

Inflation Differentials between Austria, the Euro Area, Germany and Italy

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In Austria, inflation as measured by the HICP has been accelerating at a faster rate than in other euro area countries since late 2010. By May 2011, Austria had built up an inflation differential of 1.3 percentage points against Germany and of 0.7 percentage points against Italy.

A more detailed analysis shows inflation developments in Austria to have diverged from euro area patterns above all in the food sector. This can partly be explained with the increase of the tax rate on tobacco products in Austria at the beginning of 2011. In addition, domestic food retailing market structures may have contributed to the faster and stronger pass-through of global cost shocks to consumer prices in Austria compared with other euro area countries. This study argues that retail price competition may be the key driver behind the faster and stronger pass-through. This finding would, however, have to be substantiated by a comprehensive analysis of price setting dynamics and of market structures in food retailing to be conclusive. The energy sector is another industry in which Austria recorded more rapid inflation growth than other euro area countries in early 2011, the reason being the petroleum tax increase that was implemented in 2011. The oligopolistic structure of the domestic motor fuel market calls for continued close monitoring. Service inflation accelerated to 3.3% in May 2011, significantly exceeding above all the corresponding German rate. This divergence may be attributed at least in part to country-specific effects, including the reduction of the VAT rate on accommodation services in Germany from 19% to 7% and the abolition of university tuition fees in one of Germany's federal states in 2010. Industrial goods excluding energy also contributed to the disproportionately strong acceleration of domestic inflation in early 2011 (May: 1.9%). Above all shoe and garment prices rose comparatively faster in Austria than in Germany. Given the seasonality of price movements that is typical of nonenergy industrial goods and given the uncertainty surrounding inflation measures following the implementation of harmonized EU standards for the treatment of seasonal products in the HICP in January 2011, it is, however, too early to deduct an inflation trend in this sector at this stage.

At the aggregate level, the Austrian inflation rate and its differential against other countries' rates are expected to shrink considerably in the coming months and in 2012. According to the OeNB's latest projections, annual Austrian HICP inflation should drop substantially from 3.2% in 2011 to 2.1% in 2012. At the same time, Austria's inflation differential to the euro area should narrow by 0.2 to 0.5 percentage points against the euro area and by 0.1 to 0.3 percentage points against Germany and Italy.

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Following accelerated inflation in recent months, price growth leveled off in Austria in May 2011 at a high rate. Having risen from 2.2% in December 2010 to 3.7% in April 2011, Austria's annual HICP inflation rate stayed at the April level in May. Mirroring these developments, core inflation (which excludes the volatile components energy and unprocessed food) climbed from 1.5%

in December 2010 to 3.0% in May 2011. Until March 2011, energy and food prices had accounted for roughly two-thirds of this rise in headline inflation, whereas in April and May services were the key drivers.

Amid the continuing uptrend in euro area inflation, Austria has lately been recording significantly higher increases in inflation than the euro area

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HICP Inflation Developments in Selected Euro Area Countries



Source: Eurostat.

as a whole and than Germany and Italy, its two biggest neighbors and largest trading partners. While annual HICP inflation was on a par in Austria and in the euro area in December 2010 at a rate of 2.2%, developments have since diverged, causing an inflation differential of 1 percentage point to emerge by May 2011 (Austria: 3.7%, euro area: 2.7%). A comparison with developments in Germany and Italy underlines the unusually high rise of inflation in Austria. While in December 2010, Austrian inflation had exceeded the corresponding levels in Italy and Germany by just 0.1 and 0.3 percentage points, respectively, this differential widened significantly up to May 2011. By May, the domestic inflation rate had risen to 0.7 percentage points above that of Italy (3.0%) and 1.3 percentage points above that of Germany (2.4%). This deviation is one of several episodes since the launch of the euro area during which inflation developments in Austria have been out of sync with those of its neighboring countries (chart 1).

Similarly to headline inflation, core inflation (excluding energy and unprocessed food) has grown more strongly in Austria since December 2010 than in

the euro area on average and in Austria's neighboring countries. Domestic core inflation in fact doubled to 3.0% from December 2010 to May 2011. Thus, core inflation was 1.3 percentage points above the euro area average and 1.6 and 0.8 percentage points, respectively, above the corresponding German and Italian rates.

