Box 4

THE ROLE OF GLOBAL FACTORS IN RECENT DEVELOPMENTS IN EURO AREA INFLATION

Euro area inflation has declined by more than 2 percentage points since its latest peak in October 2011, to stand at 0.5% in May 2014. This decline took place in an environment of modest global economic activity and relatively subdued developments in commodity prices, with the ensuing disinflationary effects on euro area price developments being further exacerbated by a nominal appreciation of the euro. Against this background, this box discusses recent developments in relevant global determinants and their potential impact on the inflation rate in the euro area.

Recent developments in global determinants of euro area inflation

The disinflationary impact on euro area price developments stemming from the external environment over the past two years reflects different factors. Oil prices and food commodity prices have, on balance, been relatively stable in US dollars terms after having surged in the

Prices and costs

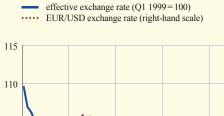
Chart A Oil and non-oil commodity prices

(monthly data, in USD, 2010 = 100) industrial raw materials food and beverages 160 160 150 150 140 140 130 130 120 120 110 110 100 100 90 80 2013 2014

Sources: DataStream and HWWI Note: Latest observation: May 2014.

preceding years, and industrial raw material prices have even been declining since end-2011 (see Chart A). The fading-out of upward pressures on inflation arising from these factors has been exacerbated by a nominal appreciation of the euro since mid-2012, both vis-à-vis the US dollar and in effective terms vis-à-vis the main trading partners (see Chart B). In addition, inflation has declined in both the emerging and advanced economies since the end of 2011 (see Chart C). While much of this decline across economies is associated with the downward impact on inflation rates arising from relatively stable commodity prices, the more subdued price pressures at the global level also reflect spare capacity in different parts of the world.1 This may have led to downward pressures on the prices of both intermediate and final goods imported to the euro area, beyond those downward pressures originating from developments in commodity prices and exchange rates.

Chart B Nominal exchange rate of the euro



1.7

(monthly data)



Sources: ECB and Bloomberg. Notes: Latest observation: May 2014.

The effective exchange rate of the euro is computed vis-à-vis 19 trading partners.

(monthly data; annual percentage changes)

emerging markets

OECD - CPI excluding energy and food



Sources: OECD, IMF-IFS and Haver Analytics Notes: Latest observation: March 2014 The emerging market series is a GDP-weighted average of 23 large emerging market economies

¹ For a discussion of developments in global inflation, see the box entitled "Drivers of recent global inflation developments", Monthly Bulletin, ECB, February 2014.

The combined influence of the different external factors is reflected, to a large extent, in the developments in import prices (measured in euro) of industrial goods (see Chart D). The annual growth rate of the prices of imports from outside the euro area has decreased markedly since October 2011, in fact, by around 12 percentage points. This was mainly driven by the energy component (accounting for around 70% of the decline), but, particularly more recently, also by other components. For instance, the annual growth rate of import prices for consumer goods declined by around 5 percentage points in the period between October 2011 and March 2014, and, given their weight in the total imports of industrial goods (approximately one-fourth), this component made a noticeable contribution to the recent fall in import price inflation.

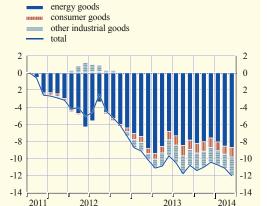
The impact of external factors on euro area **HICP** inflation

Gauging the importance of global factors in relation to the decline in euro area consumer price inflation is difficult. First, the various factors can be interrelated and affect domestic variables through multiple channels. Second, the impact of global factors on euro area consumer prices depends on how producers and/or retailers adjust their margins as a result of changes in costs.

To some extent, the relevance of global factors can be gauged from the contributions of the individual HICP components to overall HICP inflation (see Chart E), as certain components, most notably energy, are more sensitive to global factors than others. In this respect, a large part of the decline in headline inflation in the euro area since the end of 2011 has been on account of the HICP energy component (around 50%).

