The impact of external shocks on inflation dynamics in CESEE[1]

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This contribution compares and contrasts Emerging Asia with Emerging Europe – the CESEE region[3] to be specific – in terms of their inflation dynamics. The idea is to single out factors which are similar as well as factors which are different. To start with, the inflation performance of the CESEE region has been remarkable. In the context of economic stabilisation, taking place in the late 1990s and early 2000s, the region was characterized by a strong disinflation process, mainly driven by a few countries, for instance Romania. Inflation subsequently returned and picked up in the period from 2006 to 2008, but since then inflation rates have been rather modest. Overall, Emerging Asia has exhibited fairly similar inflation patterns, yet its crisis response seems to have been rather different. Whereas inflation rates in Emerging Europe stayed at very low levels or declined even further, inflation rates in Emerging Asia returned to elevated pre-crisis levels relatively soon (Chart 1 a + b). A possible explanation is the sovereign debt crisis in some Euro Area countries, which prevented growth in the CESEE region from recovering as quickly as it did elsewhere. Due to the strong economic linkages between the Euro Area and CESEE there were several negative spill-overs to the CESEE region, with negative economic sentiment triggering severe setbacks in demand.

Monetary policy strategies in CESEE: the smaller the country, the closer to the Euro

One of the major factors determining inflation dynamics in general is a country's monetary policy strategy. The monetary policy strategy is, in turn, influenced by the institutional environment, in particular with regard to the EU or even Euro Area membership of some Emerging Europe countries. In the CESEE region one can find all kinds of monetary policy strategies. The small and very open economies of the region, which are very much dependent on foreign demand, opted for Euro Area entry at an early stage (Slovenia in 2007, Slovakia in 2009 and Estonia in 2011). Others decided to strongly orientate their exchange rate regimes towards the euro (Bulgaria has a currency board, Latvia and Lithuania joined ERM II with unilateral commitments to narrow exchange rate bands). Last but not least, the bigger economies of the region have introduced inflation targets as a monetary policy regime. This reflects their larger domestic markets, which make them somewhat less dependent on Euro Area developments (Table 1). This wide variety of monetary strategies is, incidentally, characteristic of Emerging Asia as well (Filardo, 2012).

Current inflation dynamics in the CESEE region are being driven by several factors. Three important groups of factors can be singled out: (sovereign debt) crisis-related, international

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[3] Here the term Emerging Europe is used to mean the Central, Eastern and Southeastern European (CESEE) countries that have joined the EU: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia.

and domestic ones. To start with the crisis-related ones, firstly there are real economic spill-overs from the Euro Area, resulting in weak growth and lower demand-side pressures on inflation. Secondly, rising risk aversion in international markets towards Europe is not only weighing on the exchange rate of the euro but also on the exchange rates of the CESEE economies. Currency depreciation has in fact been very substantial, affecting inflation via exchange rate pass-through (but also indirectly by complicating the conduct of monetary policy, especially in the presence of an inflation target, as increased attention has to be paid to financial stability considerations). Thirdly, fiscal consolidation needs which prompted governments throughout the region to increase (indirect) tax rates have led to elevated inflation rates.

International factors are affecting all countries worldwide, although in different ways, depending on their economic structure. High commodity prices (oil, but also agricultural commodities) strongly influence the HICPs of the CESEE region, also given the relatively high weight of energy and food items in CESEE HICP baskets. Domestic factors are home-made ones. The most prominent are housing bubbles, which popped up in several countries of the region (e.g. the Baltics). All these factors will be looked at in more depth below.

Crisis-related factors work via different channels

Whereas the financial market crisis affected all regions worldwide in a similar vein, in Europe it also triggered a sovereign debt crisis, which led to very low growth rates in the Euro Area. As most CESEE exports are to the Euro Area, this development resulted in a lack of demand for CESEE products, causing lower wage growth, lower investments and a significantly lower growth performance of CESEE countries. Average growth in the region declined strongly during the crisis from over 6% in 2006 and 2007 to -3.6% in 2009. After some recovery in 2010 and 2011 (2.7% and 3.3%, respectively), growth is again set to be comparatively low in 2012. Forecasts produced by OeNB staff experts estimate growth to come in at 1.4% this year, which is broadly in line with the forecasts of other important institutions (Woerz, 2012). Against this background, the lack of external and internal demand resulted in less upward pressure on prices in Emerging Europe, especially when the situation is compared with those of the boom years.

