at all and whether they might even be counterproductive in terms of stabilising the euro area.<sup>43</sup> Even lender of last resort activities by the ECB, largely accepted during the global financial crisis, came under severe criticism once the symmetric global crisis turned into an asymmetric euro crisis.<sup>44</sup>

40 C.A.E. Goodhart, op. cit.

41 W. Buitier, E. Rahbari: The European Central Bank as lender of last resort for sovereigns in the eurozone, in: *Journal of Common Market Studies*, Vol. 50, 2012, pp. 6-35; P. De Grauwe: The European Central Bank as lender of last resort in the government bond markets, in: *CEifo Economic Studies*, Vol. 59, No. 3, 2013, pp. 520-535.

42 M. Obstfeld, op. cit.

43 A. Winkler: Ordnung und Vertrauen: Zentralbank und Staat in der Eurokrise [Order and confidence: central banks and governments in the euro crisis], in: *Perspektiven der Wirtschaftspolitik*, Vol. 14, No. 3-4, 2013, pp. 198-218.

44 H.-W. Sinn: Verantwortung der Staaten und Notenbanken in der Eurokrise [Responsibilities of Governments and Central Banks in the Euro Crisis], 2013, <http://www.cesifo-group.de/de/ifoHome/policy/Sinns-Corner/Sinn-Juni2013-Verantwortung-in-der-Eurokrise.html>. A. Winkler: The lender of last resort in court, Frankfurt School of Finance & Management, Working Paper No. 207, 2014, <http://www.frankfurt-school.de/clicnetclm/fileDownload.do?goid=00000557420AB4>.

The relatively poor performance of the EAP countries in comparison to the BELL countries in managing and adjusting to the financial crisis reflects a range of economic, structural as well as institutional differences between these two groups of countries. Moreover, public shock absorbers have played a larger role in the EAP than in the BELL countries. However, arguing that the allegedly soft budget constraint nature of public shock absorbers explains the relatively poor adjustment performance of the EAP overlooks the fact that, in contrast to the BELL countries, the euro area as a whole was unprepared for managing a sudden stop within the EMU. Beyond that, after having been confronted with the sudden stop, policy makers were hesitant to establish euro area institutions that were needed to successfully manage the crisis. Finally, even after these institutions were established, policy makers remained hesitant to employ these instruments. Thus, the poor performance of the EAP may not reflect soft budget constraints but may represent the costs of being unprepared.

## Conclusion

It has almost become a platitude: the global financial crisis has triggered a rethinking of the role of finance in the economy. This also holds for the finance-growth nexus, which – as widely interpreted before the crisis – seemed to suggest that more finance necessarily leads to more growth. New evidence suggests that this formula does not hold, at least not without qualification. Moreover, the crisis has confirmed the conventional wisdom of the pre-crisis literature on the dangers of rapid credit growth, in particular when associated with substantial capital inflows. Finally, we have learnt that it is useful to prepare for a financial crisis, in particular for a sudden stop. The European perspective provides two major lessons on this last point: Firstly, relying on foreign banks is not a panacea for making financial integration and financial development crisis-resilient. Secondly, a total lack of preparation for a sudden stop is a recipe for disaster. The first lesson has been derived from the experience of CESEE countries, while the second lesson has been taught by the euro crisis.

In recent months, some steps have been taken to enhance financial stability in the euro area, notably the OMT programme as well as progress in establishing a fiscal and a banking union. These steps represent a response to the insight that a currency union must be more than an exchange rate regime in order to be sustainable. Euro area citizens are unlikely to accept for a second time that their common currency is more vulnerable to a sudden stop than the currencies of their reasonably prepared emerging market neighbours with fixed exchange rates.