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The OeNB's quarterly *Focus on European Economic Integration (FEEI)* presents peer-reviewed studies on macro-financial and monetary integration in Central, Eastern and Southeastern Europe (CESEE) as well as related country analyses and statistics. This publication reflects a strategic research priority of the OeNB.

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Call for Entries: Olga Radzyner Award 2012 for Scientific Work on European Economic Integration

The Oesterreichische Nationalbank (OeNB) has established an award to commemorate Olga Radzyner, former Head of the OeNB's Foreign Research Division, who died in a tragic accident in August 1999. The award is bestowed on young economists for excellent research on topics of European economic integration and is conferred annually. In 2012, four applicants are eligible to receive a single payment of EUR 3,000 each from an annual total of EUR 12,000.

Submitted papers should cover European economic integration issues and be in English or German. They should not exceed 30 pages and should preferably be in the form of a working paper or scientific article. Authors shall submit their work before their 35th birthday and shall be citizens of any of the following countries: Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, FYR Macedonia, Hungary, Kosovo, Latvia, Lithuania, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia and Ukraine. Previous winners of the Olga Radzyner Award, ESCB central bank employees as well as current and former OeNB staff are not eligible. In case of co-authored work, each of the co-authors has to fulfill all the entry criteria.

Authors shall send their submissions by postal mail – with the envelope marked “Olga Radzyner Award” – to the Oesterreichische Nationalbank, Foreign Research Division, Otto-Wagner-Platz 3, PO Box 61, 1011 Vienna, Austria. Entries for the 2012 award should arrive at the OeNB by September 17, 2012, at the latest.

For more information, please see www.oenb.at or contact Ms. Eva Gehringer-Wasserbauer in the OeNB's Foreign Research Division either by e-mail (eva.gehringer-wasserbauer@oenb.at) or by phone (+43-1-40420-5205).

Call for Applications: Visiting Research Program

The Oesterreichische Nationalbank (OeNB) invites applications from external researchers for participation in a Visiting Research Program established by the OeNB's Economic Analysis and Research Department. The purpose of this program is to enhance cooperation with members of academic and research institutions (preferably post-doc) who work in the fields of macroeconomics, international economics or financial economics and/or with a regional focus on Central, Eastern and Southeastern Europe.

The OeNB offers a stimulating and professional research environment in close proximity to the policymaking process. Visiting researchers are expected to collaborate with the OeNB's research staff on a prespecified topic and to participate actively in the department's internal seminars and other research activities. They are provided with accommodation on demand and have, as a rule, access to the department's data and computer resources and to research assistance. Their research output will be published in one of the department's publication outlets or as an OeNB Working Paper. Research visits should ideally last between 3 and 6 months, but timing is flexible.

Applications (in English) should include

- a curriculum vitae,
- a research proposal that motivates and clearly describes the envisaged research project,
- an indication of the period envisaged for the research stay, and
- information on previous scientific work.

Applications for 2012/13 should be e-mailed to eva.gehringer-wasserbauer@oenb.at by May 1, 2012.

Applicants will be notified of the jury's decision by mid-June. The next round of applications will close on November 1, 2012.

Studies

Residential Property Markets in CESEE EU Member States

Antje Hildebrandt,
Reiner Martin,
Katharina Steiner
and Karin Wagner¹

This paper provides an overview of residential property market developments in ten Central, Eastern and Southeastern European (CESEE) EU Member States over the last 10 to 15 years, featuring price developments, housing conditions, affordability, housing financing and policy measures targeting residential property markets. The descriptive cross-country approach particularly focuses on the period of the economic and financial crisis by capturing the recent boom and bust of residential property prices across the whole region. We observe that high levels of home ownership and low costs of external housing financing were related to rising residential property prices. Besides the small size of the rental market, rising demand for affordable good-quality housing suggests that price developments during the forthcoming catching-up of residential property markets are likely to be dynamic. In this respect, policy action in different areas should increasingly attempt to keep a lid on housing market developments in CESEE.

JEL classification: E3, F36, P2, P5, R21, R31.

Keywords: Residential property market, housing finance, regulation of housing markets, CESEE countries

1 Introduction

As residential property is one of the major components of household wealth, price developments in the residential property market are closely linked to the real economy and the financial sector. On the one hand, price trends in residential property markets influence household consumption and investment decisions via wealth effects. On the other hand, residential property transactions are often loan-financed, and property constitutes an important type of collateral for private debt. In turn, changes in residential property prices affect households' net debt positions and future borrowers' capacities to service their loans. Large-scale residential property financing may thus ultimately impact financial stability. In addition, the residential property market is closely tied to key economic sectors such as construction.²

These interlinkages have been evident not least since the beginning of the recent financial crisis. Several examples for the interaction of residential property and financial markets can be found both in the most recent past (e.g. in Ireland and Spain) and in the more distant past (e.g. in the second half of the 1980s and in the early 1990s, when property price developments caused severe banking crises in Finland, Norway and Sweden). As strong residential property price fluctuations can have destabilizing effects on the real economy and on finance, their monitoring has become an important element in the surveillance of macroeconomic imbalances. Most recently, this was emphasized by the European Commission's design of the scoreboard for the surveillance of macroeconomic imbalances, which

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² ECB (2011) provides a brief overview of the direct and indirect channels relating residential property markets to the real economy and the financial market.

explicitly takes into account the development of residential property prices (European Commission, 2011)³.

Against this background, this paper presents a systematic descriptive overview of private housing market developments in ten Central, Eastern and Southeastern European (CESEE) EU countries over the past ten to fifteen years.⁴ We add to the results of earlier papers on housing market developments in the CESEE region by capturing the most recent dynamics of the bust of residential property prices from a cross-country perspective, which allows us to show trends observable in the region as a whole.⁵ This is of particular interest as all CESEE residential property markets have undergone a transformation process since the late 1980s, which resulted in certain peculiarities common to most CESEE countries despite country-specific institutional settings: a boom-bust development in residential property prices; a high degree of home-ownership which is, to a large extent, financed via housing loans that are often denominated in a foreign currency; underdeveloped rental markets with relatively high rental costs; and room for improvement regarding the availability and affordability of good-quality housing.

This paper addresses these issues by first providing information on residential property price developments in CESEE over the pre-crisis, crisis and post-crisis periods. Depending on data availability, the pre-crisis period generally covers the period from 2004 to the second quarter of 2008, the crisis period covers the period from the third quarter of 2008 to the end of 2009 and the post-crisis period covers the year 2010. This choice is largely motivated by turning points in the developments suggested by the available data, namely the halt of the post-accession boom in the fall of 2008 and the start of economic recovery at the beginning of 2010. However, one should be aware of country-specific developments, e.g. the earlier start of the economic downturn in the Baltic countries. Furthermore, the classification “post-crisis period” could be too optimistic at the current juncture.

In a next step, we analyze the structural aspects of residential property markets (such as, *inter alia*, the ownership rate and affordability) from a household perspective. Housing loan market developments capture the role of banks in financing residential property. As country-specific institutional settings are important for residential property price developments, national economic policies and regulations are addressed, too. In this respect, this paper attempts to form the basis for future empirical research on the interlinkages between these structural aspects and residential property price developments.

This paper is structured as follows: Section 2 reviews residential property price developments. Section 3 deals with factors impacting property price developments such as structural aspects of housing markets, the affordability of residential property, financing issues and economic policies related to residential property markets. Section 4 concludes with policy recommendations and avenues for future research.

³ More generally, also the IMF recently emphasized the synchronization of financial and residential property markets, arguing that surveillance and domestic policies need to take this phenomenon into account more specifically (IMF, 2011b).

⁴ The sample of CESEE countries analyzed in this paper comprises Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia and Slovenia. The time span and country coverage shown in the charts vary according to data availability.

⁵ For more detailed CESEE country-specific information, see OECD (2005a), EMF (2011) and UniCredit (2011).

2 Residential Property Price Dynamics in CESEE Countries

Residential property markets are far from being transparent asset markets. They have particular characteristics which imply difficulties in collecting comparable data on prices. For example, houses and apartments are very heterogeneous and residential property prices can therefore vary considerably within a country (see box). In addition, the processes required for the purchase or sale of a property vary across countries, and turnover rates of properties are particularly low in CESEE, which makes it more difficult to assess price developments there (Hilbers et al., 2008). It is also crucial whether the data to be used for analysis are based on transaction (or selling) prices, collected e.g. from tax returns or private real estate agencies, or from asking (or offer) prices taken simply from advertisements (see chart 2). Data quality also depends on the distribution of the reported transactions, as prices differ according to type of dwelling, location, quality and whether the transactions refer to new buildings only or also to existing ones (Palacin and Shelburne, 2005). National central banks, national statistical offices and private real estate agencies provide residential property price data on CESEE.⁶ As data collection does not rely on a uniform (international) method, we analyze data from different sources, trying to present the most comparable data referring to residential property prices in capital cities (see chart 1).

In the run-up to the economic and financial crisis, prices rose sharply in most CESEE countries. These price hikes at least partly reflected the general catching-up process in CESEE; as living conditions changed, real estate markets began to be developed accordingly. Strong economic growth, a rise in real wages combined with strong demand for residential property and abundant housing loan supply are

Chart 1

Residential Property Price Developments in CESEE EU Capitals

Index (2007=100), in real terms



Source: BIS, ECB, national central banks, national statistical offices, REAS (residential market advisory company).

Note: The price index for BG refers to residential properties in large cities. All indices are HICP deflated. More detailed definitions of the residential property price indices are provided in the appendix.

⁶ As a result of the recommendation given in the report on "The Financial Crisis and Information Gaps" submitted by the Financial Stability Board and the IMF to the G-20 finance ministers and central bank governors, the BIS has started to publish data on property prices in 42 countries. In addition, Eurostat is working on a handbook on how to properly compile residential property price indices (e.g. Eurostat, 2011b). See Hilbers et al. (2008) and Murphy (2010) for details on different data collection methods.

all found to have played a role in the pre-crisis real estate price hikes in CESEE (Égert and Mihaljek, 2007). Demographic factors were also important for property price increases, as the generation of baby boomers born in the late 1970s boosted real estate demand in some countries (e.g. the Czech Republic) despite the overall decline in population figures in the region. In addition, the privatization of residential buildings, the absence of large-scale rental markets and high rental costs were closely related to residential property price developments. FDI is also found to have impacted residential property market developments in CESEE.⁷

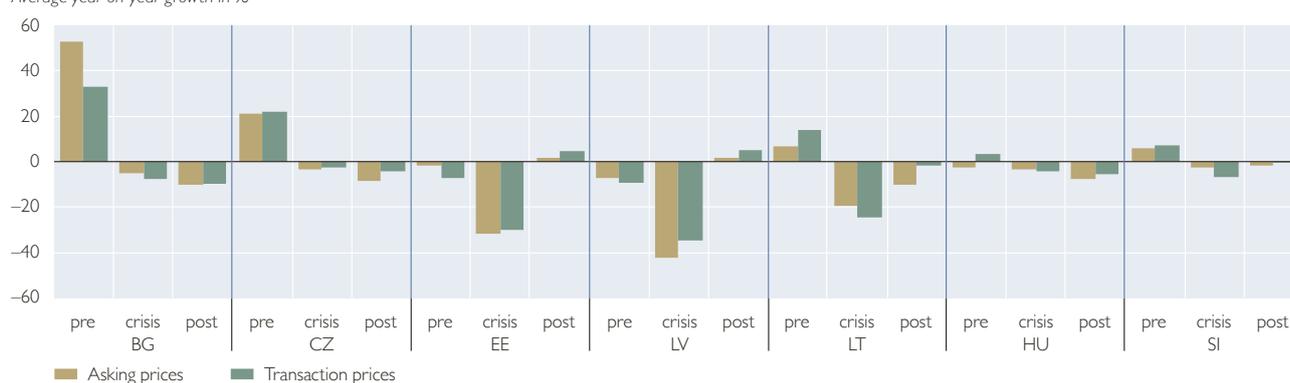
Although fundamental factors seem to have driven residential property prices, strong price increases for several consecutive quarters could also have been a sign of overshooting, particularly if followed by equally severe price contractions, which can be observed ex post. The European Commission's scoreboard for the macroeconomic imbalances procedure indicates that year-on-year changes in deflated housing prices of more than 6% could be referred to as a sign for overshooting (ECB, 2011). In all CESEE countries, deflated residential property price indices for the respective capital cities recorded strong year-on-year increases by clearly more than 6% over several consecutive quarters in the pre-crisis period. This shall only serve as a first indication for imbalances observed in the market during the pre-crisis period, as additional figures – such as long-term price changes and volume indicators – shall be considered to complement the assessment of the European Commission (2011).

After residential property prices had peaked, their contraction was sharp, too, in most CESEE countries and continued for several consecutive quarters. In Estonia and Latvia, prices already fell markedly in 2007. Residential property prices in the Czech Republic, Slovakia, Bulgaria and Romania started to decline only in the

Chart 2

Transaction Prices and Asking Prices in CESEE EU Countries

Average year-on-year growth in %



Source: FHB, REAS (residential market advisory company) and official data sources (BIS, ECB, national central banks, national statistical offices).

Note: Pre-crisis period: Q1 07–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10. REAS price index based on average asking prices for properties located in capital cities. Transaction price indices refer to capital cities except in the case of BG (large cities) and HU (whole country). PL, RO and SK have been excluded owing to a lack of transaction price data or due to insufficient time series. The pre-crisis period only starts in Q1 07 because no comparable data for asking prices were available for an earlier point in time.

⁷ Although we take note of the macroeconomic importance of the construction sector and of FDI inflows (Égert and Martin, 2008, and Mitra, 2011), this aspect is not treated in this paper as no detailed information is available on construction sector developments (in terms of gross value added or employment) and on FDI inflows that are directly related to residential property.

second half of 2008, when the financial crisis hit CESEE. The strongest fall in prices, however, was recorded in the Baltic countries as shown in chart 2, which compares real estate transaction and asking prices, taking account of different data collection methods⁸. This comparison reveals that data on both transaction and asking prices, which often originate from different sources, show broadly similar developments over time although the strength of the average year-on-year growth rate varies somewhat between transaction and asking prices.

Selected country-specific evidence reveals that the boom and bust of residential property prices was more pronounced in some CESEE countries, while it seems to have been more balanced in others (e.g. Poland). For example in Estonia, the economic bust, which also hit the residential property market, resulted from preceding unbalanced macroeconomic developments, such as in the construction sector, and was closely linked to other macroeconomic imbalances, e.g. in the nontradable sector (Brixiova et al., 2010). In Poland, by contrast, the residential property price contraction was not as sharp as in Estonia (see chart 1). The Polish construction sector was not as large as the one in Estonia, relative to the overall economy, and economic growth dynamics were more balanced. This might have slowed down the fall of property prices. In Hungary, the residential property price index behaved rather differently from that in other CESEE countries. The strong increase in Hungarian residential property prices at the end of the 1990s⁹ was largely driven by the generous housing subsidy program which comprised, inter alia, interest rate subsidies on long-term mortgages and personal income tax exemptions related to housing loans. The Hungarian government started reducing the program in 2003, which lowered the demand for residential property and led to a slow and steady decline in residential property prices (see chart 1 and FHB, 2009, Hegedüs, 2010, and Molnár, 2010). This shows that country-specific institutional settings are important for residential property price developments. They are therefore discussed in more detail in section 3.4.

Box

Regional Differences in Residential Property Prices

Regional differences within the CESEE countries add to the complexity of residential property price developments. Chart A shows that in the period from 2004 to 2010, residential property in CESEE capital cities was most expensive, although price levels in large (non-capital) cities were relatively close to those observed in the capitals (except in Bulgaria). Fundamental structural differences such as economic activity in the respective region, its employment level and opportunities, income level and demographic structure account for a large price divergence between residential property in the cities and in the country.

In CESEE, housing policy previously tended to be an aspect of labor policy, which provided housing where employment was created (Keith et al., 2000). Since the beginning of transition, the geographical distribution of economic activity in CESEE has widely changed and so has the regional demand for housing (Palacin and Shelburne, 2005). The relocation of industries, factory foreclosures and better labor market conditions have fostered urbanization, which

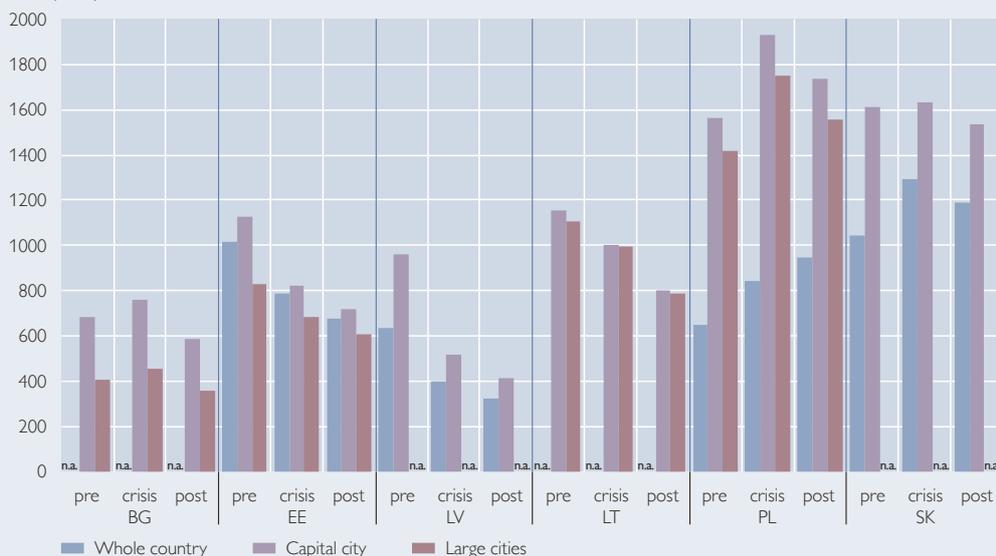
⁸ In many cases, data on transaction prices are collected and published by official institutions, whereas data on asking prices are collected by private organizations.