Another channel is the exchange rate channel. In CESEE countries with a floating exchange rate system (the Czech Republic, Hungary, Poland and Romania) the crisis triggered an exchange rate depreciation which highly correlated with spikes in risk perception as measured by CDS premiums. Chart 2 a + b distinguishes between three phases: the first phase is the Lehman crisis, the second phase covers the first rescue package for Greece, and the third phase shows the increasing uncertainty concerning the Greek situation (write-off of Greek debt by banks, referendum on austerity etc.) and the heightening tensions in Hungary (suspension of talks on IMF program due to controversial laws e.g. concerning the central bank and a new constitution). In some countries the depreciation was substantial; for instance, in Hungary the forint depreciated by 35% in nominal terms after Lehman.

Exchange rate swings do have different country-specific impacts on inflation developments. ECB research has shown the following: in Hungary a 1% currency depreciation leads to a rise in the inflation rate of 0.91 percentage points within eight quarters, in the Czech Republic the rise amounts to 0.77 pp and in Poland to 0.56 pp (Ca'Zorzi et al., 2007). Interestingly, this impact is much higher compared to the impact in other emerging markets, especially Asian ones (in Hong Kong SAR it is 0.37 pp, in Korea 0.13 pp, in Taiwan, China 0.01 pp and in Singapore -0.06 pp). Possible explanations for these differences are structural inefficiencies or significantly less competition, leading to greater price-setting power in CESEE.

Euroization as a special factor in CESEE

The relationship between monetary policy and financial market stability has been, and still is, widely discussed. Especially when it comes to quantitative easing, the question of first and second priority arises. The enormous amount of euroization in several CESEE countries adds another dimension to this ongoing discussion.

Exchange rate depreciation influences inflation both directly, via pass-through, and indirectly. In an environment of widespread currency substitution, exchange rate depreciation may force a central bank to give financial stability considerations priority over its inflation target when setting monetary policy. The OeNB EuroSurvey (Ritzberger-Grünwald and Scheiber, 2012) shows that currency substitution is a widespread phenomenon in Eastern Europe (Chart 3). Whereas liability substitution (FX loans) is popular throughout the region, asset substitution (cash and deposits) can be found mostly in countries with an exchange rate target – especially in the Western Balkans (to the right of the black bar in the chart).

Fiscal policy – a crisis-related response

In many countries the financial market crisis has increased budget deficits significantly. The good news is that public debt started from relatively low levels, but although fiscal support was limited, fiscal deficits increased due to lower fiscal revenues. As the Stability and Growth Pact is also valid for the CESEE economies, some countries violated the benchmarks and ended up in an Excessive Deficit procedure. To increase the crisis resistance in general, but also to fulfill the EU policy commitments in particular, the authorities have increased their consolidation efforts recently. Quite often this has been done via (indirect) tax increases. In many countries the VAT rate was raised, and in some countries new taxes have been introduced. Chart 4 shows the importance of tax rate changes for the development of inflation in the CESEE area via the example of two countries, Hungary and Romania. In Hungary the VAT rate was raised from 20% to 25% in July 2009. This caused the HICP to increase by more than 2 pp to 6% in late 2009/early 2010. Without this change in taxation, HICP inflation would have decreased by 3 pp to around 1%. In early 2012 the standard VAT rate was raised again, this time from 25% to 27%. A similar pattern can be observed for Romania and, to a lesser extent, also for the Czech Republic, Poland and Slovakia.

The composition of the domestic inflation basket – food and energy prevail

The transformation from an emerging market to an advanced economy goes hand in hand with increasing consumption by households of sophisticated goods and services, which implicitly decreases the share of (basic) food in the consumer basket. Concerning energy, the picture is not so clear-cut. Whereas the demand for energy increases due to the higher standard of living, in parallel to GDP per capita, the widespread use of energy-saving machines and products works in the opposite direction.

Compared with the Euro Area, many CESEE countries are characterized by a relatively high share of (processed and unprocessed) food in their HICP baskets. This share ranges from 23% in Slovenia to almost 40% in Romania (average 29%). The corresponding figure for the Euro Area is 19% (Chart 5). Energy also has a higher weight in the consumer basket of CESEE, but the difference to the Euro Area is not so pronounced (ranging from12.5% in Romania to 19% in Slovakia; average: 15%; Euro Area: 11%).