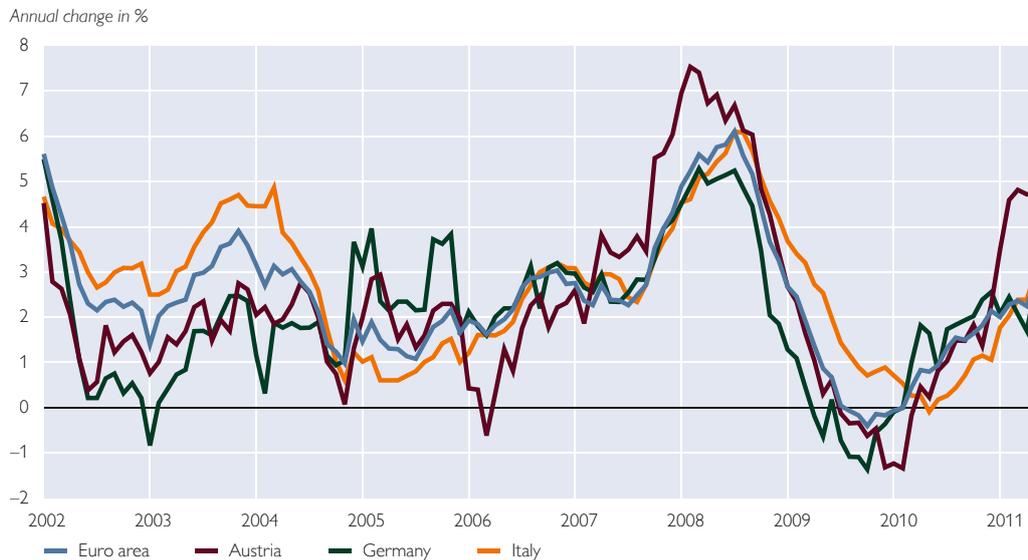
The following sections will look more closely at inflation developments in some subsegments of the HICP in Austria with a view to highlighting potential causes of the inflation differential.

1 Tax Increases and Stronger Pass-Through of Global Cost Shocks Drive Accelerated Rise in Food Price Inflation

In Austria, the food component of the inflation rate (which includes alcohol and tobacco) climbed from 2.3% in December 2010 to 4.7% in May 2011. While food prices increased also in the euro area average during this period, they did so at a far smaller rate (December 2010: 2.1%; May 2011: 2.8%). Moreover, these averages mask divergent developments across the euro area. In Germany, for instance, price growth even declined in the food segment from December 2010

Chart 2

Inflation of Food Prices Subject to Marked Increases in Austria



Source: Eurostat.

to April 2011 and did not start to regain momentum until May 2011.

Current inflation differentials between Austria and its neighbors Germany and Italy can, to some extent, be attributed to the increase in the tobacco tax rate, which became effective in Austria at the beginning of 2011 and which contributed approximately 0.6 percentage points to recent food price inflation.

Yet other factors have also been at play. A cross-country comparison shows that the costs of global price developments were passed through to consumer prices in Austria at a markedly stronger rate than abroad. The pass-through of price developments has been particularly strong in the case of nonalcoholic beverages such as coffee, tea and cocoa. In addition, the prices of bread and cereals as well as of dairy

products have also been rising faster in Austria than in the euro area as a whole and in the neighboring countries.

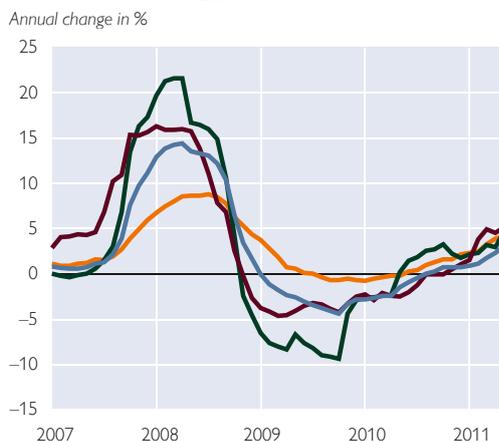
To some extent, these diverging developments can be explained by the food retail market structures prevailing in Austria and their role in transmitting world market prices, which have risen by more than 100% in some instances for wheat, corn and coffee since mid-2010. Some factors indicate that food retailing is characterized by high price competition in Austria and that this has fueled a rapid pass-through of costs to end users against the backdrop of the global commodity price increases.² The fiercer the competition, the smaller corporate profit margins are and the stronger or faster the rate is at which rising costs need to be passed on to consumers in the form of higher prices. In selling bread and cereal products

² In an older study, Weiss (1995) established a robust relationship between the degree of concentration and the degree of price pass-through in the Austrian manufacturing industry: The lower (higher) the degree of concentration, the higher (lower) the degree of cost pass-through.