⁹ This information can be obtained from the house price index which is provided by the FHB Land Credit and Mortgage Bank Company and which covers Hungary as a whole. It shows that much of the increase in house prices occurred over the period from the beginning of 1998 until the end of 2000.

Chart A

Regional Developments of Residential Property Prices in Selected CESEE EU Countries

Prices per square meter in EUR



Source: BIS, ECB, Latio, national central banks, national statistical offices, Ober-Haus Real Estate Advisors, REAS (residential market advisory company).

Note: Pre-crisis period: Q1 04–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10. No data available for the capital city of SK for Q1 04–Q3 06 and the whole country of LV for Q1 04–Q4 05. Data on property prices in real terms (HICP deflated, 2005=100) at current exchange rates in EUR.

fueled a rising demand for housing in the cities. However, the supply of new housing often lagged behind and rental housing was scarce, too (Dübel, Brzeski and Hamilton, 2006). In turn, residential property price levels increased much more strongly in urban than in rural areas. In addition, the price divergence posed a constraint on labor mobility as rural households often lacked resources to afford an accommodation in more dynamic regions (Palacin and Shelburne, 2005). Besides labor migration within countries, external demand for housing by CESEE citizens working abroad has put upward pressure on residential property prices because the remittances have at least partly been used to finance residential property. Demand for second homes additionally fostered price hikes in tourist areas (Égert and Mihaljek, 2007).

Regional differences in housing market policies also account for diverging residential property price developments. Federal or devolved government systems allow regional authorities to pursue policies that are different from those of the central government. In turn, residential property markets in regions with poorly developed legislation (e.g. regarding land registry, contract enforcement or planning control) often lacked transparency. Most likely, transaction prices have thus been distorted and often high. In addition, a lack of regulation and professionalism of real estate advisory services further distorted price developments (Keith et al., 2000).

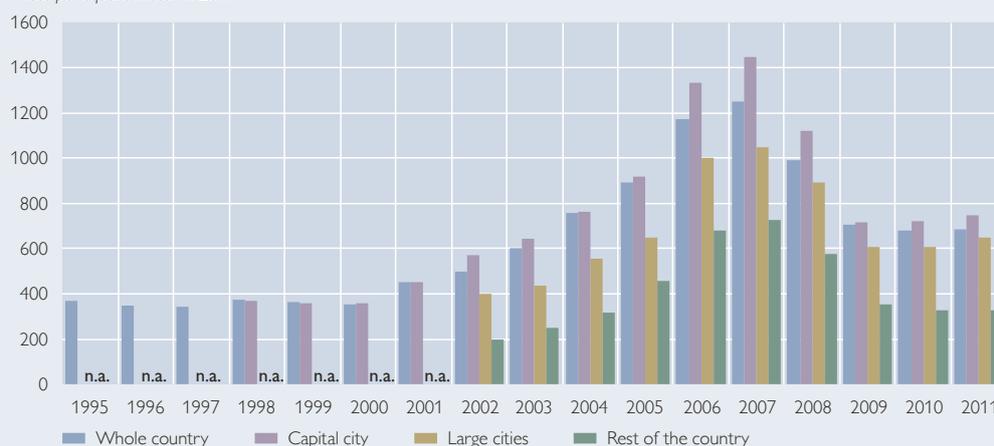
Country-specific evidence for Estonia, where data on regional housing price differences are more easily available than in other CESEE countries, shows that residential property prices increased from 2000 to 2007 in all regions (chart B). Loosened credit conditions, which allowed potential debtors to take out larger amounts of credit, particularly fostered demand for residential property (Tamm, 2007). In turn, residential property prices appreciated, driven additionally by the booming construction sector and by optimistic expectations of further price increases. After the price peak in 2007, buying property in Estonia became cheaper and prices dropped by more than 30% in 2009. The bust in residential property prices went hand in hand

with the downturn in the Estonian economy as a whole, as explained above. While from 2009 to 2011 buyers in rural areas profited even further from slightly declining price levels, capital cities and large cities saw a slow rise in residential property prices according to the official data. Over the entire period, prices remained lowest in the rural areas of Estonia.

Chart B

Regional Developments of Residential Property Prices in Estonia

Prices per square meter in EUR



Source: BJS, Eesti Pank, Estonian national statistical institute.

Note: The indicated property prices are annual average prices at current exchange rates and in real terms (HICP deflated). Data for 2011 refer to the first and second quarters of 2011.

To sum up, most CESEE residential property markets recently experienced a boom and bust cycle, albeit to different degrees. Property price increases have not always reflected the catching-up process and have also shown unbalanced developments in many cases. The decline in residential property prices went along with banks' rising reluctance to grant new housing loans (see section 3.3) and thus restrained demand for housing. In addition, construction activity slumped and can be expected to remain subdued until the market will have absorbed the stock of available housing.¹⁰ Changes in the institutional setting and policy framework followed (see section 3.4). As a reaction to most recent developments, residential property prices in CESEE showed a further declining tendency at the beginning of 2011, except in Estonia and Latvia, where prices rebounded.

3 Factors Related to Property Price Developments

This section analyzes some of the key factors related to property price developments in the CESEE countries. We start by flagging some of the structural differences before looking at the affordability of residential property and at financial deepening. A review of policy and regulatory measures concludes this section.

3.1 Ownership Structure and Housing Conditions

Two of the most striking features of the residential property markets in CESEE are the high share of owner-occupied housing and the relatively low quality of

¹⁰ Some CESEE countries initiated government programs (cofinanced by EU funds) targeting the renovation of public buildings to stimulate the construction sector, such as Lithuania from 2009 to 2010.

housing stock. These aspects of CESEE residential property markets are mainly a legacy of communist housing policy. During the socialist period, public rental housing was provided via a state-owned controlled housing system which was based on low housing costs, centralized production and state or enterprise control over housing allocation, which often resulted in a mismatch of supply and demand and housing shortages (Tsenkova, 2011).

Privatization and restitution in the 1990s totally changed the CESEE housing system. Many cooperative, state-, municipality- and employer-provided dwellings were privatized and sold to tenants, often with a discount of 80% or more from the estimated market price. As a consequence, shares of owner-occupied housing increased strongly in all CESEE countries with the exception of Poland, where cooperatives own a large share of the housing stock (chart 3).¹¹ While such asset transfers enhance households' wealth, high maintenance costs weigh heavily on the owners of often poorly maintained dwellings. The mass privatization process also left a large number of dwellings with unclear ownership, and responsibilities for common areas remained unclear, too. These circumstances have been a disincentive for private owners to invest in their property and have resulted in a deteriorating quality of the housing stock and thus a depreciation of privately owned residential property (Dübel, Brzeski and Hamilton, 2006). Moreover, from a macroeconomic perspective, the high share of owner-occupied accommodation may well be a bottleneck for labor mobility in the region (see e.g. OECD, 2010).

Despite these disadvantages, the rental market has only played a relatively small role in the CESEE countries during the last two decades; it has been concentrated in urban areas. In many CESEE countries, its size has even decreased significantly since the beginning of transition, mostly through the transfer of house ownership to sitting tenants (Amann, 2008). A household survey conducted in several CESEE countries showed that while only about 3% of the surveyed households lived in rented homes in Romania in 2002, this share amounted to 16% in Lithuania and about 30% in Poland (Dübel, Brzeski and Hamilton, 2006).

Affordable good-quality housing has remained scarce in CESEE – particularly for low-wage earners and marginalized groups of the population. The relatively high share of the population living in dwellings classified as overcrowded or severely deprived shows that there remain deficiencies in the market which ought to be addressed by policymakers (chart 4). At around 30% of the total population, the share of the population living in severely deprived homes is par-

Chart 3

Owner-Occupied Housing in CESEE EU Countries (2009)

Share of home owners in % of total population



Source: Eurostat (EU-SILC).

Note: Includes owners with and without outstanding mortgages or loans.

¹¹ More generally, cultural, sociological and demographic aspects, the availability, variety and cost of financing, policy choices such as making mortgage interest rates tax deductible, and other fiscal measures are important determinants for international differences in home ownership rates (Springler and Wagner, 2010).

Chart 4

Housing Conditions in CESEE EU Countries (2009)



Source: Eurostat (EU-SILC).

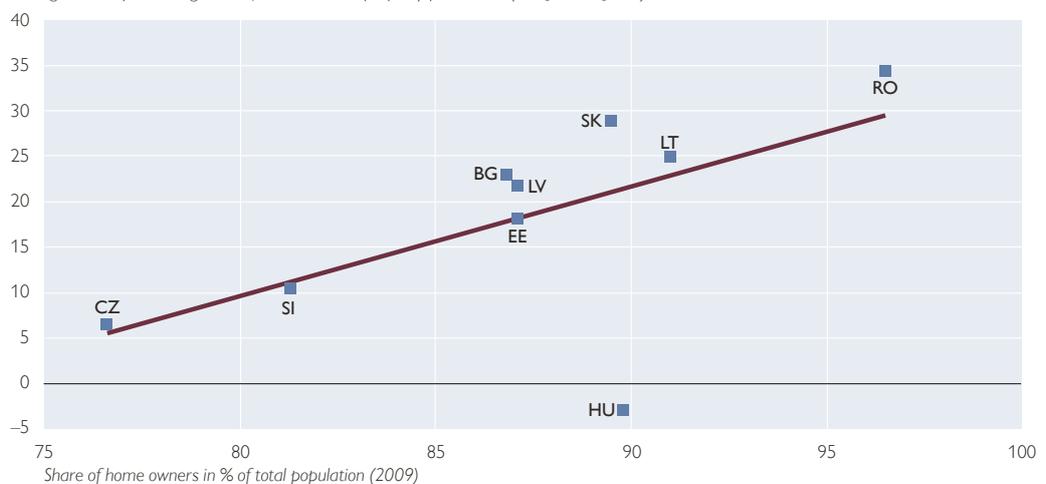
Note: The overcrowding rate describes the proportion of people living in an overcrowded dwelling, as defined by the number of rooms available to the household, the household's size, as well as its members' ages and family situation. A person is considered as living in an overcrowded dwelling if the household does not have at its disposal a minimum number of rooms equal to one room for the household, one room per couple in the household, one room for each single person aged 18 or more, one room per pair of single people of the same gender between 12 and 17 years of age, one room for each single person between 12 and 17 years of age not included in the previous category and one room per pair of children under 12 years of age (Eurostat definition). The severe housing deprivation rate is defined as the share of persons living in a dwelling which is considered as overcrowded and exhibits at least one of the following characteristics: no bath or shower, no indoor toilet, a leaking roof or lighting that is considered as too dark (Eurostat definition).

ticularly high in Romania compared to other CESEE countries. Overall, convergence to the quality levels prevailing in the euro area, where the percentage of the population living in overcrowded and severely deprived homes amounted to 11.3% and 3.4%, respectively, in 2009, still seems to be a long way off for most CESEE

Chart 5

Residential Property Prices and Home Ownership

Average annual pre-crisis growth of the residential property price index (%; Q1 04–Q2 08)



Source: BIS, ECB, Eurostat, national central banks, national statistical offices, REAS (residential market advisory company).

Note: Residential property prices used as in chart 1. The share of home owners includes owners with and without outstanding mortgages or loans. Due to lack of data the series start in Q3 04 for Estonia and Q4 07 for Romania and Slovakia. Poland has been excluded because of outlier data.

countries. Social housing programs exist but are limited, and public rental accommodation is often of poor quality as reported by the World Bank (Dübel, Brzeski and Hamilton, 2006).

Chart 5 suggests that CESEE countries with a higher home ownership rate (and hence a smaller rental market) also saw a stronger increase in residential property prices in the pre-crisis period. Similarly, rising residential property prices were related to a higher share of the population living in severely deprived homes in the region. The affordability of housing is an important issue in this context. The above-mentioned aspects of housing quality also suggest that the demand for housing improvements and new housing in the CESEE countries will remain high until the quality and quantity gap in the housing stock has been closed. This, in turn, suggests that real estate price developments during the catching-up period are likely to remain dynamic.

3.2 Affordability of Residential Property

As household wealth has been hit by the economic and financial crisis and the availability of mortgage loans has become tighter, housing affordability has become an even more important issue for domestic residents in CESEE. Housing affordability can generally be defined as the capacity to meet housing-related costs while “maintaining the ability to meet other basic costs of living” without incurring financial difficulties (Burke, 2004, Robinson, Scobie and Hallinan, 2006). Housing-related costs refer to the purchase of residential property and the running costs of owning or renting a home (such as water and electricity costs). We focus on the so-called purchase affordability by relating residential property prices to gross wages and salaries in chart 6 (OECD, 2005b).¹² While causality between residential property prices and wages cannot be determined in this context, the affordability index shown in chart 6 allows for analyzing changes in affordability over time.¹³ Affordability first decreased in most CESEE countries during the boom period. Later, residential property became more easily affordable as residential property prices posted a somewhat stronger decrease than wages and salaries during and after the 2009 crisis. These developments were most striking in Latvia and Bulgaria. Most recent data show that housing became slightly less affordable in Estonia and Latvia in 2010, while affordability remained largely stable or slightly improved in the other CESEE countries.

Although housing affordability increased during the economic and financial crisis as shown in chart 6, it was at the same time impaired by other factors such as decreasing non-wage income, declining employment or the high level of household debt. For example, the unemployment rate in CESEE increased from around 6% in 2007 to more than 12% in 2010 (unweighted average, Eurostat), which – despite its presumably mainly cyclical nature – indicates that in the near future a smaller share of the population is likely to obtain bank funding for housing purposes. In addition, households’ indebtedness markedly augmented in the last decade and an

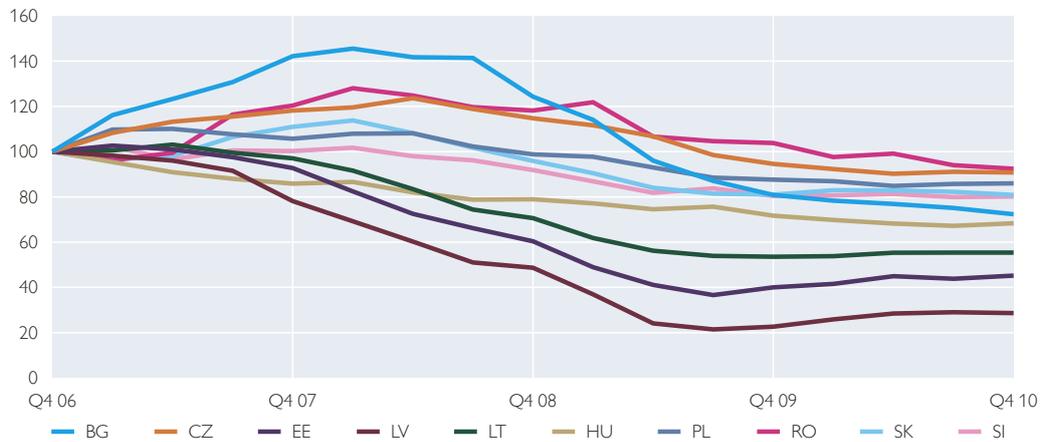
¹² The housing markets for domestic residents and expatriates working for foreign companies operating in CESEE may differ considerably in terms of price levels and affordability.

¹³ Affordability measures usually require a benchmark by which to tell at what proportion of total income housing costs become unaffordable (Robinson, Scobie and Hallinan, 2006). The affordability measures shown in chart 6 and 7 are calculated using price indices, which means they only show changes over time. Further aspects of affordability are discussed in Robinson, Scobie and Hallinan (2006) and Gan and Hill (2009).

Chart 6

Development of Housing Affordability

Index (Q4 06=100)



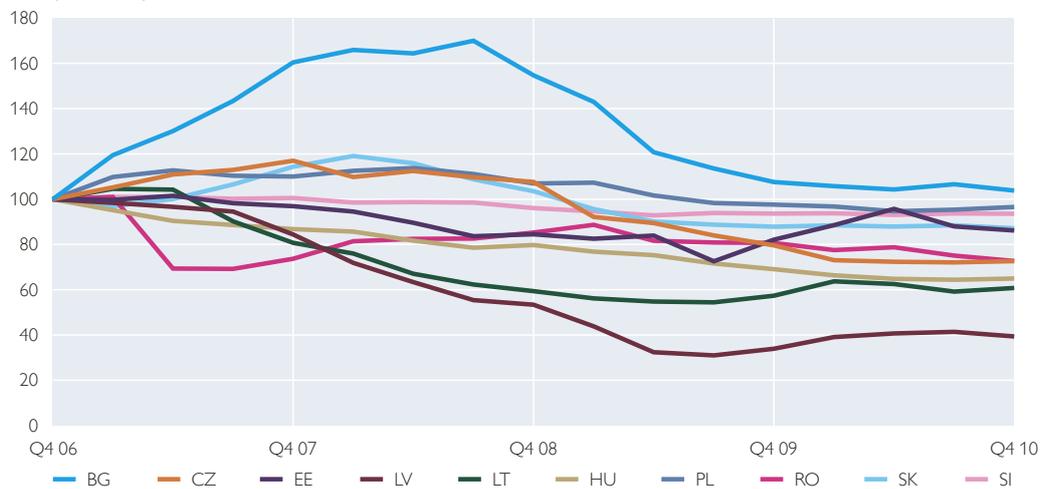
Source: Eurostat, OeNB, REAS (residential market advisory company).

