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*Opinions expressed by the authors of studies do not necessarily reflect the official viewpoint of the OeNB.*



# ANALYSES

# Inflationary Pressures Worldwide despite Downturn in Growth

## Dampened Growth also Expected in the Euro Area

Wolfgang Pointner,  
Martin Schneider,  
Josef Schreiner

The international environment is increasingly being dominated by a cooling global economy. In the U.S.A., the real estate and financial crisis has spilled over to the real economy. Growth in consumer demand has declined, and the deterioration in the labor market suggests a deepening of this trend. In addition, the leading indicators point to a marked downturn in growth, and major Austrian and international organizations recently downgraded their GDP forecasts for the U.S.A.

In the euro area, the economy likewise weakened somewhat in the fourth quarter of 2007. Despite the increased euro exchange rate, net exports made the largest contribution to GDP growth. Domestic demand was driven by gross fixed capital formation while consumer spending was down for the first time since 2001. The latest macroeconomic projections by ECB staff experts anticipate a slowdown in the euro area's GDP growth for 2008.

In February 2008, euro area inflation (based on the HICP) reached 3.3%, a record high since the euro area was created. This rise is primarily attributable to the increase in energy and food prices. The increase in the euro exchange rate occurring in the same period mitigated the inflationary pressures to some extent. The projections for inflation in 2008 were further upgraded.

Despite the international financial crisis and its dampening effects worldwide, the Austrian economy looks surprisingly healthy. The OeNB economic indicator of March 2008 signals only a modest downturn in GDP growth for the first half of 2008.

JEL classification: E2, E3, 01

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## 1 Rising Inflationary Pressures Worldwide

### 1.1 U.S.A.: Marked Downturn in Growth with Higher Inflation

In the U.S.A., after very dynamic economic growth in the third quarter of 2007, annualized real GDP growth markedly slowed to 0.6% in the fourth quarter of 2007. Whereas weaker residential construction investment and inventory rundown contributed negatively to growth, the previous two key pillars of economic activity – consumer spending and net exports – grew at a slower pace. This reflects the impact of the real estate and credit crisis. At 2.2%, growth in 2007 as a whole was the weakest since 2002.

Marked dampened growth is expected to continue in 2008. The latest U.S. economic indicators also

point in this direction, e.g. the sharp deterioration in consumer confidence and falling employment. Both the IMF and the U.S. Fed recently downgraded their growth forecasts for 2008.

Inflationary pressures, which have been mounting since fall 2007, only marginally eased recently. In February 2008, consumer prices advanced by 4.0% year on year. Core inflation, which fell to 2.3% in February 2008, continued to exceed the U.S. Fed's comfort zone. For 2008 as a whole, the U.S. central bank expects a downturn-induced decline in consumer price growth ranging between 2.1% and 2.4%.

The U.S. labor market situation also visibly deteriorated in recent months. For instance, for the first time since June 2003 the number of

Editorial close:  
March 18, 2008.

nonagricultural jobs fell for two successive months in January and February 2008. Given a sharp decline in the number of employed persons, the cutback in jobs has, so far, not affected the unemployment rate, which recently stood at 4.8%.

The U.S. real estate market continues to witness high levels of excess supply. Just as with the sale of existing houses, new house sales have been shrinking in the last two and a half years. In addition, house prices are continuing to fall. The resulting negative wealth effects and the credit squeeze are also affecting households. Following generous injections of capital into the U.S. banking sector, the crisis began to spread to other financial institutions (particularly specialized insurers and hedge funds). In mid-March 2008, JP Morgan acquired the investment bank Bear Stearns, which was threatened by insolvency. The U.S. Fed supported this transaction by injecting liquidity of USD 30 billion. Credit card companies' write-off requirements are also on the rise.