During recent years the world has seen a significant increase in global commodity prices, as a result not only of the financial market crisis but also of political turmoil. Combined with the above-average share of food and energy in the HICP baskets, food and energy accounted for roughly two-thirds of the HICP increase in April 2012 in the Czech Republic and Hungary (Chart 6). This was a severe policy challenge for these inflation-targeting countries, but also for the others.

Comparing the consumer baskets of Emerging Europe and Emerging Asia, especially the different weights for food and energy, is difficult due to different underlying methodologies, and also due to different underlying methodologies, reflecting cultural differences (whereas eating out is classified under "services" in Emerging Europe, it is classified under "food" in at least some countries in Emerging Asia). Still, several general assessments hold for both regions. The weights for food and energy in CPI baskets are large in both Emerging Asia and Emerging Europe. Similarly, the weights for food run a very broad range, starting from 12.7% in Korea and 14.6% in Thailand, and going up to 27.5% in Hong Kong SAR, 30.5% in China, 39% in the Philippines and 41% in Sri Lanka. Energy weights are also elevated, but not as pronounced as the weights for food. Accordingly, Asian inflation rates have also been affected by a global rise in commodity prices, with a full pass-through mostly occurring after six months (Neumann and Mukherjee, 2012).

Housing bubbles affect inflation dynamics

Property prices in CESEE have generally risen strongly since the late 1990s. While this was partially a catching-up phenomenon, bubbles emerged in several countries, especially in the mid-2000s. The crisis forced a marked price correction in all countries of the region, especially in the Baltics. The situation was characterized by a recent boom and bust of residential property prices across the whole region (Chart 7). High levels of home ownership and low costs of external housing financing caused residential property prices to rise. 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 (Hildebrandt et al., 2012).

However, it has to be taken into account that most inflation indicators do not cover housing prices. This was, and still is, the result of the debate concerning the pros and cons of including asset prices. Still, housing prices are a matter of concern when it comes to financial stability, although the analysis of inflation dynamics cannot be disentangled from their development, either.

Summary

At least in the CESEE region, catching-up was, and still is, a longer story than expected. On the one hand, expectations were too optimistic; on the other hand, the financial market, above all the sovereign debt crisis, created a less favorable economic environment.

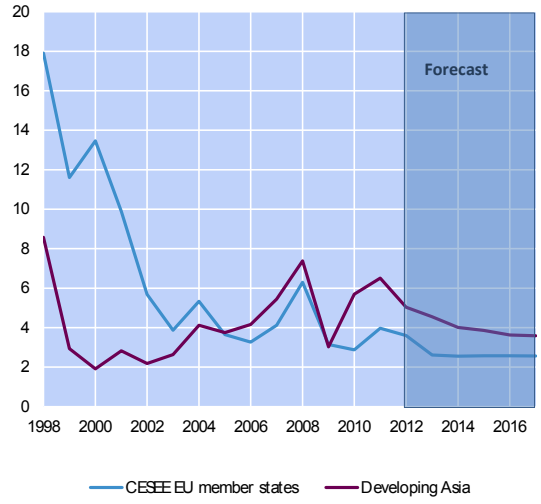
This difficult situation has caused very fundamental concerns about future growth rates (will there be any catching-up in the future at all?) and financial market stability in general. The CESEE region had the good luck that its financial markets were not directly involved, but it had the bad luck that there are not only intensive real economic linkages. The current deleveraging process of both foreign- and domestically owned banks in the region, regardless if it is voluntary or enforced by new supervisory standards, weighs on the region too. Overall this seems to be one of the main differences to other emerging market economies, especially Asian economies.

The good news concerns inflation and inflation dynamics. Whereas previous analyses were full of explanations for the constantly and systematically higher inflation rate in CESEE (see, for instance, the extensive literature on the Balassa-Samuelson effect), more recent analyses do not see any (or only few) inflation risks. This is in line with the general assessment in Europe as a whole, where the main focus is on financial stability as well as on fiscal risks, which could trigger a double-dip recession with all its consequences. Another possible, even more pessimistic, interpretation of the fact that inflation is a non-topic, at least for the moment, is that the catching-up process has come to a halt in general and for a longer period of time. More positively, it could be interpreted as a monetary success story: obviously, in many CESEE countries a certain stage of economic and institutional development has been reached, including a stable and credible monetary policy.