Note: The index of housing affordability is calculated as the ratio of the residential property price index to the index of wages and salaries at current prices (in nominal terms and in national currency, seasonally and working day adjusted). The residential property price index refers to properties in the capital cities.

Chart 7

Development of the Price-to-Rent Ratio

Index (Q4 06=100)



Source: Eurostat, OeNB, REAS (residential market advisory company).

Note: The price-to-rent ratio is calculated as the ratio of the residential property price index to the index of actual rents for housing (neither seasonally nor working day adjusted). The residential property price index refers to properties in the capital cities.

increasing number of indebted households faced difficulties in meeting their debt servicing commitments in late 2010 as a result of the economic and financial crisis.¹⁴ Risk premia on household loans also went up in the course of the crisis, weighing negatively on affordability (see section 3.3).

¹⁴ This information is taken from the OeNB Euro Survey, which is conducted on a regular basis in nine CESEE countries. In this case, respondents were asked whether they had found it more difficult to pay down their loans as a result of the economic and financial crisis (Dvorsky, Scheiber and Stix, 2011, p. 58).

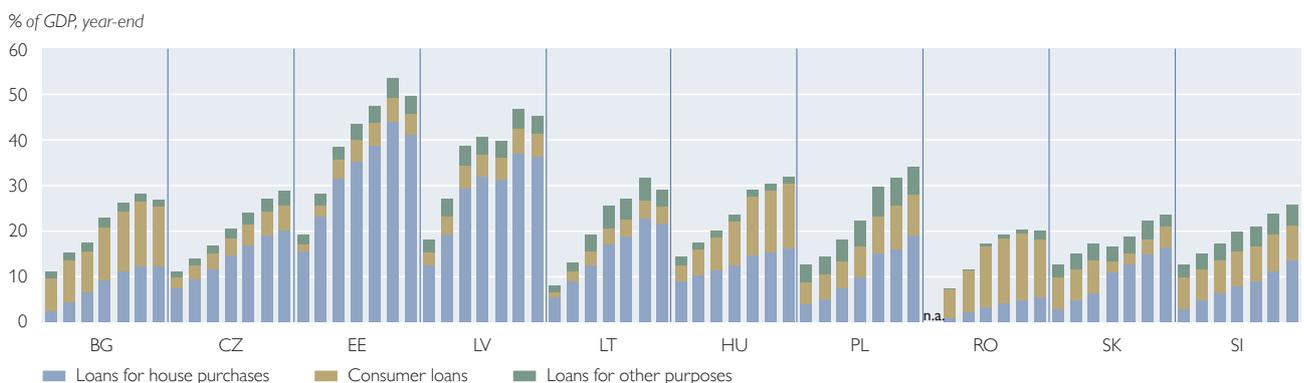
Another aspect related to affordability is a comparison of the costs of owning and those of renting a home. Rents in CESEE have been relatively high compared to residential property prices because demand for rented homes has been strong in view of rising residential property prices, underdeveloped rental markets and subdued supply (Dübel, Brzeski and Hamilton, 2006).¹⁵ During the financial crisis, renting became even more expensive than buying residential property, as the residential property prices are considered to be more sensitive to cyclical fluctuations than rents (chart 7). Financing issues need to be considered in the context of affordability, too.

3.3 Financial Deepening and the Financing of Residential Property

CESEE households have increasingly taken on external financing for housing purposes. In recent years, the average stock of outstanding loans for house purchases in the CESEE countries increased from around 7% of GDP in 2004 to 20% of GDP in 2010 (unweighted average). These housing loans accounted for the largest component of loans to households in 2010 in all CESEE countries analyzed except for Bulgaria, Romania and Hungary (chart 8). In Romania, the share of consumer loans in GDP was more than twice as high as that of housing loans, whereas in Bulgaria and Hungary both loan categories were almost equally important. On the supply side, at the end of the 1990s, particularly the establishment of savings and mortgage banks as well as capital inflows to the region enhanced the creation of more sophisticated credit instruments (Mitra, 2011). The softening of credit standards caused by strong competition among banks as well as progress in the enforcement of property rights and the registration of property deepened the market for housing finance (Warnock and Warnock, 2008, and World Bank, 2011). On the demand side, rising housing debt was interlinked with increasing disposable income and intertemporal considerations (expectations of higher wages)

Chart 8

Household Credit Stock by Loan Purpose (2004–2010)

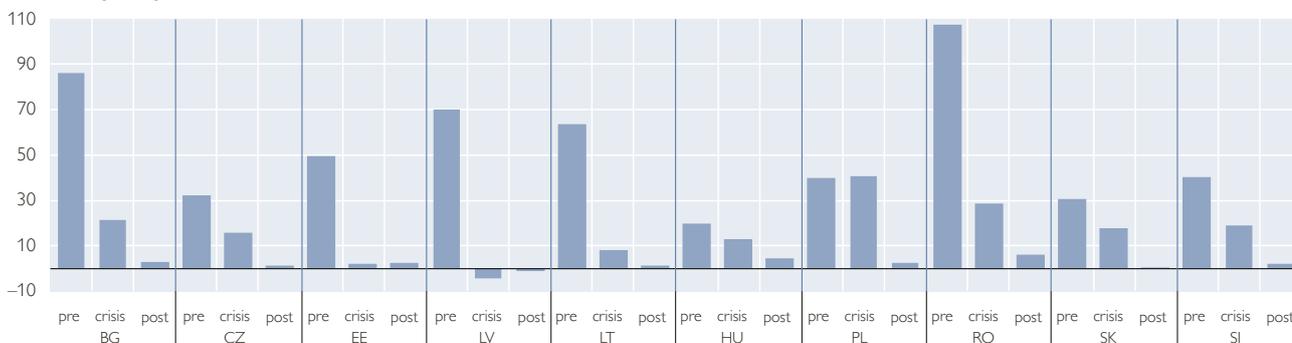


Source: ECB, IMF, national central banks, OeNB.

¹⁵ It is not clear to what extent social housing is included in the data on rents. The share of social rented homes in total housing stock declined, however, from above 20% in 1990 to levels of around 3% in 2000 and has remained low since. Section 3.4 points out its minor role in the housing market. Social housing means homes that are owned and managed by local authorities. It is generally provided by councils and nonprofit organizations such as housing associations (social rented homes are let at lower rents than those rented out by private landlords).

Lending to Households for Residential Property Purchases

Annual average real growth in %



Source: ECB, IMF, national central banks, OeNB.

Note: Pre-crisis period: Q1 04–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10. Data for EE and SI starts in Q1 05 and data for RO in Q3 06.

combined with low leverage at the beginning of the process. In addition, the absence of large-scale rental markets combined with the high cost of renting homes prompted households to buy residential property – a development which eventually drove up house prices.

With the onset of the financial crisis, bank lending to households for house purchases weakened strongly, and growth rates still remain depressed in some countries, particularly in the Czech Republic, Slovakia, Latvia and Lithuania (chart 9). Banks have been more reluctant to grant new housing loans in view of worsening risk perceptions and tighter credit standards while households' demand declined, given higher debt financing costs, high uncertainties about their future incomes, job insecurity and thus the future affordability of mortgages. In 2010, the stock of outstanding housing loans ranged between 6% of GDP in Romania and 41% in Estonia (chart 8).

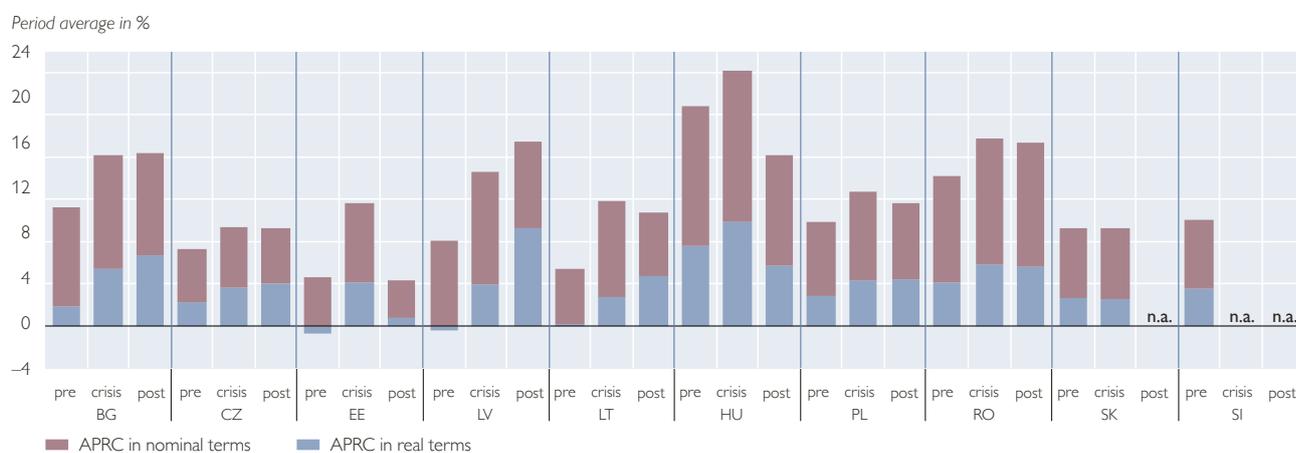
The annual percentage rate of charge (APRC) provides information – that is comparable across countries – on the annualized costs of new housing loans in local currency, which is another aspect of housing affordability.¹⁶ The APRC comprises an interest rate component and any loan-related charges paid by borrowers to lending banks.¹⁷ Although policy and market interest rates have gone down since the beginning of transition, the nominal APRC for housing is found to have been generally high in the CESEE countries and to have increased even further over time (see chart 10). The real APRC, however, reached levels below zero in the pre-crisis period in some countries. Thereafter, developments across CESEE diverged more strongly, a trend which partly reflected the fact that financial markets increasingly differentiated between individual CESEE countries. In Estonia, for example, interest rates reached quite a low level in 2010 as the convergence process was perceived to be sustainable in the run-up to euro adoption.

¹⁶ Comparable time series for the APRC only start in 2004. For longer periods, bank lending rates taken from the IMF's International Financial Statistics (IFS) database show that nominal interest rates for domestic currency lending to households declined from around 50% in 1994 to below 10% in 2004.

¹⁷ The composition of other charges varies across countries because the definitions in the Consumer Credit Directive (Directive 87/102/EEC) are applied differently across countries and because national financial systems and credit securitization procedures differ (ECB, 2003).

Chart 10

APRC on Local Currency Loans to Households for Residential Property Purchases

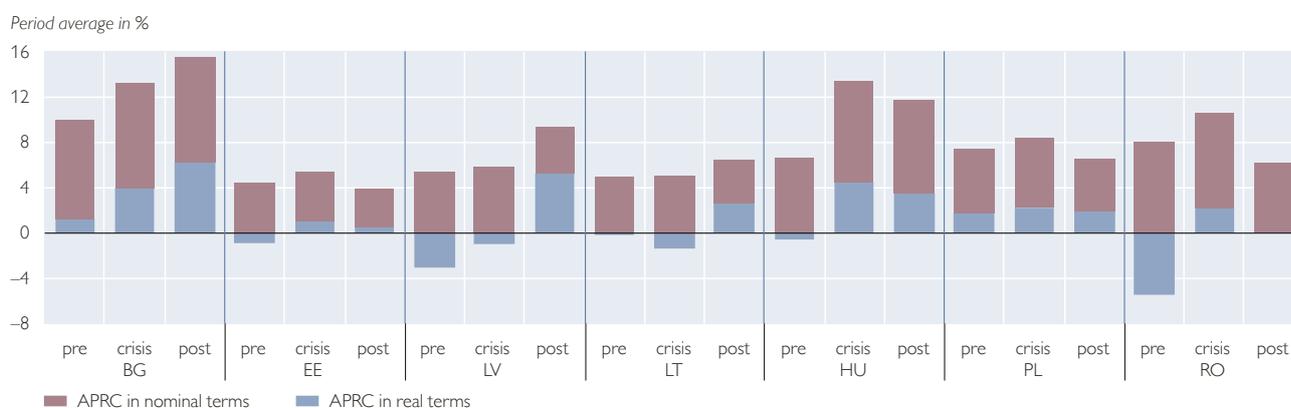


Source: ECB, national central banks, OeNB.

Note: APRC = annual percentage rate of charge; pre-crisis period: Q1 04–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10.

Chart 11

APRC on Euro Loans to Households for Residential Property Purchases



Source: ECB, national central banks, OeNB.

Note: APRC = annual percentage rate of charge; pre-crisis period: Q1 04–Q2 08; crisis period: Q3 08–Q4 09; post-crisis period: Q1 10–Q4 10. The Czech Republic, Slovakia and Slovenia are not included in this chart. In the Czech Republic and – prior to its introduction of the euro in 2009 – in Slovakia, the share of foreign currency-denominated housing loans was very small. Slovenia already adopted the euro in 2007.

A particular aspect of financial deepening in CESEE has been foreign currency lending, which had increased strongly prior to the crisis. In 2010, the shares of foreign currency lending ranged from 60% to 98% of total housing loans in Hungary, Latvia, Lithuania, Poland and Romania according to national central banks' statistics. Chart 11 shows that the level of the APRC on loans denominated in euro was considerably below that on loans denominated in domestic currency until 2010. At least for the pre-crisis period, there is evidence that a considerably lower APRC on euro-denominated loans – together with the lack of long-term financing in domestic currency – contributed to the attractiveness of foreign

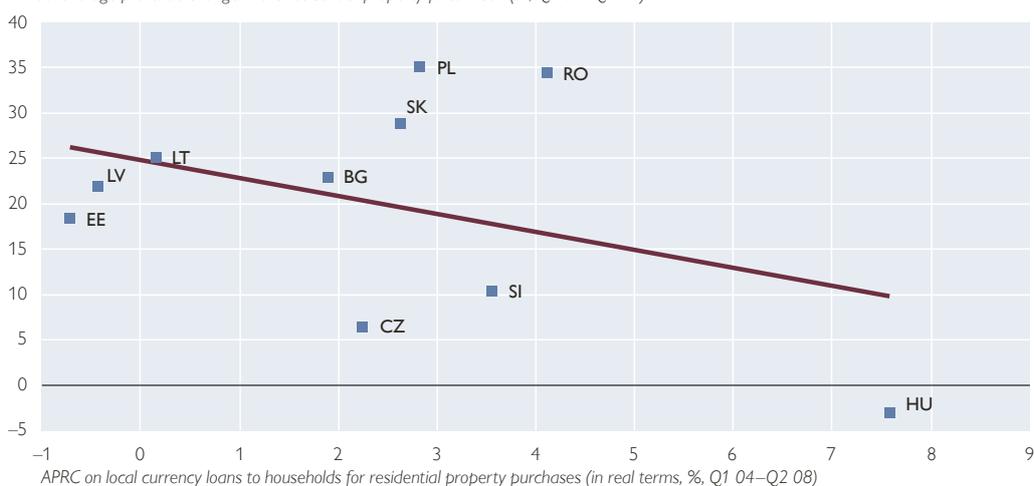
currency loans, which are mainly used for housing purposes (see e.g. Crespo Cuaresma et al., 2011, and Steiner, 2011).¹⁸

Once the crisis hit CESEE, high shares of foreign currency lending posed risks to financial stability. Empirical evidence based on household survey data shows that during the crisis, households which took out a foreign currency-denominated mortgage and were hit by one or more negative income shocks had to cut base consumption more strongly than similar households servicing local currency-denominated debt (EBRD 2011). Exchange rate fluctuations were problematic for borrowers, particularly for unhedged Hungarian and Polish borrowers who had taken out Swiss franc-denominated loans, as the depreciation compromised their repayment ability. Nevertheless, foreign currency mortgage borrowers in CESEE appear to have continued to service their debt at the expense of consumption according to the EBRD (2011) survey results. Apart from exchange rate fluctuations, the strong decline in residential property prices in many CESEE countries reduced the value of the collateral of mortgage loans (irrespective of the currency of denomination) relative to the outstanding loan amount for individual mortgage loans. On the one hand, new debtors consequently received less collateralized credit than they would have in times of higher residential property prices. On the other hand, as the economic downturn caused solvency problems for debtors, banks were required to reevaluate the underlying assets used as collateral for loans, which does not only appear difficult given the low turnover rates in residential property markets but also weighs on banks' balance sheets given their need for higher risk-weighted assets. Moreover, carrying out a revaluation of underlying assets based on falling property prices is particularly problematic if nonperforming

Chart 12

Residential Property Prices and APRC

Annual average pre-crisis change in the residential property price index (%; Q1 04–Q2 08)



Source: BIS, ECB, national central banks, national statistical offices, REAS (residential market advisory company).

Note: APRC = annual percentage rate of charge. Residential property prices used as in chart 1. Due to a lack of data the series starts in Q3 04 for Estonia, in Q2 06 for Poland and in Q4 07 for Romania and Slovakia.

¹⁸ The same reasoning applies to lending denominated in Swiss franc, which largely dominated foreign currency lending in Hungary and Poland.

mortgage loans are to be foreclosed. Other factors, such as protracted foreclosure procedures, the existence of foreclosure and eviction moratoriums¹⁹ and the above-mentioned low mortgage market liquidity provide further obstacles to mortgage foreclosures.