Following the downslide in equity prices, the U.S. Fed convened an extraordinary meeting on January 22, 2008 and cut the Federal Funds target rate by 75 basis points. At its regular Federal Open Market Committee (FOMC) meeting, it made a further cut of 50 basis points to 3.0%. On March 18, 2008, the U.S. central bank reduced its target rate by a further 75 basis points in view of the continued turmoil on international financial and real estate markets. Since September 2007, the U.S. Fed has successively lowered its key interest rate five times by a total of 225 basis points. These rate cuts have not had the expected impact on the credit markets, however. Banks re-

main very cautious owing to losses and writedowns of more than USD 190 billion so far as a result of the subprime crisis and looming total loan losses of USD 400 to 600 billion. On March 11, 2008, the ECB, in conjunction with the Bank of Canada, the Bank of England, the U.S. Fed and the Swiss National Bank, announced new measures to mitigate the liquidity strains in the money markets and credit markets.

Current U.S. fiscal policy is also endeavoring to counter a potential recession by means of an economic recovery package, which was approved by President Bush on February 13, 2008 (total volume: more than 1% of GDP) and which comprises, in particular, tax relief measures and investment incentives.

The risks to this economic outlook are primarily in the continuing and intensifying turmoil in the financial markets as well as in the spreading of this crisis to other segments such as credit cards, car credit or credit default swaps (financial instruments used by banks and investors to hedge risks).

## **1.2 Japan: Growth Spurt in the Fourth Quarter of 2007**

In Japan, despite the global financial crisis, real GDP growth in the fourth quarter of 2007 accelerated to 0.9% on a quarterly basis (third quarter: +0.3%). Robust gross fixed capital formation and continued high levels of exports – the latter thanks to brisk demand from East Asia and the EU – are fueling growth. Private domestic building activity, by contrast, continued to wane owing to more stringent building regulations. Once again, exports were the main engine of growth in 2007 as a whole while the positive contribution from private consump-

tion was smaller than in 2006. As a result, GDP growth slowed slightly to 2.1%.

In general, economic momentum in Japan is expected to weaken in 2008. The IMF and OECD downgraded their growth forecasts to 1.5% and 1.6%, respectively. Weaker global levels of demand, lags in wage increases and a hesitant recovery in the domestic construction industry were cited as justification for these downgrades. In addition, corporate profits have been falling since their peak of mid-2007 owing to higher input prices. The Japanese government anticipates real GDP growth of 2.0% for the coming fiscal year (April 2008 to March 2009).

While sustained downward wage pressures are dampening consumer price growth, increased import prices for commodities are beginning to stoke inflation. In January 2008, for instance, the CPI rose by 0.7% year on year, i.e. to the same level as in the previous month. At 0.8%, the corresponding rate of change in core inflation (excluding fresh food) remained unchanged. This is its steepest rise since March 1998.

Key interest rates were last raised by 25 basis points to 0.5% in February 2007. The Bank of Japan (BoJ) bases its rationale for this decision on a “forward-looking monetary policy” with a horizon of one to two years. The interest rate gap relative to major currency areas remains wide, and the BoJ has not announced further rate hikes for the near future. The exchange rate of the Japanese yen has been firming against the U.S. dollar since mid-2007 and markedly so since early 2008. Fears of a possible U.S. economic downturn and the unwind-

ing of carry trades were cited as reasons for this development. Against the euro, however, the Japanese yen remained within a relatively narrow margin of fluctuation.

### **1.3 Asia Continues to Boom; China Wrestles with Overheating and Rising Cost of Living**

The major emerging Asian economies (excluding Japan) enjoyed continued robust GDP growth. According to the IMF, real GDP growth in the region was 9.6% in 2007 but is expected to fall to 8.6% in 2008. China and India remain the engines of growth in Asia.

In 2007, real GDP growth in China further accelerated to 11.4% despite measures to cool its overheated economy. Tighter credit and monetary policies should now curb high levels of investment demand. In addition, the policy of a moderate gradual appreciation of the renminbi-yuan relative to the U.S. dollar was eased to some extent in 2007, permitting somewhat more discernible appreciation. Despite a halt in the rise of administered prices, consumer price growth continued to accelerate in February 2008 to 8.7% year on year. This was owing to mounting food prices, in particular. In addition, inflationary pressures in most other Asian countries are still strong owing to high food and commodity prices. India saw continued economic momentum albeit at a slightly slower pace. Asia’s overall bright economic prospects are underpinned by both domestic demand and robust growth of exports between Asian countries, as well as with Europe and the Gulf states.