Chart D Contributions to the decline in import price inflation of industrial goods

(monthly data; annual percentage changes; percentage point

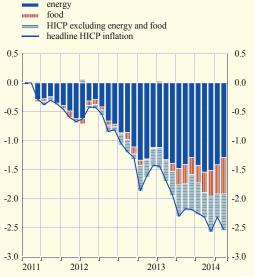


Sources: Eurostat and ECB calculations Notes: Latest observation: March 2014. The product coverage is provided by the Statistical Classification of Products by Activity 2008, Sections B, C and D and refers to imports from outside the euro area.

2014

Chart E Contributions to the decline in headline HICP inflation since October 2

(monthly data; annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB calculations Note: Latest observation: May 2014

Prices and costs

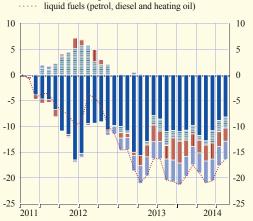
Within the energy component, it is, in particular, liquid fuels that are heavily influenced by external factors via oil prices and the EUR/USD exchange rate. Chart F illustrates that crude oil prices explain a large part of the fall in the annual growth rate of the prices of liquid fuels, reflecting the change from a strong positive contribution at the end of 2011 to a negligible contribution for the latest readings, as crude oil prices have remained rather stable lately. Disinflationary effects on fuel price inflation were also exerted by the nominal appreciation of the euro vis-àvis the US dollar, the decrease in the refining and distribution costs and margins, as well as the fading-out of the impact of changes in taxes.2

Turning to the HICP food component, this has accounted for 25% of the decline in euro area HICP inflation since October 2011. This also reflects the downward impact of external factors, such as international commodity prices, in particular on processed food items in

Chart F Contributions to the decline in price inflation in liquid fuels since October 2011

(monthly data; percentage changes; percentage point contributions)

crude oil prices in USD
margins
EUR/USD exchange rate
taxes (including excise duties and VAT)
.... liquid fuels (petrol, diesel and heating oil



Sources: Bloomberg, European Commission's Weekly Oil Bulletin and ECB calculations. Notes: Latest observation: May 2014. Margins include costs and margins arising from the refining and distribution processes.

the HICP.³ However, the strong downward path of HICP food price inflation in recent months rather reflects the unwinding of the weather-related price hikes seen in unprocessed food in 2013.

While the slowdown in inflation over the past two years has been driven predominantly by developments in energy and food prices, the most recent period reveals a significant contribution from the services and non-energy industrial goods price components as well. In particular, prices in the latter component are more sensitive to external factors, as a number of items are either directly imported or are produced domestically with a high import content. By contrast, services – albeit with a few exceptions – tend to be more influenced by domestic factors such as labour costs.⁴ Moreover, domestic prices may also be affected by structural factors in the global economy, such as those related to increased factor mobility, the greater integration of low-cost countries into the global markets, cost-efficiency gains associated with the fragmentation of production processes, and the generally increased tradability and substitutability of goods and services.⁵

² For a more extensive discussion of the decomposition, see the box entitled "The evolution of consumer prices for oil products in 2011", Monthly Bulletin. ECB. January 2012.

³ See the box entitled "Food commodities and the common agricultural policy" in the article entitled "Commodity prices and their role in assessing euro area growth and inflation", Monthly Bulletin, ECB, October 2013.

⁴ See the box entitled "Impact of services and non-energy industrial goods prices on the recent decline in HICP inflation", Monthly Bulletin, ECB, March 2014.

⁵ There is increasing empirical evidence that the high interconnectedness of the global economy has led to a stronger influence of global factors on national inflation. See Borio, C. and Filardo, A. (2007), "Globalisation and inflation: new cross-country evidence on the global determinants of domestic inflation", *Working Papers* No 227, BIS; Ciccarelli, M. and Mojon, B. (2010), "Global inflation", *The Review of Economics and Statistics*, Vol. 92, No 3, pp. 524-535.

Conclusion

The decline in euro area inflation since the end of 2011 has largely been due to the influence of external factors, such as subdued developments in commodity prices and the appreciation of the euro. Understanding the nature of the disinflation process is important, as a low level of inflation due to lower commodity prices can be associated with a positive impact on purchasing power and output in the euro area, while a low level of inflation resulting from an appreciation of the exchange rate, whilst strengthening real disposable income in the short run, may have a negative impact on competitiveness. In any case, beyond the external influences, the disinflationary path since the end of 2011 also reflects weak domestic demand within the euro area.