Chart 1 a + b

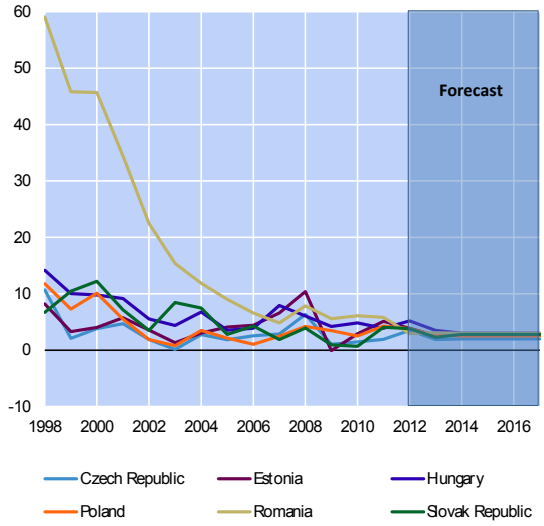
CESEE compared to Developing Asia

CPI/HICP, period average, % year on year



Selected CESEE countries

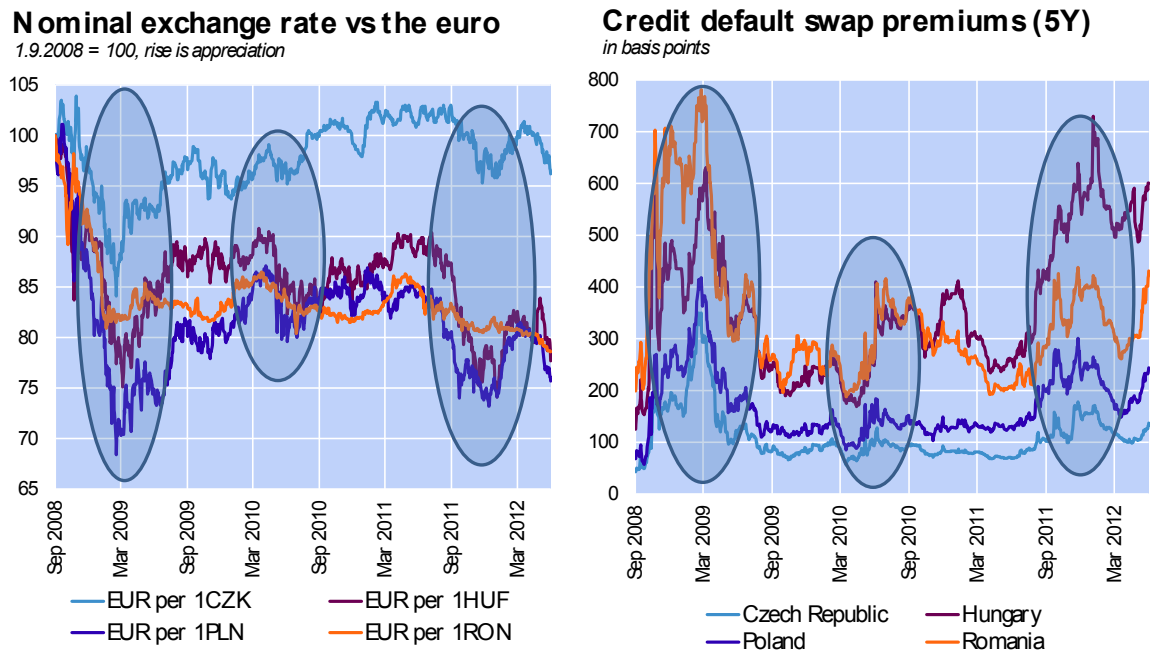
HICP, period average, % year on year



Source: IMF.