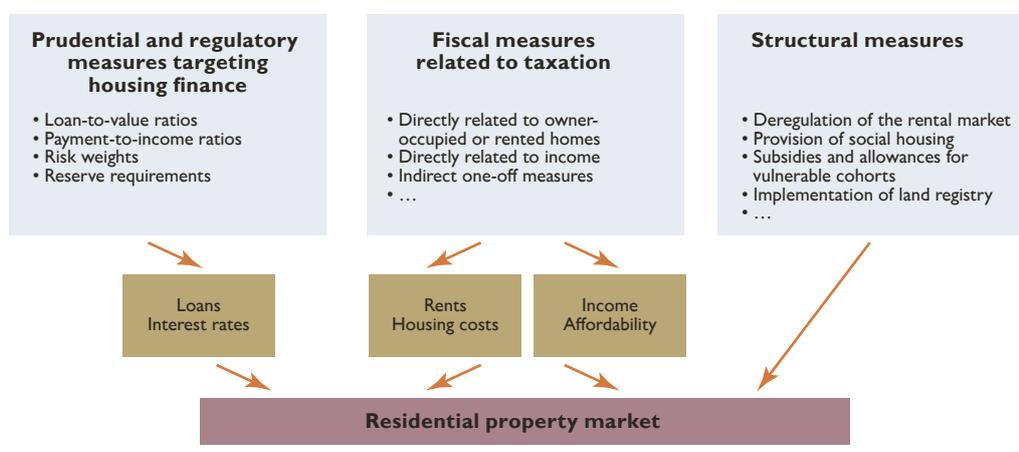
Overall, financial deepening has been closely intertwined with residential property price developments in the CESEE countries (IMF 2011b). In particular, the necessity, for households, to finance home ownership in the absence of large-scale long-term rental markets and rising residential property prices seems to be related to the surge in housing loans. Declining real interest rates can also be associated with increasing residential property prices, as shown in chart 12 (see also Égert and Mihaljek, 2007). Crowe et al. (2011), therefore, talk about a “twin boom” in CESEE real estate and credit markets.

With the beginning of the financial crisis, the growth of housing loans has declined, and region-specific risks have materialized from the high share of household loans denominated in foreign currency. In particular, the decline in residential property prices has reduced the value of underlying collateral, which in turn weighs on banks’ balance sheets. Dübel and Walley (2011) highlight that lenders thus face an elevated level of risk from over-relying on inflated house prices.

3.4 Policy Measures Related to Residential Property Market Developments

A wide range of policy measures impact property market developments. Apart from monetary policy and macroprudential measures aimed at housing finance, fiscal and structural measures can have a strong impact on developments in the residential property market, e.g. via housing costs, income and affordability. The combined impact of these measures on residential property prices can be particularly strong if they work in the same direction (Hilbers et al., 2008). In general, governments should provide a policy framework which ensures that the markets can operate in an efficient way without any distortions. Chart 13 illustrates the

Chart 13



¹⁹ In Hungary, the foreclosure moratorium was replaced in the third quarter of 2011 by a new regulation allowing banks to only foreclose a certain ratio of the collateral of their nonperforming loan portfolio.

main types of policy measures available and how residential property markets are influenced through the various channels.

In the CESEE countries, numerous policy measures have been implemented which have had an impact on residential property market developments. Policy action has also been reconsidered and readjusted over the past fifteen years. The impact of these policy measures on residential property markets of course highly depends on the entire institutional setting in each individual country. Reform progress has not only varied among CESEE countries but also within the regions of the individual countries, depending on the respective government system (Keith et al., 2000). In the following, similarities and differences of selected policy measures across the CESEE region are identified, keeping in mind that explicit policy recommendations have to account for country-specific institutional characteristics. Future policy-oriented empirical research, as is known from the literature on the effectiveness of policy measures in impacting credit developments, is called for in this context.²⁰

Fiscal measures operate on an individual or collective basis (e.g. capital grants to help households to accumulate sufficient starting capital, or subsidies and allowances to reduce mortgage interest expenses). Taxes can be categorized into direct taxes related to taxpayers' net household income, direct taxes related to the property used as collateral and indirect taxes in the form of one-off measures (transaction costs or fees for property transfers or applicable to an inheritance). They should be designed in a way so as not to distort economic behavior in the real estate market and not to crowd out property transactions into the legal black hole (Keith et al., 2000). Table 1 provides a cross-country overview of the most recent status quo of tax measures targeting residential property markets in the CESEE countries. In the majority of countries covered here, mortgage interest payments are tax deductible, although tax deductibility is usually restricted to primary residences. In Poland, for example, the tax deductibility of interest payments has already been abandoned, while the system of interest rate subsidies applicable to some types of housing is to be withdrawn in 2012. In other countries, such as Lithuania and Hungary, the tax deductibility of interest payments was also withdrawn in recent years while in others, tax deductibility was newly introduced (e.g. in Bulgaria in 2009)²¹. In general, tax deductibility on mortgage interest rates reduces the user cost of owning a home. Some papers analyze how the abolishment of tax deductibility affects housing prices. They argue that housing prices declined as the demand for houses decreased owing to the fact that mortgage interest rates were no longer tax deductible (Cecchetti and Rupert, 1996). In view of the absence of large-scale rental markets and the subsequent need for households to purchase residential property, the impact of an abolishment of tax deductibility on the demand for homes can be assumed to be limited in CESEE.

²⁰ See e.g. Polgar and Zdzienicka (2011) for related research on policy measures targeting credit developments and related caveats to empirical research.

²¹ More of the impact of tax deductibility will be borne by households at higher income levels, mainly because lower-income households do not itemize their tax returns (Cecchetti and Rupert, 1996). But, as higher-income households hold a smaller share of their wealth in housing than lower-income households, changes in the value of their other assets may mitigate the decline in the price of their homes. Since renting is often a substitute for home owning, market forces drive the prices of both rented and privately owned homes at the same time.

Table 1

Housing Market-Related Taxation in 2011

	Direct taxes			Indirect one-off taxes		
	Tax deductibility of interest payments	Tax on imputed rent	Property or real estate tax	Capital gains tax	Transaction tax, fees, stamp duties	
BG	Yes	No	Yes	Yes	Yes	
CZ	Yes	No	Yes	No	Yes	
HU	No	No	Yes	Yes	Yes	
LV	No	No	Yes	Yes	Yes	
LT	No	No	Yes	No	Yes	
PL	No	No	Yes	Yes	Yes	
RO	No	No	Yes	Yes	Yes	

Source: *European Tax Handbook (International Bureau of Fiscal Documentation)*.

No CESEE country imposes taxes on imputed rent for owner-occupied housing, but most countries impose a property tax that has a similar effect. VAT taxation also often promotes home ownership, which is already at a high level in the CESEE countries. EU membership required VAT changes which added some volatility to housing construction and transaction costs, i.e. property purchase costs and mortgage loan costs, which may have a direct impact on housing market activity and in turn indirectly affect labor mobility in the years after implementation (Kierzenkowski, 2008).

Regarding *structural changes* in residential property markets, it is particularly important that governments develop capacities for administrative and technical support in surveying and mapping property, and that they ensure reliable contract enforcement and implement efficient land registration procedures (Keith et al., 2000). However, particularly at the beginning of transition, there had been a certain suspicion among households e.g. about governments' motives for collecting information on privately owned property, given the households' past experience with corruption. Buyers' uncertainty about their purchased rights and the value of the property added to the risk of dealings in the real estate market (Keith et al., 2000). It has therefore been important to foster the efficiency and reliability of the legal framework for residential property dealings.

With regard to housing affordability, the availability of public housing programs is an important aspect. With the shift away from direct state intervention to market-based provision of housing services in the 1990s, municipalities have emerged as the predominantly new "social" landlords, but social housing programs had a low priority until the end of the 1990s. At that time, national housing programs aimed at emphasizing the role of the rental sector in some CESEE countries (e.g. in Hungary in 2000), by setting related rents below market levels, for example (which affected 5% to 10% of market rents on average). It is noteworthy that rent arrears in this segment have become a widespread phenomenon creating pressure for housing administration and management.²²

²² In large cities in Romania, for example, one-third of rent revenues are defaulted on, while in smaller cities the share is 25% (Tsenkova, 2011).

Direct subsidies for new public housing in CESEE have been largely eliminated, although some ad hoc funding is provided. In the absence of systematic policy intervention, the urban poor in the CESEE countries are settling in the rapidly growing informal peripheral urban areas of large cities. To dampen the growth of these informal settlements, various projects have been implemented, ranging from legalization to programs for resettlement in social housing (Tsenkova, 2011). In recent years, the pressure for more affordable social housing in the CESEE countries has been increasing against a background of various patterns of social exclusion. Subsidies and allowances for vulnerable cohorts have been implemented, but there seems to be further room for improvement in light of the low share of the rental market in residential housing and ongoing social exclusion (Hegedüs, 2010, Kierzenkowski, 2008, and Tsenkova, 2011).

Apart from changes in fiscal measures, the development of a residential property market additionally requires a stable framework for housing finance. This, in turn, requires the development of commercial legal systems regulating financial reporting and the enforcement of contracts (Keith et al., 2000). The impact of the *macroprudential regulation* of housing finance on the development of residential property markets is essential for understanding residential property price developments, too. Governments and national central banks had started to pay increasing attention to the rise in household debt (taken on particularly for housing purposes) already before the financial crisis (see section 3.3.). Supply-side measures taken by some CESEE governments comprised e.g. moral suasion, stricter risk weights (e.g. in Bulgaria and Poland), tighter capital requirements on (foreign currency) mortgage lending (e.g. in Poland), a more conservative treatment of eligible collateral (e.g. in Bulgaria and Romania) and guidelines or stricter rules for loan-to-value (LTV) ratios (e.g. in Hungary, Poland, Lithuania and Romania) or payment-to-income (PTI) ratios (e.g. in Hungary; see Crowe et al., 2011, and IMF, 2006).

The currency denomination of housing loans has to be considered in designing macroprudential regulation. LTV and also PTI ratios are very sensitive to exchange rate movements. In fact, e.g. Hungary implemented different maximum LTV ratios according to the respective currency denomination on mortgage loans and vehicle-financing loans in June 2010 (Lim et al., 2011). In Poland, a closer monitoring of LTV ratios of foreign currency loans was already introduced before the crisis. In addition, banks increasingly have to consider possible changes in the value of collateral used for mortgage loans. In Romania, e.g., loans may only be granted if the value of the collateral sufficiently covers the loan under an adverse economic scenario.

Overall, all governments in the CESEE region have implemented several of these measures and changed them often, in particular since the beginning of the crisis. In general, it is important that the applicable policy framework provides adequate conditions for encouraging property transactions and does not drive them outside legal control (Keith et al., 2000). For the time being, an assessment of the mid- or long-term outcomes of the policy measures is still quite difficult as many of them have not been in place long enough.

4 Concluding Remarks

This paper provides a systematic overview of residential property markets in the CESEE EU countries during the recent boom and bust cycle that most countries in the region have experienced. During this cycle, most CESEE countries saw a strong rise in residential property prices, which only partly reflected the catching-up process and was followed by a more or less severe contraction. Rising residential property prices in the CESEE countries went hand in hand with declining housing affordability in the run-up to the 2009 crisis. During the financial crisis, residential property became more affordable as the slump in residential property prices was stronger than in wages and salaries. However, most recent data indicate that affordability has deteriorated again in some countries. Related indicators, such as rising unemployment and increased indebtedness, have also negatively affected households. Moreover, affordability is closely linked to distinctive structural characteristics of residential property markets in CESEE, such as widespread home ownership and a high share of the population living in overcrowded and low-quality dwellings. These aspects of CESEE housing conditions suggest that the demand for housing improvements and new housing will remain high until the quantity and quality gaps are closed. In this respect, price developments during the catching-up period are likely to be dynamic in CESEE. As concerns housing finance, financial deepening has been closely intertwined with residential property price developments and resulted in a rapid increase in the indebtedness of private households; loans taken out by households are often used for housing purposes and denominated in foreign currency, which entails risks for unhedged borrowers.

Going forward, the main task for policymakers would be to draw the right lessons from the past boom-bust episode in most CESEE countries and to establish a policy environment which does not trigger destabilizing residential property price fluctuations or addresses them if macroeconomic and financial imbalances related to the residential property market occur. The scoreboard for the surveillance of macroeconomic imbalances and the macroeconomic imbalances procedure of the European Commission (2011) can be seen as a first step in the right direction. Beyond that, sustainable developments of CESEE housing markets should be supported – with sustainability referring to the continuous affordability of at least basic and adequate housing for all cohorts of society. This, in turn, requires a better knowledge of the impact of various policy measures on residential property prices. Preliminary evidence, for example, indicates a link between the increasing stock of housing loans, high ownership rates, poor housing conditions and rising residential property prices. Fiscal measures, which can also contribute to rising housing prices and lead to market distortions, deserve particular attention. While subsidies and allowances for vulnerable cohorts have been implemented, there is room for further improvement, particularly in view of the low quality of housing stocks and the related poor housing conditions. Macroprudential policies should aim to prevent the build-up of large and vulnerable stocks of housing loans, in particular in foreign currencies.

Future research should analyze in more detail the impact of the various policy measures on residential property markets as well as the role of international capital flows in housing finance. Such analyses would benefit from an improved availability of comparable cross-country time series for residential property prices in the CESEE region.

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Annex

Table A1

Data Sources of Residential Property Prices used in Chart 1

Country	Coverage: geographical areas and type of dwelling	Statistical concept and method	Compiled by/ Retrieved from
Bulgaria	Big cities (27 district centers); existing flats	Transaction price per square meter	National statistical office/ BIS
Czech Republic	Capital city; existing flats	Transaction price per square meter	National statistical office
Estonia	Capital city; existing and new flats	Transaction price per square meter	National statistical office/ BIS
Hungary	Capital city; existing dwellings	Transaction price per square meter	National central bank/ BIS
Latvia	Capital city; existing and new flats	Transaction price per square meter	National statistical office/ ECB
Lithuania	Capital city; existing and new flats	Transaction price per square meter	National statistical office/ ECB
Poland	Capital city; existing flats	Asking price per square meter	Private organization/ BIS
Romania	Capital city; existing and new dwellings	Asking price per square meter	REAS
Slovakia	Capital city; existing and new dwellings	Asking price per square meter	REAS
Slovenia	Capital city; existing flats	Transaction price per square meter	National statistical office/ ECB and BIS

Spillovers of the Greek Crisis to Southeastern Europe: Manageable or a Cause for Concern?

Peter Backé,
Sándor Gardó¹

During the boom years in the run-up to the global financial and economic crisis, Greece established close economic ties with the Southeastern European (SEE) region. As a consequence, the current Greek sovereign debt crisis could potentially have adverse economic implications for SEE. Both real and financial transmission channels might have a bearing, though in most countries real economic linkages do not seem as strong as the degree of interconnectedness in the realms of banking and finance, where risks might materialize both directly and indirectly (i.e. via changes in expectations and risk perceptions). So far, the Greek crisis has only had a relatively limited impact on SEE. Available buffers and policy tools have helped SEE to cope with the related risks and also provide some more room for the region to address vulnerabilities caused by the Greek crisis that may materialize in the future. Possible challenges appear to be largest in the realm of banking, even though banking sector adjustment during the crisis has been fairly orderly so far. However, the recent intensification of the sovereign debt crisis in euro area countries may put the macrofinancial resilience of SEE countries to a much stiffer test, given its ramifications on external demand, potential negative feedback loops affecting European banks and a further rise in global risk aversion.

JEL classification: F36, G2, O52, P2

Keywords: Financial stability, banking sector, sovereign debt crisis

1 Introduction

Taking advantage of its geographical proximity, Greece rapidly developed close economic and financial ties with many Southeastern European (SEE)² economies in the years before the global financial and economic crisis. As Greece slid into a severe sovereign debt crisis,³ this raised questions about possible spillovers to SEE, at a stage when the region had begun to recover from the crisis that had hit it in the fall of 2008.

Addressing these questions, this paper aims to capture and assess the impact of the Greek crisis on the SEE region. To this end, section 2 illustrates the potential channels for spillovers to SEE. Section 3 then examines the real economic ties between Greece and the SEE region, aiming to identify the relative importance of individual real transmission channels and gauging the size of the economic spillovers on individual SEE countries. Section 4 deals with banking and financial transmission channels. Section 5 concludes.

2 Potential Transmission Channels

What are the main transmission channels through which the Greek sovereign debt crisis may spill over to the SEE region? Chart 1 gives an overview of potential transmission channels, distinguishing between real and financial avenues of crisis

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² The SEE region covers the EU Member States Bulgaria (BG) and Romania (RO), the EU candidate countries Croatia (HR), the former Yugoslav Republic of Macedonia (MK, FYR Macedonia) and Montenegro (ME), as well as the potential EU candidate countries Albania (AL), Bosnia and Herzegovina (BA), Serbia (RS) and Kosovo (XK).

³ For recent accounts of the Greek crisis, see European Commission (2011), IMF (2011d), OECD (2011) and <http://www.ecb.int/press/html/crisis.en.html>.