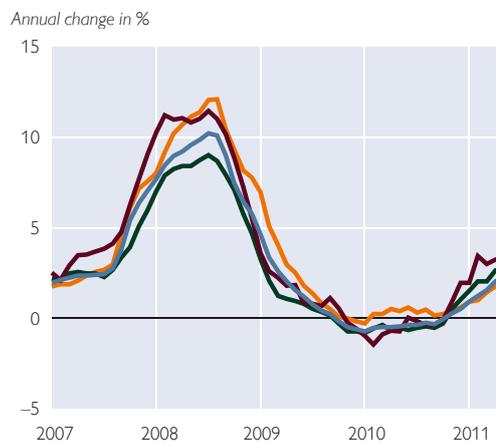
Chart 3

Substantial Acceleration of Prices for Some Food Products

Milk, cheese and eggs



Bread and cereals



Coffee, tea and cocoa



Oils and fats



— Euro area — Austria — Germany — Italy

Source: Eurostat.

and nonalcoholic beverages, Austrian food retailers generate notably smaller operating profits than their Italian counterparts but also smaller profits than their German counterparts (KMU FORSCHUNG AUSTRIA and IHS, 2011).

Apart from the comparatively lower operating profits of Austrian food retailers, a number of other factors would imply that competition intensity is rather high in the Austrian food retail market. While this market is dominated by just three chains, which be-

tween them account for a market share of 80% (Nielsen, 2010), this degree of concentration is put in perspective by the fact that these chains also operate discount stores through which they can – and evidently do – compete on prices. A recent survey among Austrian food producers and retailers has identified price competition among the retail chains together with rising and volatile commodity prices as today’s key challenges (AMA, 2011).

Overall, the reasons for “home-made” inflation remain subject to uncer-

tainty, however.³ KMU FORSCHUNG AUSTRIA and IHS (2011) found but little evidence for the impact of market structures on price setting, that is to say, they found only a weak correlation between the degree of concentration and the level of prices (not taking into account the relationship between concentration and inflation rates). The market mechanisms which determine prices need to be assessed in a comprehensive way, however. To do so, it is not sufficient to look at the degree of concentration alone; it is also necessary to evaluate the buyer power of individual retailers in their supply markets. Finally, cost patterns are also a crucial factor in corporate pricing policies. In the absence of a comprehensive analysis that takes all such aspects into account,

it is not possible to arrive at a conclusive assessment at the current juncture. The Austrian Competition Authority last conducted an industry-wide analysis of retail trade in Austria in 2007; yet even this analysis covered only a limited number of aspects (Bundeswettbewerbsbehörde, 2007).⁴

2 Energy Price Inflation Has Recently Levelled off to Slightly above German and Italian Rates

Energy price inflation accelerated at a markedly faster rate in Austria in early 2011 than in other euro area countries, rising to 12.6% in March 2011, which is more than 2 percentage points above the corresponding figures for Germany (10.4%) and Italy (10.3%). By May

Chart 4

Austria's Energy Price Inflation Differentials against Neighboring Countries Have Narrowed



Source: Eurostat.

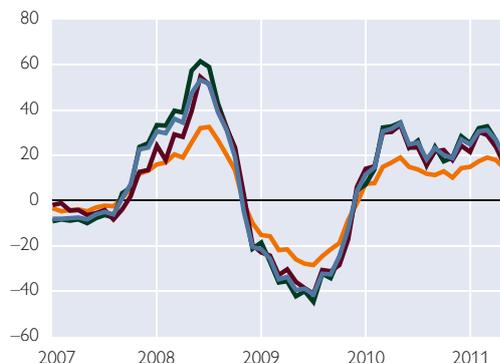
³ Food price inflation was considerably higher in Austria than in the euro area on average or than in Germany and Italy already during the commodity price shocks of 2007 and 2008. In econometric analyses, Baumgartner (2008a, 2008b) identified dairy products as well as oils and fats as the key domestic drivers of the above-average rise of inflation in Austria. The findings of Fritzer et al. (2008) support this evidence to some extent. Conclusive evidence on the role of domestic inflationary pressures has yet to be established.