## 2 Euro Area: Continued Steep Inflation in Energy and Food

### 2.1 Slowdown in GDP Growth in the Fourth Quarter of 2007

In the fourth quarter of 2007, real GDP growth rose by 0.4% quarter on quarter on a seasonally adjusted basis. This means that growth momentum slowed in the second half of 2007. Compared with the fourth quarter of 2006, GDP growth stood at 2.2% (third quarter of 2007: 2.6%). As a result, GDP growth of 2.6% was posted for 2007 as a whole. Of individual euro area countries, the Netherlands (1.2%) and Finland (0.9%) achieved the highest GDP growth on a quarterly basis. Of the large euro area countries, Spain posted an above-average performance (0.8%).

Compared with the previous quarter, net exports accounted for the largest contribution to GDP. While exports advanced a further 0.5%, imports slipped by 0.4%, thus causing the contribution of net exports to reach 0.4 percentage points in the fourth quarter, their highest level for 2007 as a whole. Both exports and imports suffered a decline in growth in the second half of 2007. Since the U.S.A. are the second most important recipient of euro area exports after the U.K., a further slowdown of the U.S. economy would reduce the contribution of net exports to GDP growth in the coming quarters. As for euro area imports, China replaced the U.K. as the EU's biggest trading partner in 2007.

In the fourth quarter of 2007, private consumption fell for the first time since 2001 on a quarterly basis, thereby making a negative contribution to GDP growth. In the same period, government consumption

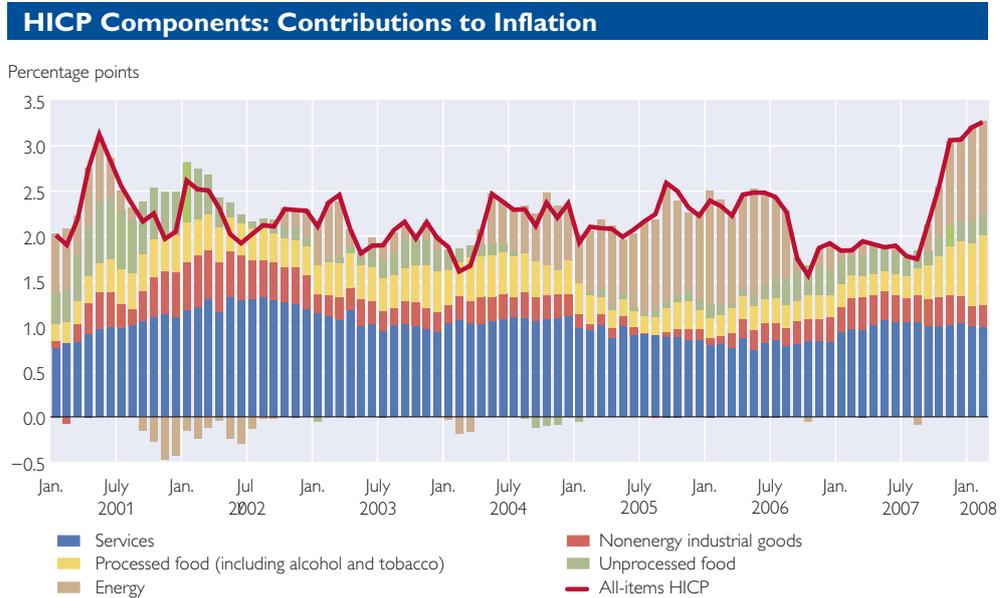
also declined for the first time in eight years on a quarterly basis. Inflation in the last few months of 2007 also dampened consumer demand. Consumer confidence surveyed by the European Commission steadily deteriorated during the second half of 2007. Both general GDP growth expectations and those relating to the financial situation of households have worsened considerably.