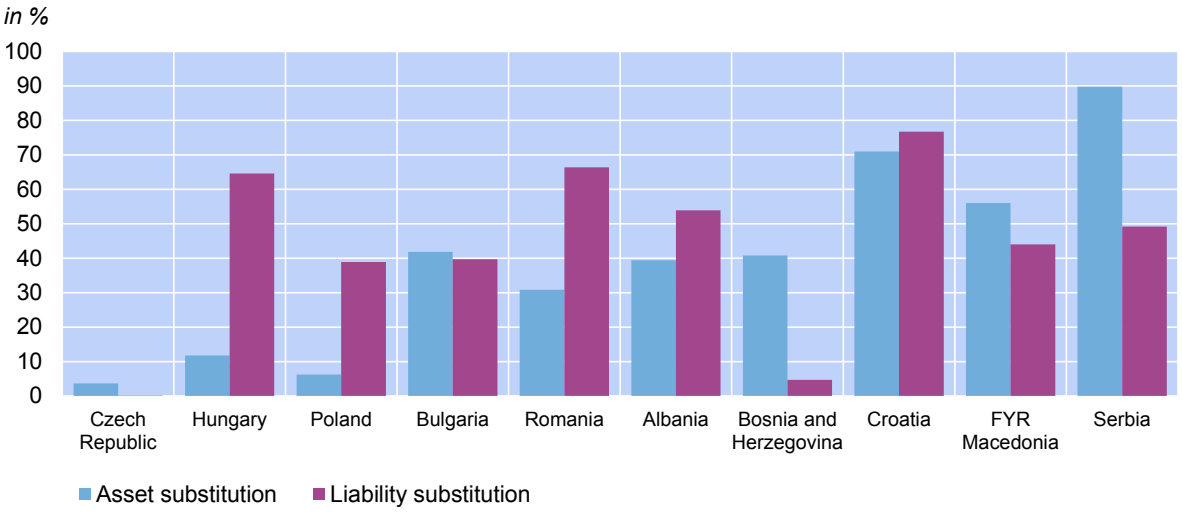
Note: CPI=Consumer Price Index, HICP=Harmonized Index of Consumer Prices. Developing Asia as defined in the IMF World Economic Outlook.

Chart 2 a + b



Note: latest observation: 01/06/2012
Source: Thomson Reuters.

Chart 3

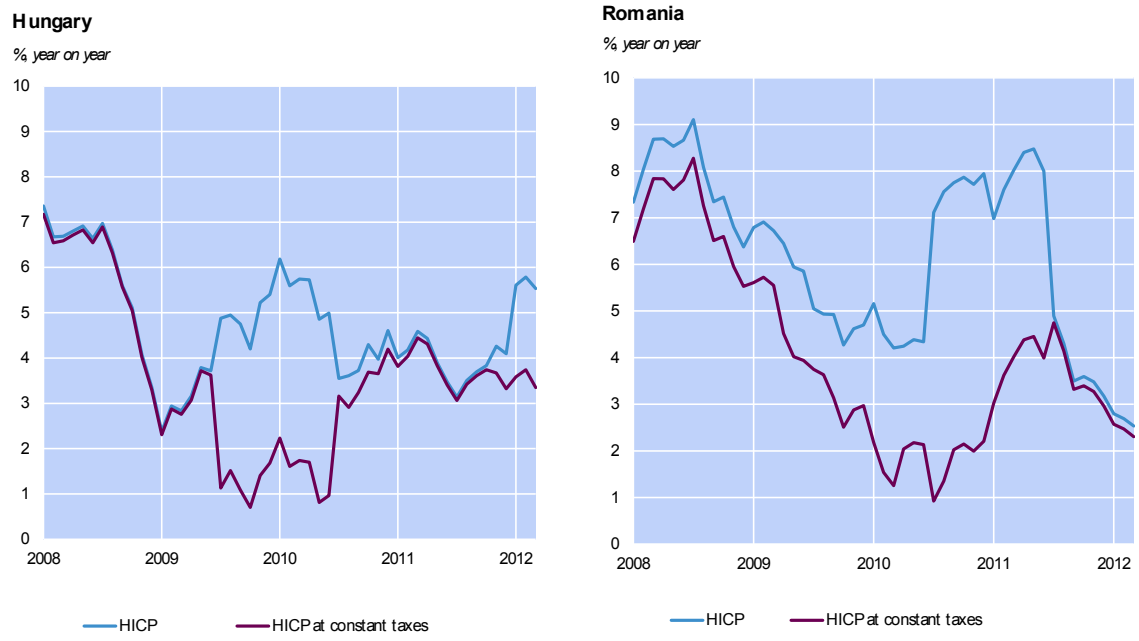


Source: OeNB Euro Survey, National Central Banks.

Note: Asset substitution is measured by the Euroization index which is defined as (euro cash + foreign currency deposits) / (total cash + total deposits), using OeNB Euro Survey data for projecting euro cash holdings of CESEE households. Liability substitution is calculated as foreign currency loans over total loans of households and NPISH (non-profit institutions serving households). The entry on liability substitution for Bosnia and Herzegovina refers to loans of resident non-MFIs.