⁴ This analysis found buying power to be high in some food retail sectors.

Inflation Dynamics of Selected Energy Sources

Heating oil

Annual change in %



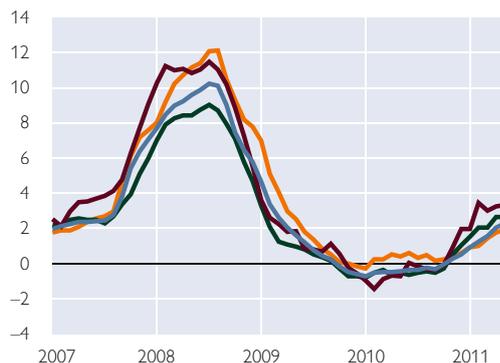
Gas

Annual change in %



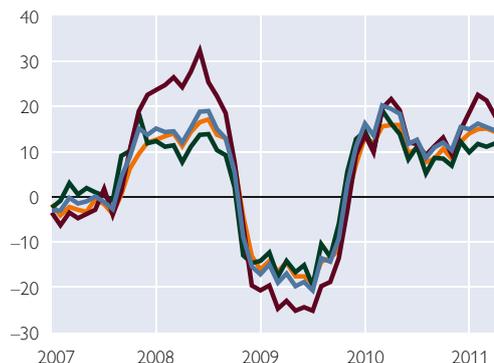
Electric power

Annual change in %



Fuel

Annual change in %



— Euro area — Austria — Germany — Italy

Source: Eurostat.

2011, the inflation differential in the energy sector had narrowed again visibly (Austria: 10.0%; Germany: 9.4%; Italy: 9.7%). The narrowing of the inflation differential may, however, be partly attributable to a base effect that reflects the disproportionately high increase of energy prices in Austria in early 2010.

In particular, motor fuel prices accelerated more sharply in Austria than in other euro area countries from December 2010 onward. This faster rise is attributable to higher petroleum taxation, which became effective in January 2011 and drove up energy inflation by 3 percentage points. Heating oil, though, remained unaffected by the rise in

petroleum tax, so that inflationary developments in Austria differ little from developments in the neighboring countries in this area.

In addition, the price increases may also reflect the structure of the Austrian motor fuel market, which is characterized by a very high degree of concentration (Bundeswettbewerbsbehörde, 2011). Last but not least, the petroleum corporations operating in Austria buy the bulk of their motor fuel from a single company (possibly on account of the lack of refining capacity in the vicinity of Austria). In the past few months, however, prices have apparently not been affected by these aspects.

Chart 6

Strong Increases in Prices for Hotel and Restaurant Services

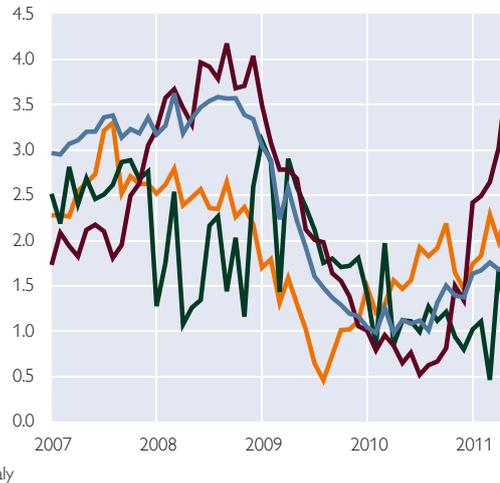
Services

Annual change in %



Hotels, cafés and restaurants

Annual change in %



Source: Eurostat.

3 Visible Increases in Austrian Service Prices in Recent Months

The annual rate of HICP inflation has lately accelerated visibly in the Austrian service sector. Service prices climbed from 1.5% in December 2010 to 3.3% in May 2011, with inflation differentials against Italy and Germany widening in the process. The key driver behind these developments was the growth of inflation for restaurant and hotel accommodation services, which stood at 3.8% in May, having almost tripled from December 2010, whereas Italy saw only a slight upward trend and Germany even reported a decline in restaurant and hotel accommodation price growth. Following the increase in prices for restaurant and hotel accommodation services, postal services have also become more expensive in Austria as of late, as have prices for social protection.