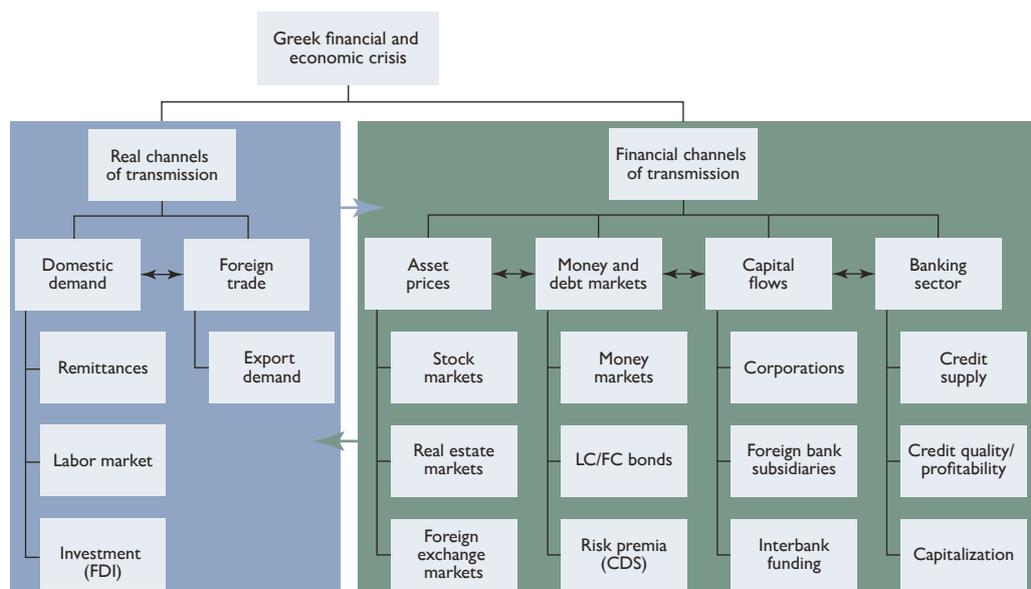
transmission. It is important to note that these channels can interact in various ways. Moreover, there can be feedback loops from affected SEE economies back to Greece, as well as contagion effects among SEE economies. This bears the potential for mutual reinforcement, so that the overall impact, in a dynamic perspective, may well become substantially larger than the initial impact through one or the other channel. Furthermore, all these channels, in particular the financial channels, can work both directly, i.e. through their immediate effects on real and financial variables, and indirectly, namely via their impact on expectations, confidence and risk aversion. Thus, direct spillovers can trigger a much wider impact through indirect knock-on effects set into motion through the change in perceptions generated by the original shock.

Let us look at these transmission channels in greater detail. To start with the real economy channels, adverse economic and labor market developments in Greece may hurt Greek demand for imports from SEE, but – via multiplier effects – also domestic demand in SEE. Second, investment activity may suffer not only due to the slowdown in FDI from Greece but also, more generally, as a result of worsening economic prospects in SEE.⁴ Third, declining workers’ remittances from Greece may negatively affect disposable income in SEE, thereby dampening private consumption (and investment in housing). Finally, if there were to be reverse migration from Greece to home countries in SEE, this would negatively impact on SEE labor markets.

Financial channels are multi-faceted, operating via falling asset prices, increasing risk premiums, adverse effects on capital flows as well as negative implications for

Chart 1

Potential Channels of Transmission of the Greek Crisis to SEE



Source: Authors' compilation.

Note: CDS = credit default swap; FC = foreign currency; LC = local currency.

⁴ For more details on this issue, see Coccoza et al. (2011).

SEE banking sectors. More specifically, potential sales of SEE financial assets by Greek investors (which may trigger sales of financial assets by other foreign investors as well) or deteriorating foreign investor sentiment vis-à-vis SEE may lead to falling asset prices. This may in turn undermine economic activity in SEE. At the same time, a weakening of local currencies in countries with flexible exchange rate regimes (Romania, Albania, Serbia), even though it would temporarily increase export competitiveness, may pose a challenge for banks that have granted sizeable foreign currency-denominated or -indexed loans to unhedged borrowers.

An increase in foreign investors' risk aversion toward the SEE region would lead to higher risk premiums, which would raise financing costs or might even limit access to funding. This would result in a slowdown or sudden stop of capital inflows, which would in particular hit nonfinancial corporations and banks in countries with strong reliance on foreign funding. The public sector might experience financing difficulties, too, in particular where government financing (via international or domestic bond markets) is heavily dependent on foreign investor participation. Finally, there could be a deleveraging by Greek banks in SEE or possibly even a (partial) withdrawal of Greek banks from the region. This could potentially have a negative effect on credit supply and thus economic activity in SEE, which in turn could have repercussions on credit quality, profitability and bank capitalization in the region.

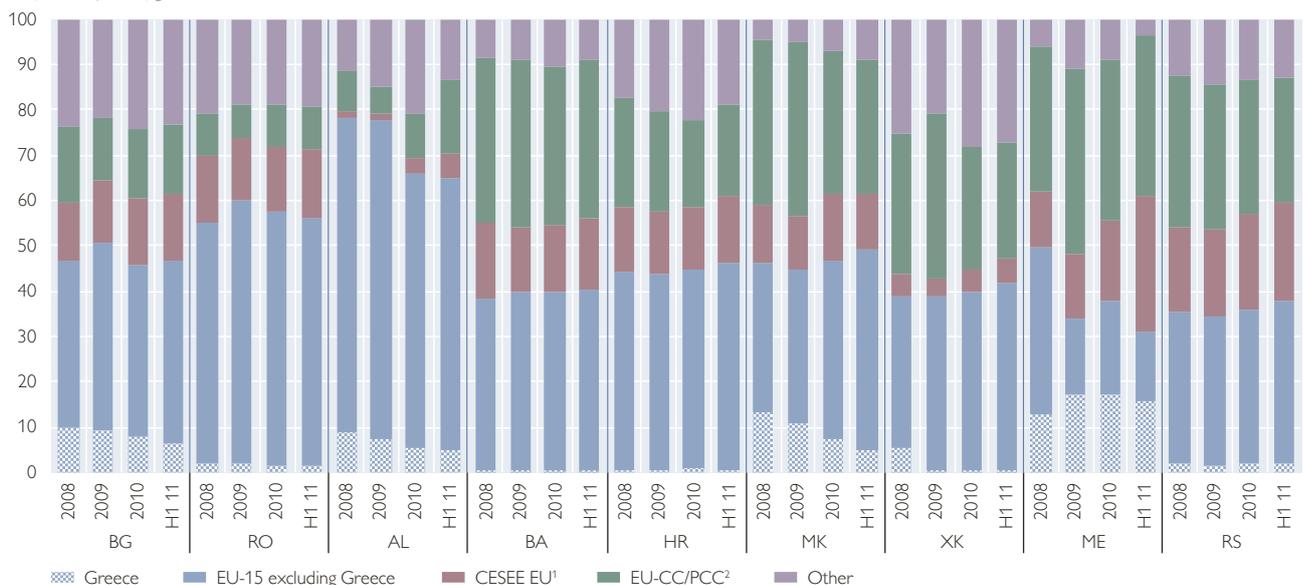
3 SEE's Real Economic Linkages with Greece

In order to gauge the relative importance of individual transmission channels, one needs to take stock of the degree of economic and financial interconnectedness

Chart 2

Exports of Goods by Destination

% of total exports of goods



Source: National central banks, national statistical offices, OeNB.

¹ EU Member States in Central, Eastern and Southeastern Europe.

² EU candidate and potential EU candidate countries: HR, IS (Iceland), MK, ME, TR (Turkey) and AL, BA, RS, XK.

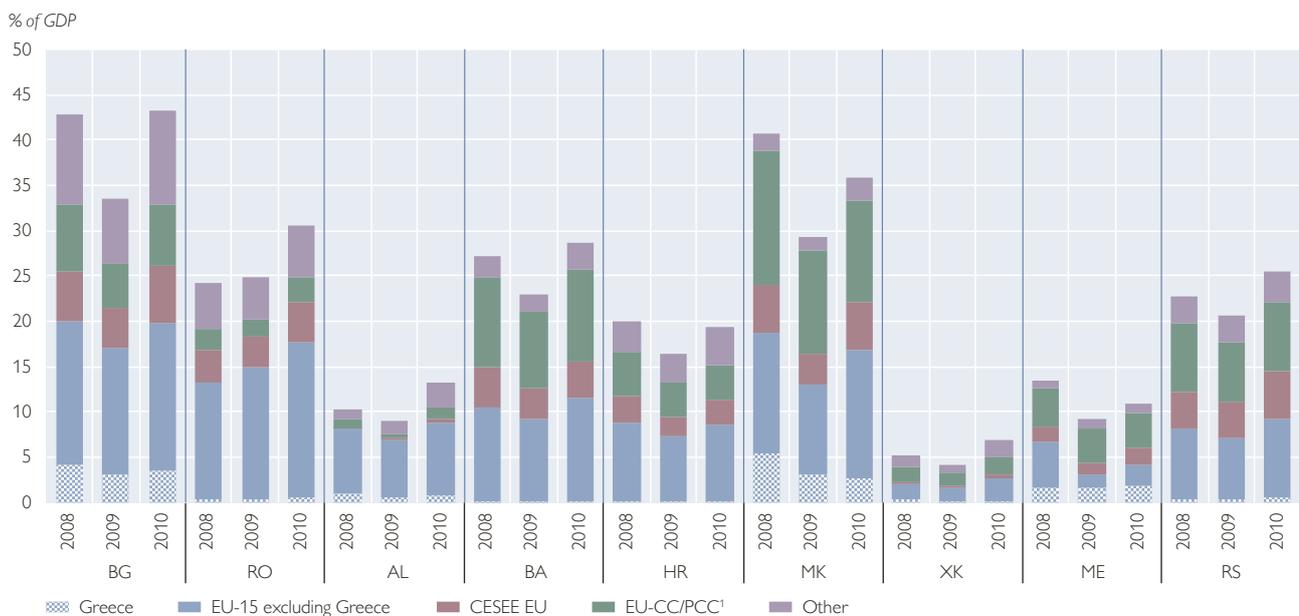
between Greece and the SEE region. With regard to real economic ties, let us first consider foreign trade linkages, focusing in particular on the export channel. Data show that Greece is a major export market for Montenegro (see chart 2). There are also rather important trade linkages with Bulgaria and the former Yugoslav Republic of Macedonia (FYR Macedonia), and to a somewhat lesser extent with Albania. From 2009 to the first half of 2011, the share of exports to Greece decreased in most SEE countries, as the latter benefited from strong export demand from other major trading partners which were experiencing a fairly dynamic recovery from the 2009 recession.

However, export shares need to be seen in the context of trade openness. Given the relatively low export bases of most SEE economies, the share of exports to Greece relative to GDP is fairly small in all SEE countries (see chart 3). Thus, a possible further decline in exports to Greece would in itself not be expected to hurt SEE countries substantially. Moreover, SEE countries' exports to Greece predominantly consist of resource-based and low-tech goods, the demand for which is likely to be affected less by the economic turmoil in Greece than demand for medium- or high-tech products. Furthermore, in the case of Bulgaria there is evidence that a large part of goods exports to Greece are destined for re-export via Greek harbors, which means that these exports are not directly affected by the economic crisis in Greece.⁵

Evidence on recent export activity directed toward Greece is mixed. Following the slump in 2009, the growth rate of exports to Greece picked up gradually during 2010 and the first half of 2011 in most SEE countries. However, exports to

Chart 3

Exports of Goods by Destination



Source: National central banks, national statistical offices, OeNB.

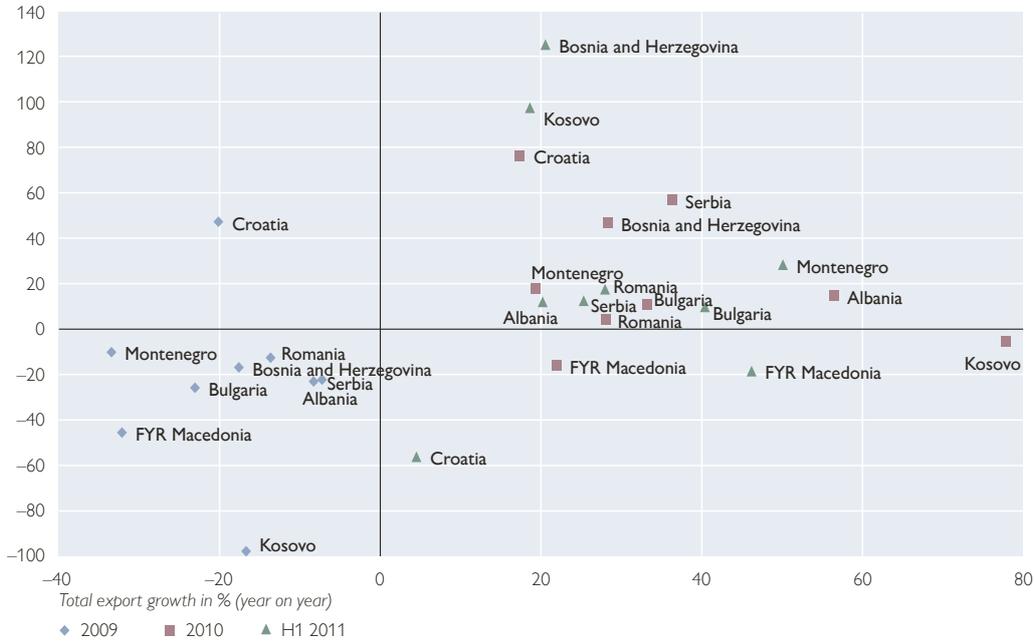
¹ EU candidate and potential EU candidate countries: HR, IS (Iceland), MK, ME, TR (Turkey) and AL, BA, RS, XK.

⁵ We are grateful to Director Mariella Nenova (Bulgarian National Bank) for this information, which is based on internal work at the Bulgarian National Bank.

Chart 4

Export Developments

Growth of exports to Greece in % (year on year)



Source: National statistical offices.

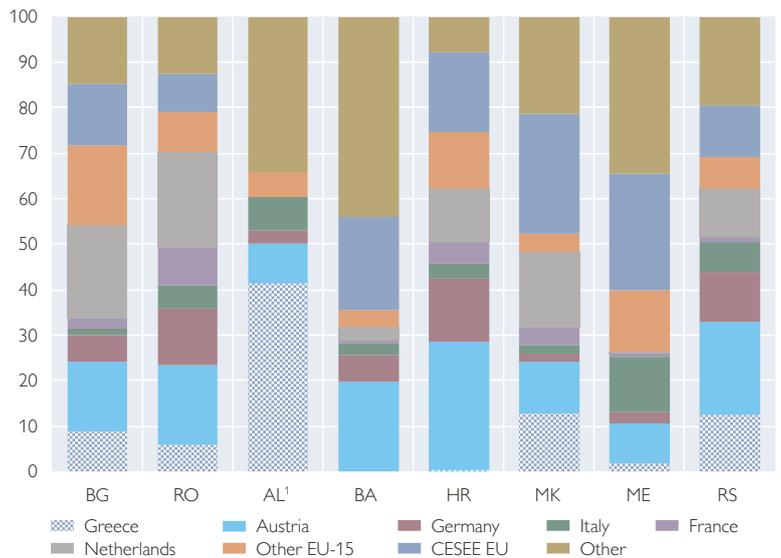
Greece tended to grow less strongly than overall export volumes, so that the share of exports to Greece in total exports has decreased in most countries (see chart 4). In Albania, Croatia and Serbia exports rebounded in 2010, but seem to have lost momentum again in the first half of 2011. Only in FYR Macedonia did exports to Greece contract during the whole observation period.

FDI flows to the SEE region first gained momentum in Bulgaria and Romania, which both entered the EU in 2007. In most other SEE countries, this did not happen until the last few years before the crisis, when economic and political reforms started and long-term EU accession prospects materialized for the region. Tax policies may also have affected FDI decisions. Besides Austria and the Netherlands,⁶ Greece became

Chart 5

Inward FDI Stock by Country of Origin

% of total, 2010



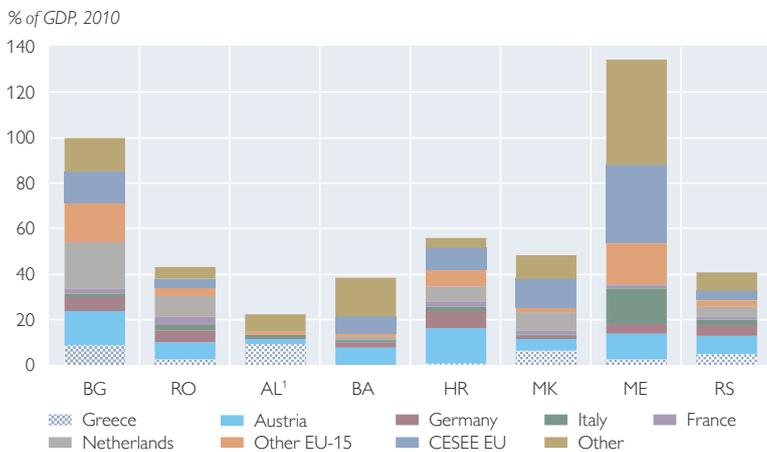
Source: wiw, OeNB.

¹ Data for 2008.

⁶ In the case of the Netherlands, a large part of FDI stems from holding companies based in the Netherlands.

Chart 6

Inward FDI Stock by Country of Origin



Source: wiiw, OeNB.

¹ Data for 2008.