Chart 4 a + b

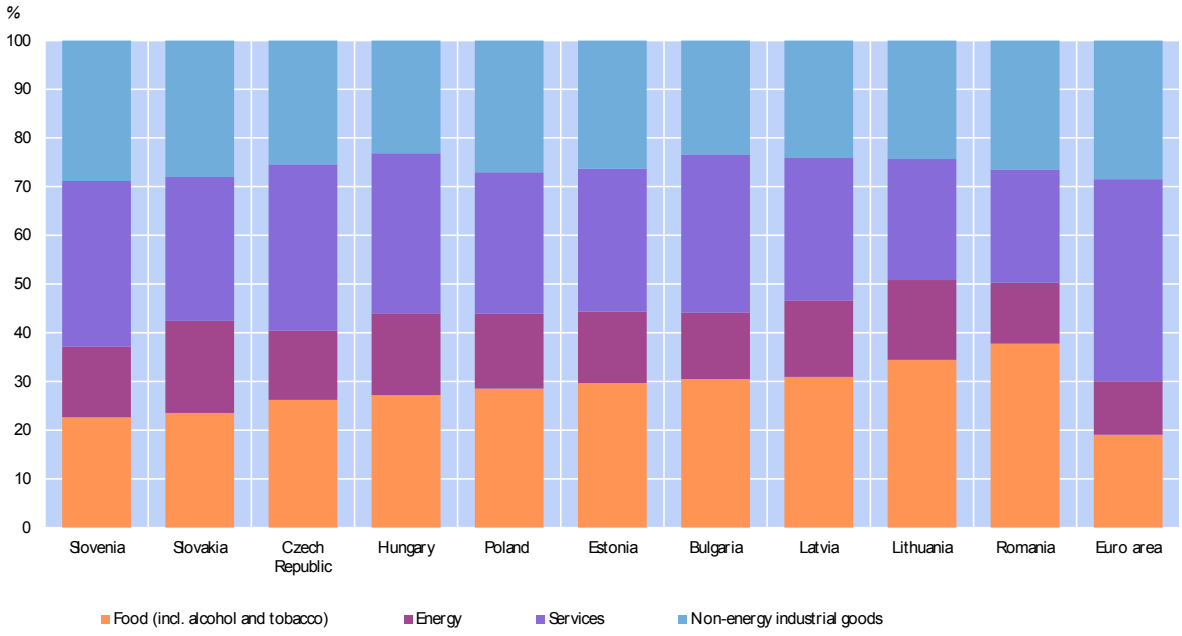
Total inflation and inflation at constant taxes



Source: Eurostat.
Note: HICP=Harmonized Index of Consumer Prices.

Chart 5

HICP item weights

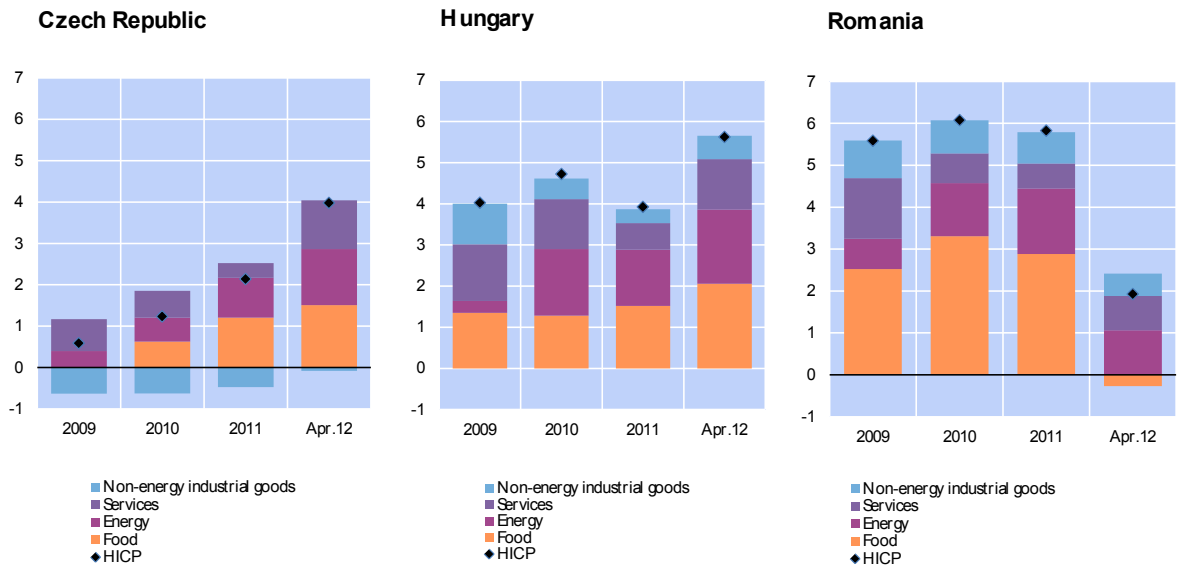


Source: Eurostat.
Note: HICP=Harmonized Index of Consumer Prices.