The fact that service price inflation rates have risen particularly strongly in Austria recently can partly be attributed

to one-off effects. Germany, for instance, lowered its VAT rate on accommodation services from 19% to 7% in 2010, the effects of which are likely to have spilled over into the first few months of 2011. In addition, service price inflation in Germany has benefited from the abolition of student tuition fees in the state of Saarland in April 2010. This effect ceased to have an impact on HICP inflation in May 2011. The comparatively high weight of hotel and restaurant services in the Austrian HICP was also instrumental in a faster acceleration of inflation. Finally, the rise in consumer prices may also have been driven by rising corporate price expectations. In the latest business survey of WKÖ (2011), the net balance of responses regarding price expectations reached the highest value in the history of the survey. Among the reasons why respondents expected prices to go up in the 12 months ahead, anticipations of wage increases figured prominently (stated by 64% of respondents). The share of respondents who expected

prices to rise was considerably higher in the wage-intensive services sector (65% of service providers) than in the manufacturing industry (51%).

4 Nonenergy Industrial Goods Inflation Largely Driven by Garment and Shoe Prices

In the nonenergy industrial goods segment, prices have been going up in Austria – as in other euro area countries – since December 2010. In May 2011, inflation in this segment totaled 1.9%, 0.7 percentage points higher than in Germany and as high as in Italy.

Prices for industrial goods excluding energy are, however, subject to pronounced seasonal variations, which is why this upward trend might well be reversed sooner or later. A more detailed assessment of the data shows that at least some of Austria's inflation differential against Germany is attributable to the garments and shoes component (chart 7). Apart from garments and shoes, inflation rates were higher in

Austria than in its neighboring countries also for photographic equipment and optical instruments as well as for some electronic devices.

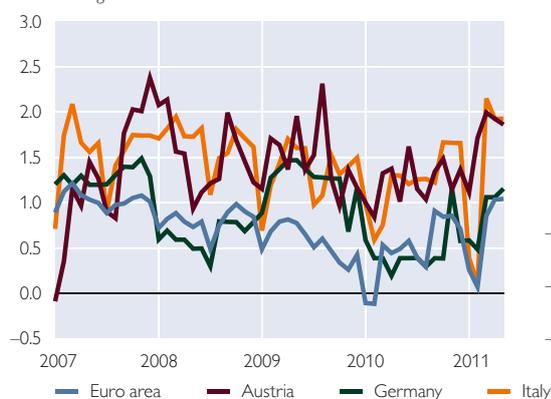
The recent upward trend in prices for garments and shoes must be seen against the backdrop of the strong volatility of such prices. Differences in seasonal patterns across euro area countries as well as the fact that the EU regulation on the treatment of seasonal products in the HICP (European Commission, 2009)⁵ became effective in January 2011 may cause national inflation rates to diverge in the short term. In Italy and in Germany, this regulation was implemented only at the beginning of 2011, whereas Austria had switched to the new standards some time ago. It should be stressed that the revision of historical data is still pending in Austria's neighboring countries, so that current inflation rates need not necessarily reflect actual developments pertaining to the implementation of the EU regulation. The new standards relate

Chart 7

Industrial Goods Prices Dominated by Prices for Shoes and Garments

Industrial goods excluding energy

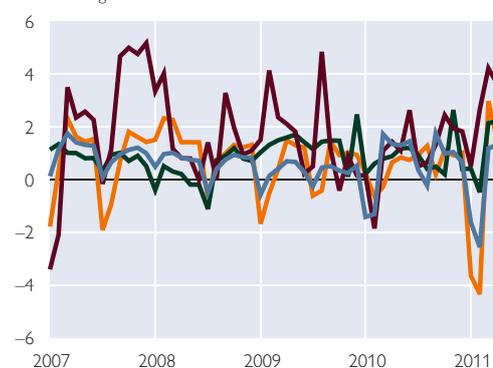
Annual change in %



Source: Eurostat.

Shoes and garments

Annual change in %



⁵ Regulation (EC) No. 330/2009 lists conventions on the statistical treatment of seasonal products that all EU Member States implemented by January 2011. Essentially, these conventions relate to the method for calculating prices and weights of seasonal products.

above all to the COICOP⁶ component of garments and shoes as well as to some unprocessed food items (fish, fruit and vegetables). According to estimates of the national statistical offices, implementation of the new standards caused annual HICP inflation to shrink by 0.4 percentage points in January and February 2011 but to rise by 0.1 percentage point in May 2011 in Italy; in Germany, the annual growth rate of HICP inflation was skewed upward by 0.1 percentage points from March to May 2011 (European Commission, 2011). These estimates would imply that, without the new standards, Austria's inflation differential would in fact have been even larger against Germany but significantly smaller against Italy in the first few months of 2011.