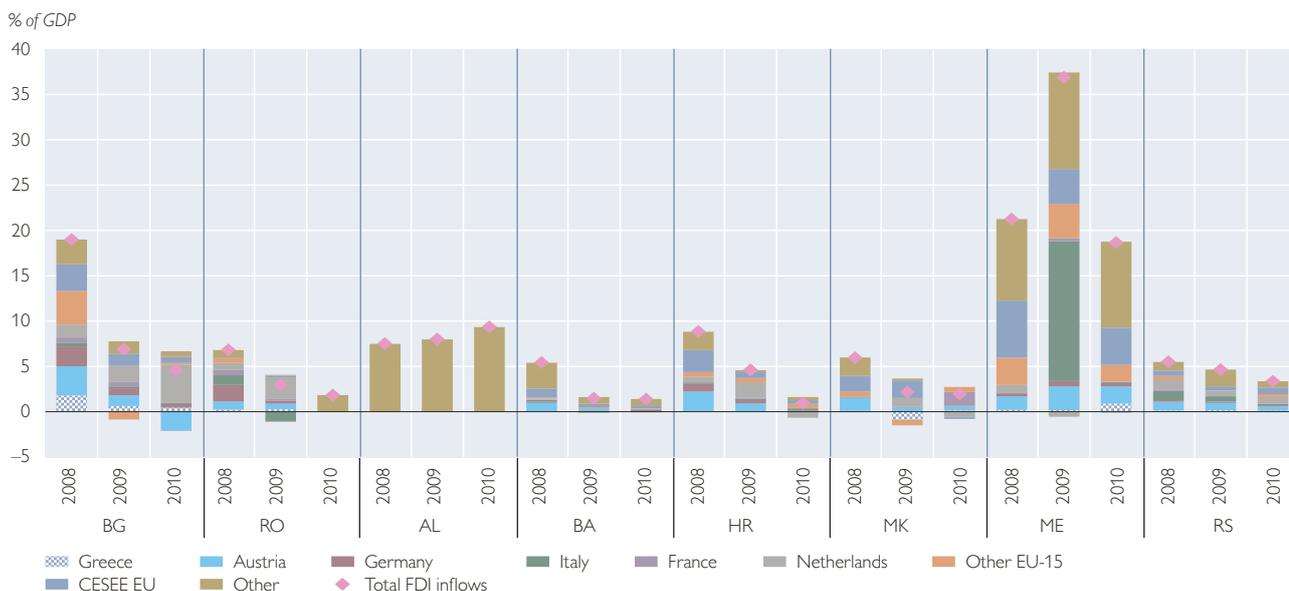
one of the most important foreign investors in the SEE region, however with considerable variation across countries (see chart 5). Greek FDI in SEE was particularly strong in the banking and finance sector and in the telecommunication segment. In terms of GDP, the highest share of Greek FDI stock is observed in Albania, followed by Bulgaria and FYR Macedonia (see chart 6).

Inward FDI flows to most SEE countries have decreased considerably during the global financial crisis, but remained positive in net terms in all countries over the review period. Similarly, Greek FDI kept flowing to the SEE region in 2009 and 2010, but in line with overall FDI inflow dynamics

often on a reduced scale (see chart 7). A substantial withdrawal of Greek investment occurred only in FYR Macedonia in 2009 (see chart 8), as Greece's leading telecommunications company had to sell its mobile and retail operations in FYR Macedonia (not due to the crisis, however, but because of a decision by the local competition authorities). Preliminary data for the first half of 2011 show that total FDI inflows to the majority of SEE countries slowed further, while FDI from Greece came to a halt in some countries or even turned negative (e.g. in the case

Chart 7

Inward FDI Flows by Country of Origin

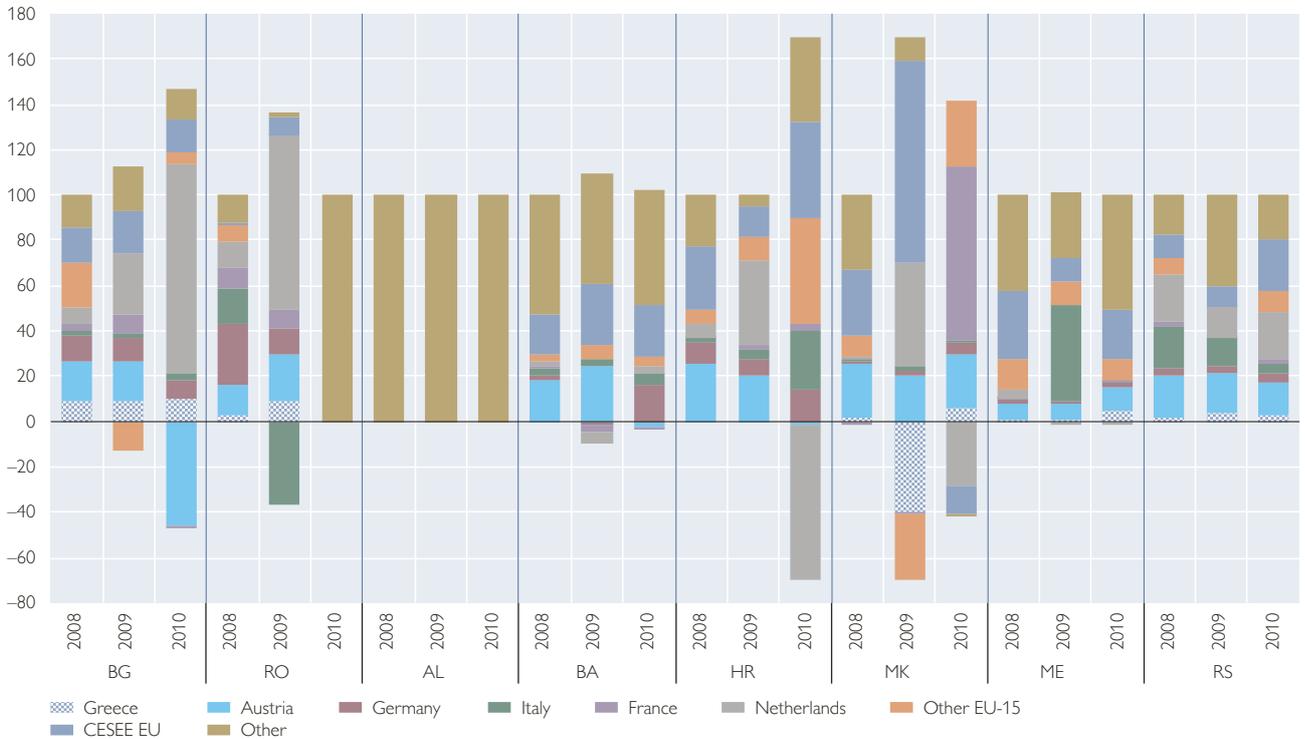


Source: wiiw, Eurostat, OeNB.

Chart 8

Inward FDI Flows by Country of Origin

% of total FDI inflows



Source: wiiv, Eurostat, OeNB.

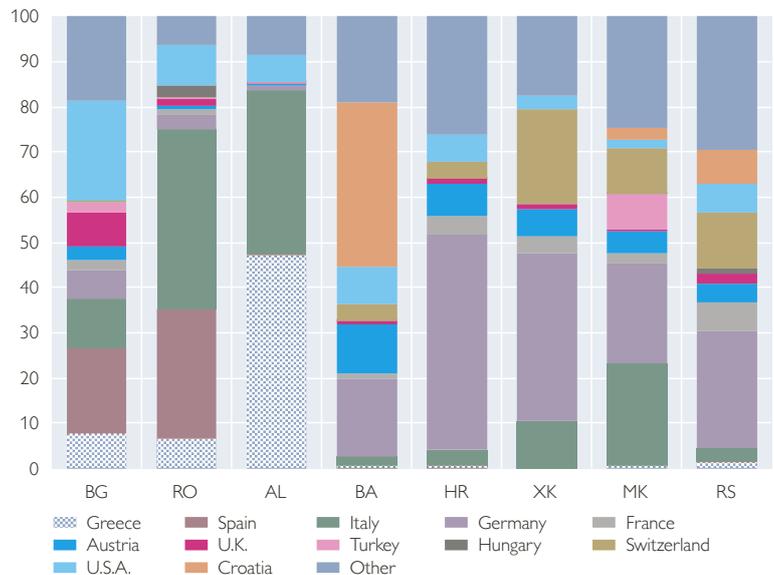
of Bulgaria). This contrasts with developments seen in the trade sector.

A number of countries in the SEE region are highly dependent on transfers from abroad, not only from a financing but also from a spending point of view. While official transfers play a more prominent role only in a few countries, private transfers, consisting predominantly of remittances, represent an important source of income. Due to data gaps, it is hard to quantify the impact of reduced remittances from Greece to SEE, even more so as remittances are only partially transferred through official channels. However, available Eurostat data on Bulgaria and Romania suggest that only a small fraction of total (official) remittances originate from Greece (see chart 9), and this share is negligible in GDP

Chart 9

Workers' Remittances by Country of Origin

% of total, 2009

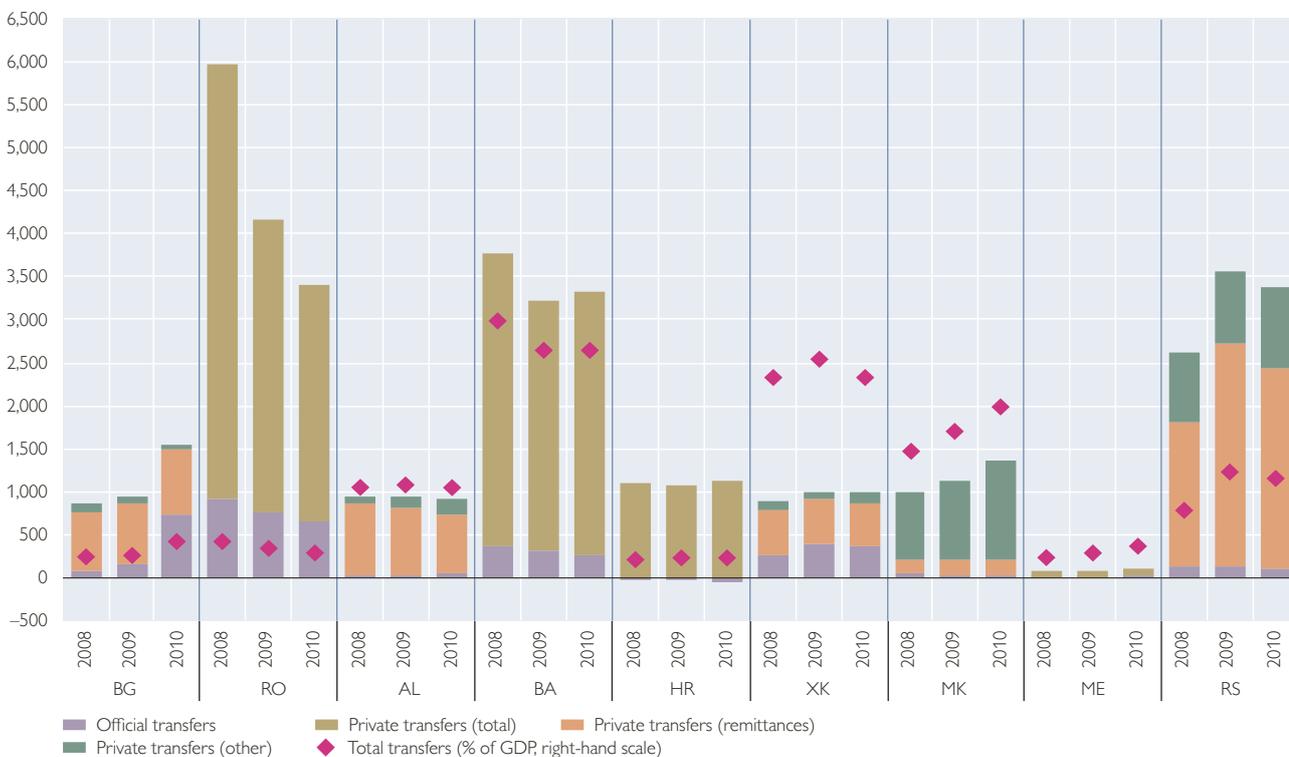


Source: BG, RO: Eurostat; XK: Central Bank of the Republic of Kosovo; RS: Narodna banka Srbije; AL, HR, MK, BA: World Bank.

Chart 10

Current Transfers

EUR million

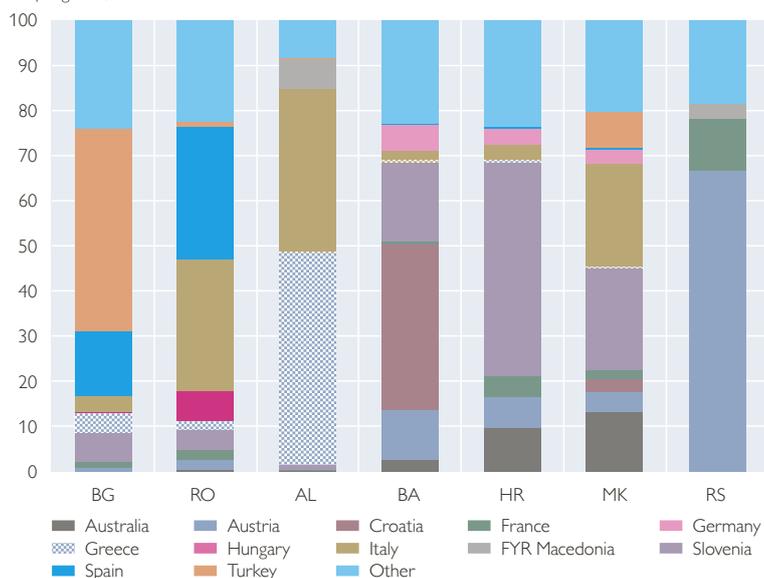


Source: National central banks, OeNB.

Chart 11

Migrant Stocks by Country of Destination

% of migrants, 2010



Source: World Bank.

terms. Only in the case of Albania, remittances from Greece are economically significant, corresponding to some 4% of Albanian GDP (see chart 9).

Despite adverse labor market conditions in the EU, where most of the workers' remittances to SEE countries originate from, private transfers (including workers' remittances) to the SEE region have proved remarkably robust in all countries during the global crisis (see chart 10).

The remittance channel is also related to possible contagion via the labor market, in particular if lower remittance inflows are a result of reverse migration. As chart 11 shows, the potential for reverse migration from Greece is marginal for most SEE countries. Only Albania constitutes an exception, with about 675,000 Albanian

migrants in Greece, accounting for approximately half of the total number of Albanian migrants.

Disaggregated country-by-country data on inward/outward migration to/from Greece is not available. Thus, there is no hard and fast evidence on how migration flows to and from Greece have developed during the crisis.

4 SEE's Banking and Financial Ties with Greece⁷

4.1 Direct Linkages

As regards *direct banking linkages*, alongside Austrian banks, Greek banks are among the most active in the SEE region, holding notable market shares in a number of SEE countries (see chart 12). Depending on the depth of banking intermediation, Greek banks' market positions (in terms of total banking sector assets) vary considerably across the region, from 11% of GDP in Romania to 30% in Bulgaria, but can be considered as substantial in all countries in which Greek banks are present, i.e. in all countries but Bosnia and Herzegovina, Croatia, Kosovo and Montenegro.

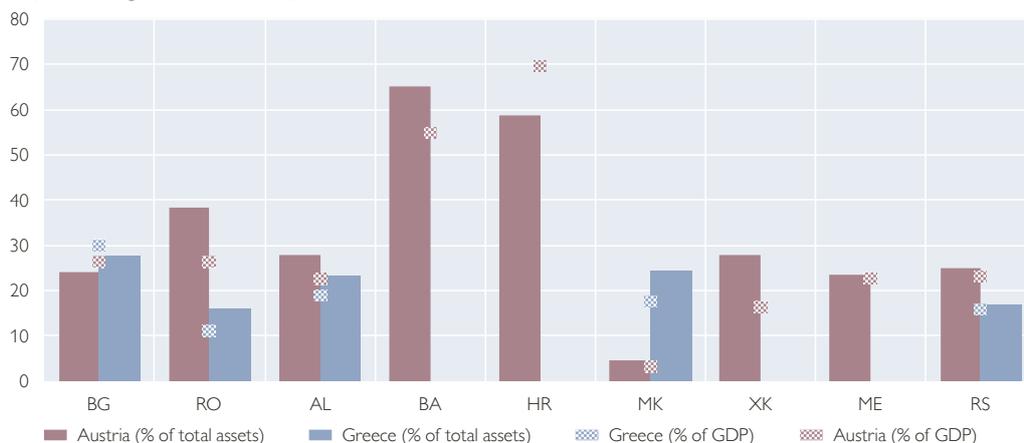
The depth of SEE countries' direct financial interconnectedness with Greece is also reflected by the structure of consolidated foreign claims of BIS reporting banks vis-à-vis individual SEE economies. As at year-end 2010, Greece was FYR Macedonia's largest creditor and also a major creditor of Bulgaria, Albania and Serbia (see chart 13). The economic importance of these Greek claims relative to GDP was most pronounced in Bulgaria, FYR Macedonia and Serbia; they also corresponded to a sizeable share of GDP in Albania and Romania (see chart 14).

In most SEE countries, Greek exposure levels decreased gradually during 2010 and/or the first half of 2011 (see also IMF, 2011a). This reduction in exposures

Chart 12

Market Shares of Austrian and Greek Banks in SEE

% of total banking sector assets and % of GDP, 2010



Source: National central banks.

Note: Austrian banks include Bank Austria, which is a member of Italy's UniCredit Group.

⁷ This section focuses on the most important linkages and transmission channels in the financial realm. Due to space limitations, we do not explicitly cover those aspects that appear less relevant in a comprehensive stocktaking of all data available.

Chart 13

Consolidated Foreign Claims of BIS Reporting Banks by Country

% of total foreign claims of BIS reporting banks, ultimate-risk basis



Source: BIS, OeNB.