Chart 6

HICP inflation and its main drivers

percentage points, contribution to year-on-year change in HICP, HICP in %

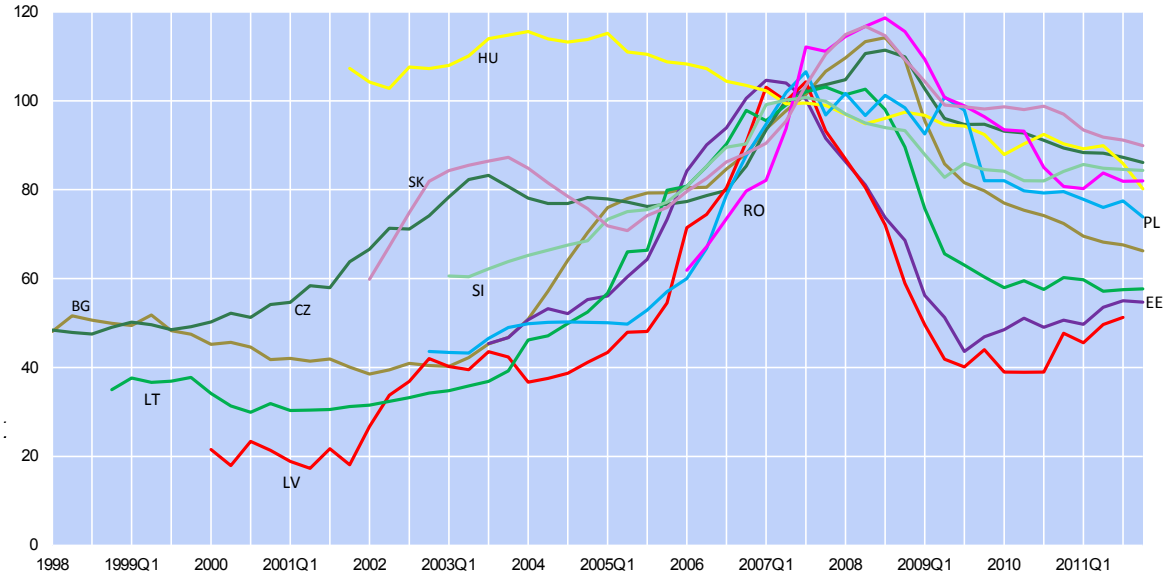


Source: Eurostat.
Note: HICP=Harmonized Index of Consumer Prices.

Chart 7

Residential Property Price Developments in CESEE EU Countries' Capital Cities

Index (2007=100), in real terms



Source: BIS, ECB, National Central Banks, National Statistical Offices, REAS (Residential Advisors).
Note: The price indices in BG refer to property in large cities. All indices are deflated by the HICP.

Table 1

Features of the monetary policy strategies of CESEE EU member states

Bulgaria	Exchange rate target: peg to the euro at BGN 1.95583 per euro within the framework of a currency board arrangement.
Czech Republic	Inflation target: 3% +/– 1 percentage point until end-2009: thereafter 2% +/– 1 percentage point. Managed floating exchange rate.
Hungary	Inflation target: 3% +/– 1 percentage point medium term target since 2007. Free floating exchange rate.
Latvia	Participates in ERM II with a +/–15% fluctuation band around a central rate of LVL 0.702804 per euro. Latvia continues with a fluctuation band of +/–1% as a unilateral commitment.
Lithuania	Participates in ERM II with a +/–15% fluctuation band around a central rate of LTL 3.45280 per euro. Lithuania continues with its currency board arrangement as a unilateral commitment.
Poland	Inflation target 3.0% +/– 1 percentage point (12-month increase in the CPI). Free floating exchange rate.
Romania	Inflation target: 3.0% +/– 1 percentage point for end-2011 and 2012 and 2.5% +/– 1 percentage point from 2013. Managed floating exchange rate.

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