Corporate price setting might lead to inflation differentials also in this segment, but this has yet to be investigated.

5 Current Inflation Differentials Likely to Narrow

Current inflation projections imply a narrowing of the substantial inflation differentials that have been building up between Austria and the euro area as a

whole as well as its neighboring countries Germany and Italy. Recent projections for euro area HICP inflation range between 2.5% and 2.7% for 2011, and between 1.1% and 2.3% for 2012.

An update of the OeNB's latest inflation projections on the basis of the HICP figures for May 2011, which were not yet available when the projections were made, has confirmed the outlook of 3.2% annual HICP inflation for 2011, and of 2.1% for 2012. In line with the OeNB's inflation projections, Austria's inflation differential against the euro area stands to shrink from about 0.6 percentage points in 2011 to within a range of 0.2 to 0.5 percentage points in 2012 (based on the arithmetic mean of the range projected for the euro area by the Eurosystem). The inflation differentials against Germany and Italy are expected to narrow more strongly judging from recent forecasts (OeNB/Eurosystem/Deutsche Bundesbank, Consensus Forecasts, OECD, European Commission), namely from a range of 0.2 to 0.7 percentage points in 2011 to a range of 0.1 to 0.3 percentage points in 2012.

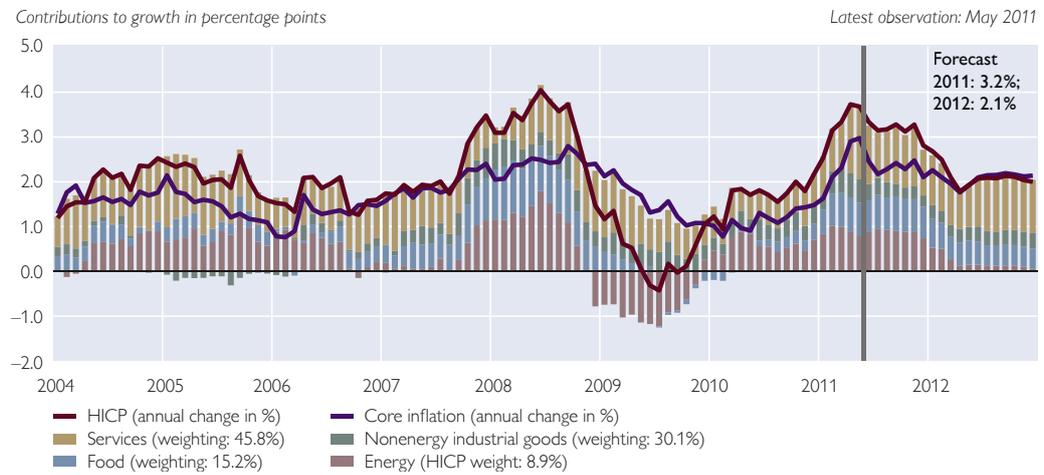
According to the OeNB's inflation projection model, the service sector is

Comparison of HICP Inflation Forecasts

	2011				2012			
	Austria	Euro area	Germany	Italy	Austria	Euro area	Germany	Italy
	<i>Annual change in %</i>							
OeNB/Eurosystem/Deutsche Bundesbank (June 2011)	3.2	2.5 – 2.7	2.5	x	2.1	1.1 – 2.3	1.8	x
Consensus Economics (June 2011)	2.8	2.6	2.4	2.6	2.1	1.9	2.0	2.0
OECD (May 2011)	3.1	2.6	2.6	2.4	1.8	1.6	1.7	1.7
European Commission (May 2011)	2.9	2.6	2.6	2.6	2.1	1.8	2.0	1.9

Source: OeNB/Eurosystem/Deutsche Bundesbank (macroeconomic projections by the OeNB for Austria and by the Deutsche Bundesbank for Germany; Eurosystem staff projections for the euro area), Consensus Economics (Forecasts), OECD (Economic Outlook), European Commission (Economic Forecast).

⁶ COICOP = Classification of Individual Consumption by Purpose.