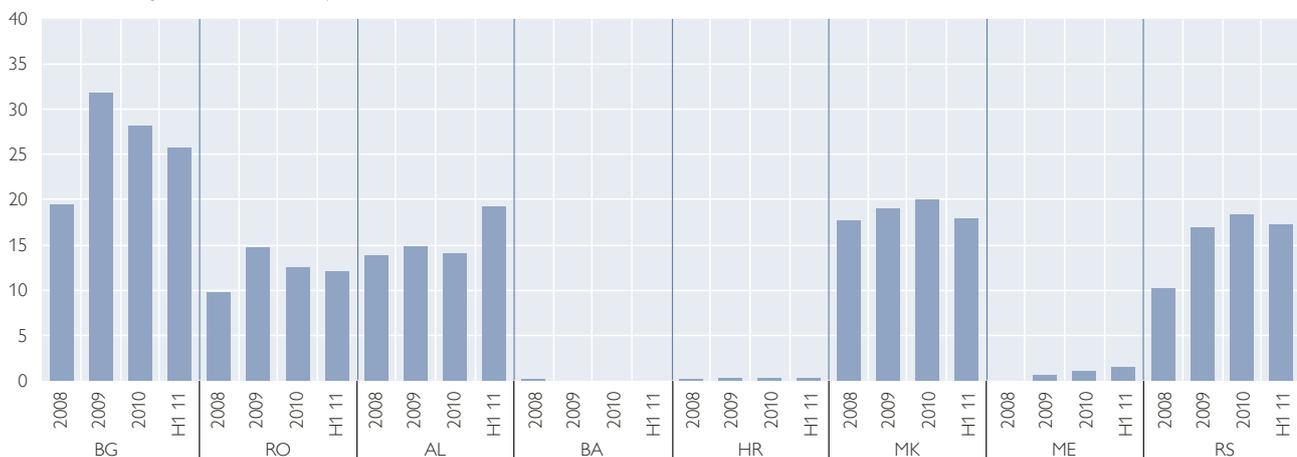
came after a marked increase in 2009, with the result that, in the majority of cases, as at mid-2011 Greek exposure levels were still above their end-2008 levels in both absolute and relative terms (more often than not by a large margin).

The stocktaking exercise above raises the question: How vulnerable is SEE to spillovers via the banking sector, given the fairly deep banking linkages between Greece and SEE and the rather strong presence of Greek banks in a number of

Chart 14

Consolidated Foreign Claims of Greek Banks

Amounts outstanding, in % of recipient country's GDP, ultimate-risk basis



Source: BIS, OeNB.

countries of the region? To assess this issue in greater depth, it is useful to set out some further facts:

First, given that (risk-adjusted) margins in SEE are higher than in Greece, Greek banks will want to stay in the SEE region, if and as long as their capital and funding situation allows them to maintain their operations there. Thus, while a retreat from the region is certainly a possibility, it would typically not seem to be a first-hand option as long as Greek banks have other measures at their disposal to cope with distress at the group level.

Second, Greek subsidiaries in SEE remained well-capitalized during the crisis years of 2009 and 2010. According to end-2010 figures (not shown here due to space limitations), their capital adequacy ratios remained at levels similar to those of other banks in the region, some of them even exceeding the sectoral average. But even in cases where Greek subsidiaries' capitalization was below the sectoral average at end-2010, they comfortably met the regulatory requirements in all countries they were present in.

Third, Greek subsidiaries' (but also other domestic and foreign players') holdings of Greek sovereign debt are very limited, so that any related valuation losses would be negligible. This is because Greek sovereign debt cannot be used as collateral in repo transactions with national central banks in SEE.

Fourth, as regards their funding structure, most Greek subsidiaries financed themselves by a combination of domestic deposits and credit lines from parent banks in 2009 and 2010, and were thus less dependent on foreign wholesale funding. In some cases, Greek subsidiaries were in fact largely funded domestically. Some Greek subsidiaries have apparently experienced liquidity pressures since 2010, partly as a result of deposit shifts from Greek subsidiaries to other banks in the region, and in a few cases also because of reduced credit lines by parent banks. Greek subsidiaries have frequently reacted by raising deposit interest rates in order to keep up domestic funding and, possibly, to substitute domestic for foreign funding. Moreover, some of them have tended to reduce asset growth by restraining lending activities and deleveraging non-core assets (albeit not in all countries). All this has led to falling loan-to-deposit ratios, a development which, however, is largely in line with general banking sector developments in most SEE countries. This down-sizing process has been rather smooth so far, with no major credit supply bottlenecks.

In fact, as Greek (parent) banks scale down their operations in some countries, other foreign banks fill in the gaps left behind, thereby offsetting a fall in (domestic and cross-border) credit supply. As long as this is the case, the impact on individual economies' overall financing situations should not be overly grave. Also, international organizations (e.g. the EBRD) stand ready to help ease Greek banks' possible financing needs if necessary, as was the case in late 2010, when the EBRD granted long-term credit lines to selected local subsidiaries of several Greek banks in Albania, Bulgaria, Romania and Serbia.

Much greater problems would be caused by a situation in which neither international institutions nor foreign banks are willing to step in for Greek banks' activities (for whatever reasons, e.g. heightened risk aversion, own financing problems, etc.). Under such a scenario, governments would need to act, which would most likely entail an additional fiscal burden. However, so far there has been no need for such government intervention.

Fifth, low loan-to-deposit ratios provide for the possibility to channel domestic savings abroad to support parent institutions. However, the need for more substantial liquidity (or capital) transfers by subsidiaries to parent institutions is expected to be limited as parent banks facing liquidity pressures have access to liquidity facilities in their home markets, such as liquidity from the ECB, national central banks and/or any other available national government support scheme. In addition, more substantial liquidity transfers from subsidiaries to parent banks would most likely also call SEE central banks into action, should the violation of regulatory (liquidity and capital) requirements imposed by SEE central banks be imminent (see IMF, 2011c). But even if there were to be larger transfers, they would still be small relative to the official exchange rate reserves of SEE countries, unless such flows were part of a broader shock to the banking system in Europe and/or to risk perceptions regarding SEE countries.

Sixth, if Greek parent banks were to experience persistent strains, they might eventually be forced to sell subsidiaries in SEE to redress capital and liquidity positions. In such an event, it would be crucial that the sale proceeds in an orderly way (as e.g. in the case of a Greek subsidiary in Poland that was sold in 2011). Otherwise, the fallout on the real economy of the respective SEE country could be substantial. Moreover, such a shock could be transmitted to other SEE countries in which the relevant parent bank has subsidiaries via the common creditor channel. Therefore, the health of parent banks is a key determinant of the size of potential spillovers (see European Central Bank, 2010) and depends to a large part on whether Greece will stabilize and ensure adequate capitalization of parent banks.

In this context, it is noteworthy that two of the Greek banks with subsidiaries in SEE were among the eight European banks which did not pass the European Banking Authority's (EBA) stress test of July 2011 (they took corrective measures after the cut-off date for the stress test, however⁸). As revealed by the recent EBA exercise on the capitalization of banks conducted in late 2011, Greek banks (no single-bank data available) have a total recapitalization need of some EUR 30 billion, the financing of which is to come both from the private and public sectors (in the latter case fully funded by the EU-IMF program). In fact, the need for parent bank recapitalization may induce the sale of foreign subsidiaries. One of the two Greek banks mentioned above has announced that it is reviewing its positioning in Turkey (but not in SEE), while the second bank is now offering its Romanian unit for sale.

Finally, it is worth recalling that during the crisis period following the collapse of Lehman Brothers, the risk of substantial exposure reductions by foreign banks in SEE was also mitigated by the European Bank Coordination Initiative (also known as the "Vienna Initiative"), through which foreign parent banks committed themselves to keep their exposures at pre-crisis levels and to see to adequate capitalization of their subsidiaries (see EBRD, 2011a, and Federal Ministry of Finance, 2010). In SEE, such formal arrangements have only been concluded for Bosnia and Herzegovina, Romania and Serbia as part of stabilization programs with the IMF, but presumably other SEE countries have also benefited from them

⁸ *Compensating measures (such as sales or mergers of subsidiaries, issuance of convertible bonds, etc.) and accumulated generic provisions to cover future losses were implemented after the cut-off date of April 30, 2011. According to the Bank of Greece, both banks would have passed the test had these measures already been taken by the April 2011 cut-off date. Furthermore, one of these two banks (the Agricultural Bank of Greece) has only minimal presence outside Greece.*

via indirect positive spillover effects. In case of renewed global financial market tensions, an arrangement along the lines of the Vienna Initiative could again be used to avoid an uncoordinated large-scale outflow of foreign (including Greek) capital and liquidity from the region in the future. However, this will presumably require that the countries concerned have stabilization programs with the IMF in place, as was the case in 2009 and 2010. Moreover, it could be more difficult to obtain commitments by parent banks in the present context, as they strive to achieve the new capital standards the European Banking Authority has prescribed for mid-2012.

Despite these arguments, it is also clear that a more comprehensive shock to the European banking system – which entered the financial crisis with a comparatively high degree of leverage and is currently grappling with the implications of the sovereign debt crisis – would pose a much more complex challenge for SEE countries than the vulnerabilities that could possibly originate from distressed Greek parent banks. A broader shock would certainly make it more difficult to replace financial services previously provided by Greek subsidiaries with services offered by other foreign-owned banks in the region. Such a shock would have adverse implications for external funding and for domestic credit supply and it could also affect the expectations, in particular risk perceptions, of financial markets vis-à-vis the countries of the SEE region.

4.2 Indirect Linkages

Looking at *indirect financial transmission channels*, foreign investors' general risk perceptions with respect to SEE countries were not shaken as the Greek crisis unfolded. More recently, since late summer 2011, risk aversion has risen globally and the SEE region has not been spared from this development. However, there are no indications that recent currency and spread movements in SEE have been characterized by a distinct idiosyncratic element that could be traced back to the Greek crisis or increased direct spillovers from Greece to SEE. Quite the contrary, the recent financial market tensions seem to have affected SEE countries with negligible real economic and financial ties with Greece more substantially. This suggests that alongside rising global uncertainty, country-specific factors (mainly related to public finances) have been important in shaping financial market developments in SEE. The charts below (15 to 19) provide a concise overview of important financial market segments so as to corroborate these stylized facts.

To provide further details: Exchange rate developments in SEE (chart 15) show no major impact of the Greek crisis so far. Countries with fixed or quasi-fixed exchange rate regimes maintained their pegs in the review period despite some temporary pressures in a few cases. Currencies in countries with flexible exchange rate regimes (Albania, Romania and Serbia) became somewhat more volatile but there were no sharp changes in valuation, and developments were mostly driven by country-specific factors such as the monetary policy cycle.

Stock markets in the region (chart 16) remained fairly stable over most of the review period. Though increased downward pressures emerged in particular after August 2011, the related losses still seem fairly contained as compared to those of the Greek stock market. However, it should be noted that stock markets are rather small in some SEE countries, with only a limited number of listings. This calls for added caution in interpreting developments in this market segment.

Sovereign risk premiums, as measured by five-year sovereign CDS premiums (charts 17 and 18), trended upward in SEE, in particular in the second quarter of

2010, when Greece was downgraded to below investment grade by two major rating agencies; nevertheless, the increase in risk premiums was by far not as pronounced as for Greece. Then, risk premiums in SEE fell again until mid-2011, thereby further uncoupling from developments seen in Greece. However, from August 2011 risk premiums also started to pick up again in SEE, although they remained well below the peaks observed in the aftermath of the collapse of Lehman

Chart 15

Exchange Rate Developments vis-à-vis the Euro¹

September 30, 2009 = 100



Source: Eurostat, OeNB.

¹ An increase in value represents a nominal appreciation.

² Bosnia and Herzegovina and Bulgaria operate under a currency board arrangement.

Chart 16

Development of Selected Stock Market Indices

September 30, 2009 = 100

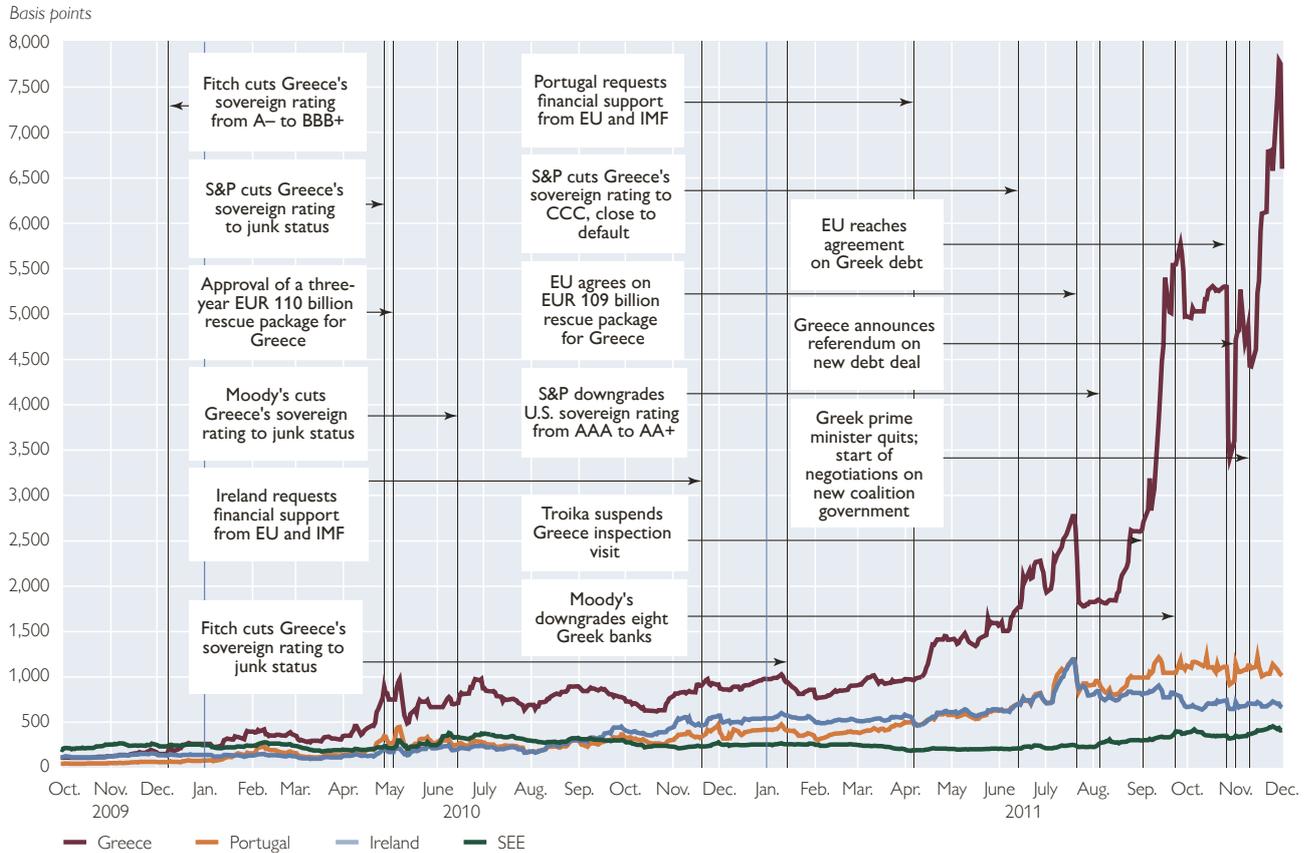


Source: Bloomberg, OeNB.

Note: BA-RS = Bosnia and Herzegovina – Republika Srpska; BA-FBiH = Bosnia and Herzegovina – Federation of Bosnia and Herzegovina; E/MEE = Emerging Markets Eastern Europe.

Chart 17

Sovereign Five-Year CDS Premiums



Source: Datastream, OeNB; SEE: unweighted average of country data for Bulgaria, Croatia and Romania.

Chart 18

Sovereign Five-Year CDS Premiums

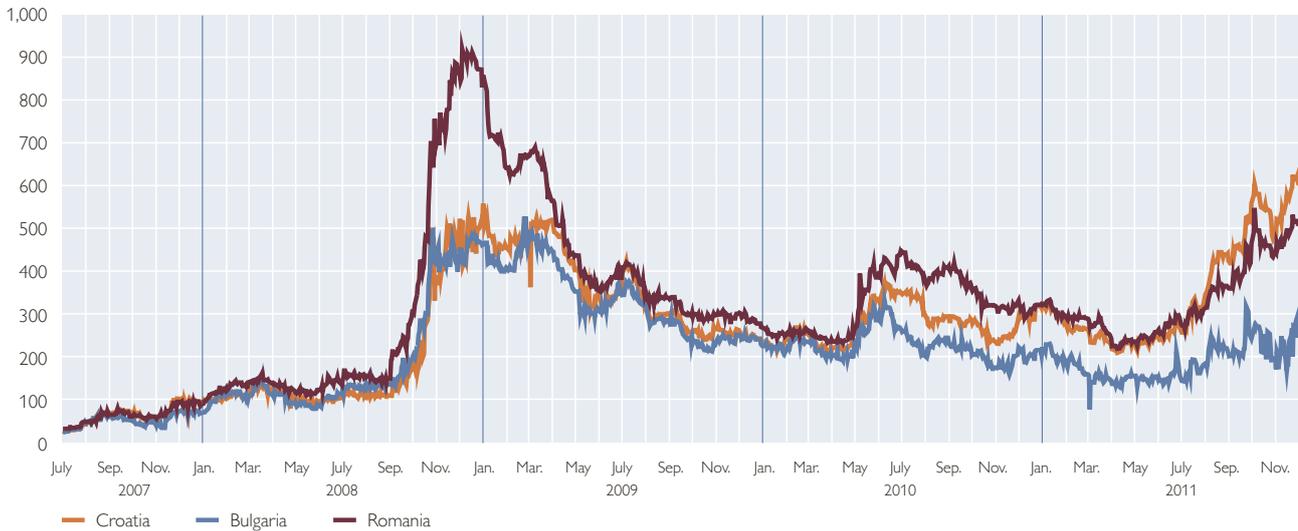


Source: Datastream, OeNB.

Chart 19

Euro-Denominated Eurobond Yield Spreads

J.P.Morgan Euro EMBI Global index



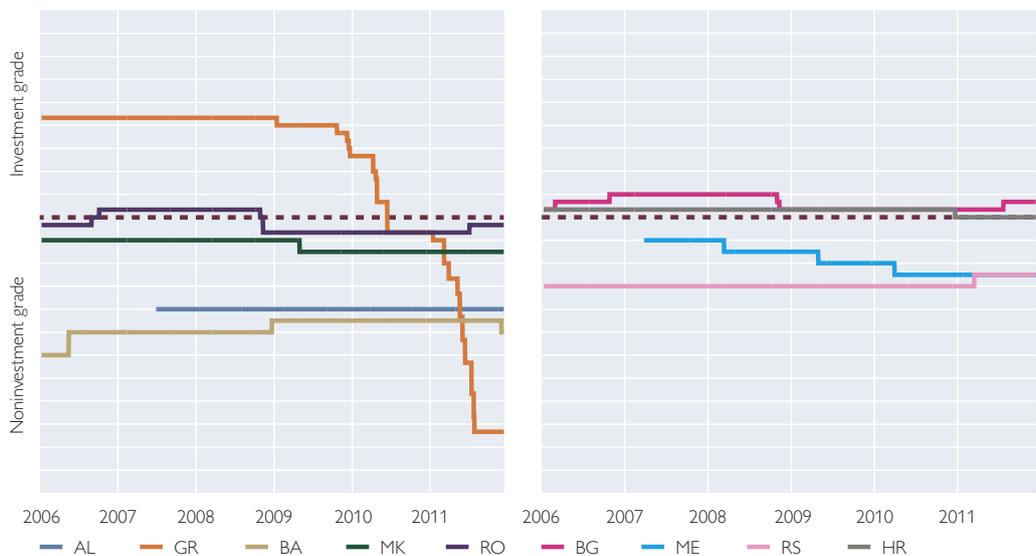
Source: Bloomberg, OeNB.

Brothers. SEE risk premiums in the review period were also much lower than risk premiums for Ireland and Portugal, i.e. countries which, like Greece, have also obtained international financial support. A similar picture can be seen with respect to euro-denominated eurobond yield spread developments (chart 19).

Chart 20

Sovereign Ratings in SEE

Average of available long-term foreign currency ratings by Fitch, Moody's and S&P



Source: S&P, Fitch, Moody's, OeNB.

Note: Investment grade ranges from BBB- to AAA in the case of S&P and Fitch, and from Baa3 to Aaa in the case of Moody's. Noninvestment grade ranges from D to BB+ at S&P, from D to BB+ at Fitch (including the rating categories DD and DDD) and from C to Ba1 at Moody's.

As is well known, the creditworthiness of Greece has suffered strongly as a result of the recent sovereign debt crisis. So far, this has not had major negative implications for the sovereign ratings of SEE countries (see chart 20). Only Croatia's and, most recently, Bosnia and Herzegovina's sovereign ratings were downgraded (in both cases by S&P and by one notch each), but these moves were explicitly based on country-specific reasons.

5 Summary and Conclusions

This paper sets out by providing a systematic overview of the main economic and financial transmission channels through which the Greek sovereign debt crisis may affect the SEE region. It then presents comprehensive information on the economic and financial linkages between Greece and SEE before and in particular during the Greek crisis. In doing so, the paper identifies the most important channels through which substantial spillovers could materialize, and then goes on to highlight the changes in economic and financial linkages between Greece and SEE since late 2009.

Overall, the analysis presented in this paper shows that, so far, effects of the Greek crisis on the SEE region and the performance of individual SEE countries have been relatively limited, even more so as recent economic developments in SEE countries may also be explained by general trends in global and European trade, FDI and remittance flows as well as financial market developments during the 2009 and 2010 crisis years. In terms of real economic linkages, Albania seems to be somewhat more exposed to spillovers of the Greek crisis than other SEE countries, given that Greece is the largest investor in the country, the main host country for Albanian migrants and correspondingly the most important country of origin for workers' remittances. Foreign trade linkages with Greece, which are strongest in Bulgaria and FYR Macedonia, do not seem a major cause for concern for the region, given the rather limited degree of trade openness of most SEE economies.

In general, there is evidence that banking and financial sector spillovers have been, and may well continue to be, more important than real economy channels, in particular in terms of potential vulnerabilities that could materialize in an adverse scenario in countries with a strong presence of Greek banks (i.e. Albania, Bulgaria, FYR Macedonia, Romania and Serbia). At the same time, the paper also argues that there are buffers (e.g. in terms of bank capitalization and foreign exchange reserves) but also market-driven and public-sector adjustment processes (e.g. Vienna Initiative) that can help avoid a large-scale materialization of such vulnerabilities. Nevertheless, challenges remain demanding, as many Greek banking groups are experiencing continued distress, even though the adjustment process in SEE banking sectors during the crisis has been fairly orderly so far. In addition, an orderly conclusion of the private sector involvement for Greece could largely relieve the liquidity pressures on Greek banks, while a subsequent program supported by the "troika" is expected to provide for a sufficient backstop facility for Greek banks.

In the realm of financial transmission channels, spillover effects stemming from a change in foreign investor sentiment seem to have played some role but, overall, financial market developments in SEE have not been strongly dissimilar from developments elsewhere in emerging Europe. Moreover, it is obviously difficult to disentangle the direct impact stemming from the Greek crisis from

rising global uncertainty or domestic country-specific factors. Also, risk perceptions can shift abruptly due to events that may be beyond the control of the authorities in a particular country. Past developments, while providing some reassurance, should not be seen as an unconditional guarantee for continued resilience.

Moreover, during the last few months it has become increasingly obvious that the Greek sovereign debt crisis is not the only external factor that is putting the macrofinancial resilience of SEE countries to a test and possibly not even the most important one. What started out as a sovereign debt crisis in Greece two years ago has become a much broader issue, both in terms of countries involved and negative feedback loops affecting European banks. In addition, there has been a considerable rise in global risk aversion recently, not only because of developments in Western and Southern Europe but because of generally reduced growth prospects and banking sector strains in advanced economies and concerns about the impact these will have on the fast-growing economies of Asia and Latin America.

While SEE seems to be broadly capable of coping with the spillovers of the Greek crisis, even if it should persist for some time to come, challenges would be much tougher if the spillovers from this local crisis “next door” were to be aggravated by major adverse effects stemming from a more substantial worsening of the external environment. Such worsening might in particular relate to the cost and availability of external funding and the continued operation of European banking groups in the region, both of which are particularly crucial to the development and convergence of SEE countries toward more affluent countries in Western Europe.

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CESEE-Related Abstracts from Other OeNB Publications

The abstracts below alert readers to studies on CESEE topics in other OeNB publications. Please see www.oenb.at for the full-length versions of these studies.

The Austrian Insurance Industry in CESEE: Risks and Opportunities from a Financial Stability Point of View

This study gives an overview of the insurance market in Central, Eastern and Southeastern Europe (CESEE) in general and of the Austrian insurance groups' activities in the region in particular. Moreover, it deals with risk management issues and the challenges arising from the new EU regulatory framework, Solvency II. We identify the main risks and opportunities for insurance groups in this respect: While potential market growth rates and still higher margins represent the main opportunities, there is also evidence of some reputational as well as financial risks. Further, cross-border business activities also pose some challenges for the risk management of internationally active insurance groups. From a macroprudential perspective, the Austrian insurance groups' exposure to CESEE augments the exposure of Austrian financial institutions to this region.

Published in *Financial Stability Report 22*.

Teresa Bianchi,
Gernot Ebner,
Raimund Korherr,
Eva Ubl

Households' Foreign Currency Borrowing in Central and Eastern Europe

Foreign currency loans represent an important feature of recent financial developments in CEECs. This might pose a serious challenge for macroeconomic stability. Against this background, we study the determinants of foreign currency loans of households, using data on the behavior of households in nine CEECs. Our results reveal that foreign currency loans are driven by households' lack of trust in the stability of the local currency and in domestic financial institutions. Moreover, special factors including remittances and expectations of euro adoption play an important role in selected regions. The financial crisis reduced foreign currency borrowing, but there is some indication this effect might be only temporary.

Published as *OeNB Working Paper 171*.

Jarko Fidrmuc,
Mariya Hake,
Helmut Stix

Event Wrap-Ups

EBRD Transition Report 2011: The Crisis from the Household Perspective

Compiled by
Markus Eller and
Mariya Hake

On January 31, 2012, the Oesterreichische Nationalbank (OeNB) hosted the presentation of the 2011 EBRD Transition Report and the January 2012 update of the EBRD's growth forecasts for Central, Eastern and Southeastern Europe (CESEE).

At the press conference (which was chaired by *Doris Ritzberger-Grünwald*, Head of the OeNB's Foreign Research Division), *Jeromin Zettelmeyer*, the EBRD's Deputy Chief Economist and Director of Research, summarized the EBRD's new growth forecasts for the countries in which it operates (the EBRD region¹) and outlined the most important findings of the EBRD Transition Report 2011 "Crisis and Transition: The People's Perspective."² The main contribution of the 2011 Transition Report lies in delivering a better understanding of both the financial crisis (2008–2010) and its longer-term implications from the household perspective, based on the findings of the second round of the *Life in Transition Survey (LiTS II)*, a household survey that was conducted jointly by the EBRD and the World Bank³.

Part I: Economic Prospects in the EBRD Region – Emerging Europe under Threat from the Euro Area Sovereign Debt Crisis

The EBRD expects that GDP growth in the transition countries will slow substantially from about 4.8% in 2011 to 3.1% in 2012. This can largely be attributed to significantly reduced growth in CESEE, where a few countries (Hungary and Slovenia) are expected to fall back into recession in 2012. Next to contractive fiscal consolidation measures in this region, the financial transmission of the sovereign debt crisis experienced in some euro area partner countries is seen as the main reason for the projected economic slowdown. Related spillovers have recently become evident in net capital outflows (observed for the first time since 2009 owing to the outflow of non-FDI capital), tightened lending conditions, sluggish or negative real private sector credit growth, and an overall deterioration of stock market indices. The EBRD's projections are subject to various downside risks, most notably a further aggravation of the sovereign debt crisis in the euro area and/or uncoordinated policy responses by individual countries.

However, the EBRD's economic outlook also cites the following encouraging prospects: First, Russia and other CIS countries which are not very integrated with Western Europe will most likely continue to post respectable GDP growth rates, assuming that commodity prices remain high. Second, compared to 2008, economic fundamentals in the EBRD region have largely strengthened: The region is less dependent on external financing, and bank balance sheets are generally stronger as a result of recapitalization and deleveraging. Third, during the current crisis, negative spillovers are expected to be mostly limited to financial channels transmitting euro area stress via strongly integrated banking systems, whereas the role of trade channels should not be as significant as during the 2008–2009 crisis, given the less global scale of the external shock.

¹ Covering 29 countries, the EBRD region stretches from Central and Eastern Europe to Central Asia, including Turkey. Effective from 2008, the Czech Republic was the first country to graduate from the EBRD.

² See <http://www.ebrd.com/pages/research/publications/flagships/transition.shtml> for the full report.

³ In addition to the countries of the EBRD region, the second round of the LiTS household survey also comprised five Western European countries, i.e. Germany, France, Italy, Sweden and the United Kingdom.

Part II: Understanding the Impact of the Crisis from the Household Perspective

In the second part of his presentation, Zettelmeyer elaborated on the impact of the financial and economic crisis on household consumption in the EBRD region as compared to a benchmark group of Western European countries (Germany, France, Italy, Sweden and the United Kingdom). Based on an index comprising a variety of crisis events (e.g. job losses, reduction of wages or working hours, reduction of remittances), the EBRD analysis showed that households in the transition countries suffered more crisis-related “shocks” and reduced their consumption (in particular for essentials such as staple foods and health care) much more strongly than their Western European counterparts. The decline in consumption can partly be attributed to the fact that most of the transition countries have by far less effective formal safety nets (e.g. safety benefits, access to finance) in place than the countries in the Western European benchmark group. On the positive side, informal borrowing channels (i.e. borrowing from relatives and friends) lessened the decline in base consumption, particularly in the less advanced and harder-hit countries. Furthermore, the Transition Report revealed that the role of formal borrowing in shaping a transition region’s response to the crisis was ambiguous. On the one hand, those respondents who were successful in obtaining a loan during the crisis were able to cushion the impact of the crisis. On the other hand, pre-crisis borrowing exacerbated the decline in household consumption during the crisis. Moreover, households that were affected more strongly by the crisis were more likely to be in arrears on their mortgage. Interestingly, the EBRD’s analysis also reveals that foreign currency mortgage borrowers have continued to service their debts more satisfactorily than local currency borrowers, though at the expense of reduced consumption. This may suggest that banks granted foreign currency loans to borrowers with increased risk-bearing capacities.

Besides the impact of the crisis on household consumption, the EBRD Transition Report 2011 also studied the effects of the crisis on the public’s support of market economies and democracy. Compared to LiTS I (conducted in 2006), the crisis has led to a strong shift in public opinion, turning public sentiment against democracy and free markets in most of the more advanced transition countries, while the opposite has been the case in many of the less developed CIS countries. Apparently, the crisis experience has led people to turn against the political and economic status quo they are faced with in their country.

The discussion that ensued after the presentation reiterated that the repayment of debt in foreign currency is apparently still manageable at the micro-level, but is associated with negative consequences at the macro-level given that household consumption has been cut back in order to continue servicing foreign currency loans. In addition, Zettelmeyer pointed out that mortgage holders in the five Western European comparator countries fared better than their counterparts in Eastern Europe, who were presumably subject to stronger over-borrowing before the crisis and a stronger decline of asset (in particular housing) prices during the crisis. Moreover, the importance of the financial integration model for economic development in the CESEE region was underlined. This model, however, still requires some modifications. Especially, the development of local currency capital markets and enhanced cross-border supervisory integration were stressed as crucial reform steps required to sustain this model.

Notes

Studies Published in Focus on European Economic Integration in 2011

For more information, see www.oenb.at.

Issue Q1/11

Households' Exposure to Foreign Currency Loans in CESEE EU Member States and Croatia
Katharina Steiner

How the Crisis Affected Foreign Currency Borrowing in CESEE: Microeconomic Evidence and Policy Implications
Elisabeth Beckmann, Thomas Scheiber, Helmut Stix

The Refinancing Structure of Banks in Selected CESEE Countries
Mathias Lahnsteiner

FDI, Trade and Growth in CESEE Countries
Jarko Fidrmuc, Reiner Martin

Determinants of Migrants' Earnings and Remittances: Evidence from Kosovo
Sokol Havolli, Olga Radzyner Award winner 2008

Issue Q2/11

The Economic Transmission of Fiscal Policy Shocks from Western to Eastern Europe
Jesús Crespo Cuaresma, Markus Eller, Aaron Mehrotra

Issue Q3/11

The Transmission of Euro Area Monetary Shocks to the Czech Republic, Poland and Hungary: Evidence from a FAVAR Model
Konstantins Benkovskis, Andrejs Bessonovs, Martin Feldkircher, Julia Wörz

Shifts in International Trade and Value Added from 1995 to 2007: Insights into the Drivers of Growth
Joseph F. Francois, Julia Wörz

A Markov Switch to Inflation Targeting in Emerging Market Peggers with a Focus on the Czech Republic, Poland and Hungary
Marjan Petreski, Olga Radzyner Award winner 2010

Issue Q4/11

Nonperforming Loans in CESEE – What Do They Comprise?

Stephan Barisitz

Determinants of Foreign Currency Loans in CESEE Countries: A Meta-Analysis

Jesús Crespo Cuaresma, Jarko Fidrmuc, Mariya Hake

OeNB Euro Survey: Growing Uncertainty, but Overall Euroization Not Affected

Elisabeth Beckmann, Sandra Dvorsky, Thomas Scheiber

Periodical Publications

See www.oenb.at for further details.

Geschäftsbericht (Nachhaltigkeitsbericht) Annual Report (Sustainability Report)

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English

This report reviews the OeNB's mandate, responsibilities and organization as well as the monetary policy of the Eurosystem, economic conditions and developments both in the financial markets and in financial market supervision during the reporting year. Furthermore, it contains the OeNB's financial statements, Intellectual Capital Report and Environmental Statement.

Geldpolitik & Wirtschaft Monetary Policy & the Economy

German
English

Monetary Policy & the Economy provides analyses and studies on central banking and economic policy topics and is published at quarterly intervals.

Finanzmarktstabilitätsbericht Financial Stability Report

German
English

This semiannual report contains analyses of Austrian and international developments with an impact on financial stability and studies designed to offer in-depth insights into specific financial stability-related topics.

Focus on European Economic Integration

English

This quarterly publication presents peer-reviewed studies on macrofinancial and monetary integration in Central, Eastern and Southeastern Europe (CESEE) as well as related country analyses and statistics. This publication reflects a strategic research priority of the OeNB.

Statistiken – Daten & Analysen

German, English summaries

This quarterly publication contains analyses of Austrian financial institutions, cross-border transactions and positions as well as financial flows. Some 200 tables provide information about macroeconomic, financial and monetary indicators. On the OeNB's website, these tables are also available in English. In addition, this series includes special issues on selected statistics topics published at irregular intervals.

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