HICP Inflation and Contributions by Subcomponents

Source: OeNB (June 2011 NIPE updated on June 16, 2011), Statistics Austria.

likely to see a decline in annual inflation until early 2012, reflecting moderate expectations in tourism, low wage costs and the base effects of strong price growth in this sector since April 2010. Expectations of higher wage settlements in the forthcoming round of wage negotiations should cause service price inflation to return to an upward path in the second quarter of 2012. Yet all in all, annual service price inflation stands to stay slightly below the average of 2011 (2.4%) in 2012 (2.3%).

In the processed food segment, annual HICP inflation totaled 4.8% in May 2011. The upward trend in food price inflation apparent since early 2010 is set to continue until the fall of 2011, given rising world market prices for agricultural commodities, the more rapid pass-through of global price developments to consumers and higher tobacco taxes, which added 1.4 percentage points to food price inflation in 2011. From the fall of 2011 onward, a more moderate development of global agricultural goods prices until the end of 2012 should translate into a pronounced decline of processed food price infla-

tion. Average HICP inflation in this segment is projected to run to 4.8% in 2011 and to 3.8% in 2012.

In the unprocessed food segment, inflation was measured at 4.7% in May 2011, which means that it has been declining since March 2011. This trend is likely to continue until the first quarter of 2012, reflecting above all a normalization of fruit prices, which went up strongly until the first quarter of 2011. Annual inflation in the unprocessed food segment has been projected to average 4.2% in 2011 and 1.9% in 2012.

In the energy segment, a sharp decline in inflation is in the offing for early 2012, given that this year's increase in the petroleum tax will cease to affect the index at the beginning of 2012 and given the base effect resulting from the sharp rise in 2011. Declining crude oil prices will intensify the decline in energy price inflation, which is expected to average 11.3% in 2011 and 2.5% in 2012 according to the OeNB's projections.

Industrial goods excluding energy are in for a pronounced decline in inflation during the remainder of 2011 due

to the pronounced seasonality of this segment and low unit labor costs. In 2012, higher wage settlements in the forthcoming wage round will reverse the dynamics of nonenergy industrial goods prices, driving them slightly upward again. This notwithstanding, HICP inflation for nonenergy industrial goods is not expected to exceed 1.1% in 2012, thus staying below the average projected for 2011 (1.3%).

6 Summary and Conclusions

Since the end of 2010, the inflation rate has been accelerating at a faster pace in Austria than in the euro area as a whole and than in Germany and Italy, Austria's major trading partners.

If inflation pressures were to persist, Austria would stand to lose competitiveness. Against this backdrop, this paper provides a detailed cross-country analysis of how the major HICP subcomponents have developed. As the emergence of inflation differentials against Austria's neighboring countries is a fairly new phenomenon, evidence on the underlying reasons is as yet inconclusive.

What can be said is that price dynamics have been particularly pronounced in the *food sector* as of late. Here, the increase in tobacco taxes that became effective at the beginning of 2011 accounts for part of the inflation differential. In addition, market structures and price competition in the Austrian food retailing sector may have played a role in accelerating and intensifying the pass-through of global cost shocks to consumer prices for some product groups, such as bread and cereal products as well as dairy products and non-alcoholic beverages (coffee, tea, cocoa) more strongly than in other countries.

Energy price inflation also accelerated visibly more strongly in Austria than in

other euro area countries in early 2011. In the meantime, inflation differentials against the neighboring countries have, however, narrowed again. The fact that energy price inflation was conspicuously higher in Austria in early 2011 than in Germany and Italy can largely be explained with the petroleum tax increase that took effect in Austria in January 2011.

Following an episode of moderate developments for *services*, inflation in this sector has gone up considerably as of late and actually reached twice the euro area average. These developments may at least partly reflect country-specific special effects (lower VAT rate for accommodation services, abolition of university tuition fees in one of Germany's federal states), which contributed to dampening service price inflation in Germany.

The accelerated rise of HICP inflation for *nonenergy industrial goods* was triggered above all by higher prices for garments and shoes. However, inflation measures in this segment are subject to heightened uncertainty, as the EU regulation on the treatment of seasonal products in the HICP became effective in January 2011.

Based on current information, both the domestic inflation rate as well as inflation differentials against other countries are expected to go down in the coming months and in 2012. The OeNB currently projects HICP inflation to reach 3.2% in 2011 but to narrow substantially to 2.1% in 2012. At the same time, Austria's inflation differential should shrink to a range of 0.2 to 0.5 percentage points against the euro area, and to a range of 0.1 to 0.3 percentage points against Germany and Italy.

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