In the fourth quarter of 2007, gross fixed capital investment expanded by 0.8% against the third quarter, contributing 0.2 percentage points to GDP growth as a whole. Moreover, the contribution made by investment to GDP growth was thus smaller than in the third quarter of 2007. Investment growth, which is becoming more sluggish, is partly explicable by existing production facilities' lower levels of capacity utilization. According to a survey conducted by the European Commission, industrial capacity utilization peaked in the second quarter of 2007 and has since been on the wane. Although capacity utilization levels should have fallen slightly also in the first quarter of 2008, they still remain historically high.

A sectoral breakdown of activity shows that GDP growth was fueled primarily by business-related and financial services. Other services and goods production also made positive contributions albeit to a smaller extent. Other sectors, in contrast, failed to provide growth momentum in the fourth quarter of 2007. Even trade, which grew in the first three quarters of 2007, stagnated.

The labor market situation continued to ease in recent months. In January 2008, the euro area's seasonally-adjusted unemployment rate fell to 7.1%. This improvement was pri-

Chart 1



marily attributable to developments in Germany and France. The last time the French unemployment rate was as low as it currently is was in August 1983. In the fourth quarter of 2007, the number of employed in the euro area grew by 0.2% on a quarterly basis. On an annual basis, however, it rose by 1.7%. The European Commission's survey on employment expectations in the service and industrial sectors showed a continued deterioration in February 2008. As for households, the fear of joblessness continued to strengthen. Employment growth is therefore likely to have been more sluggish in the first quarter of 2008. Currently available data show that the favorable labor market situation has still not fed through to higher wage increases for the employed. In the third quarter of 2007, employee remunerations grew by 2%, which was roughly equivalent to the average in recent years.

## 2.2 Inflation in Early 2008 at its Highest Level since the Creation of the Euro Area

In February 2008, HICP inflation continued to rise and stood at 3.3%. This is its highest annual growth rate since 1999. In particular, sustained upward pressures on food and energy prices were responsible for the high inflation rate in February 2008. By contrast, the contributions to inflation from services remained constant and those from industrial goods excluding energy were smaller than in the previous year, as in January 2008. Although exchange rates are dampening the inflation of imported consumer goods, the producer prices of domestic consumer goods – in particular, those of food – are still subject to inflationary pressures.

Core inflation (all-items index excluding energy and unprocessed food) also rose in February 2008 (2.4%). The momentum of core inflation is mainly attributable to the sharply ris-

ing inflation in processed food. After the prices for each of these goods had climbed by some 2% year on year in the first six months of 2007, from July 2007 this rate rose on average by 0.7 percentage points from one month to the next, reaching a new annual high of 6.4% in February 2008.

The increase in oil prices also made a significant contribution to inflation in the euro area. At the end of February 2008, the price of North Sea Brent crude exceeded the USD 100 per barrel mark for the first time in its history. On March 14, 2008, it reached a new record high of USD 108 only to fall by 8% in the days thereafter to March 24, 2008. Although this signifies an increase in USD-denominated oil prices of some 67% on an annual basis, the simultaneous strengthening of the EUR/USD exchange rate meant that euro-denominated oil prices rose a mere 43% over the same period. In February 2008, shocks in the financial markets, which were accompanied by fears of recession, induced a temporary drop in the price of oil.

On March 18, 2008, the EUR/USD exchange rate achieved a fresh record high of 1.57, having climbed 6% since early 2008 alone. In this case too, the exchange rate softened in the second half of March, standing at 1.54 on March 24. Since the start of the financial turmoil in August 2007, the EUR/USD exchange rate has risen by some 12%. The euro strongly firmed against the U.S. dollar as early as the second half of 2007. This appreciation was motivated primarily by the expected widening of the interest rate gap between the euro area and the U.S.A. From November 2007 to February 2008, the EUR/USD exchange rate had a relatively high margin of fluctuation ranging

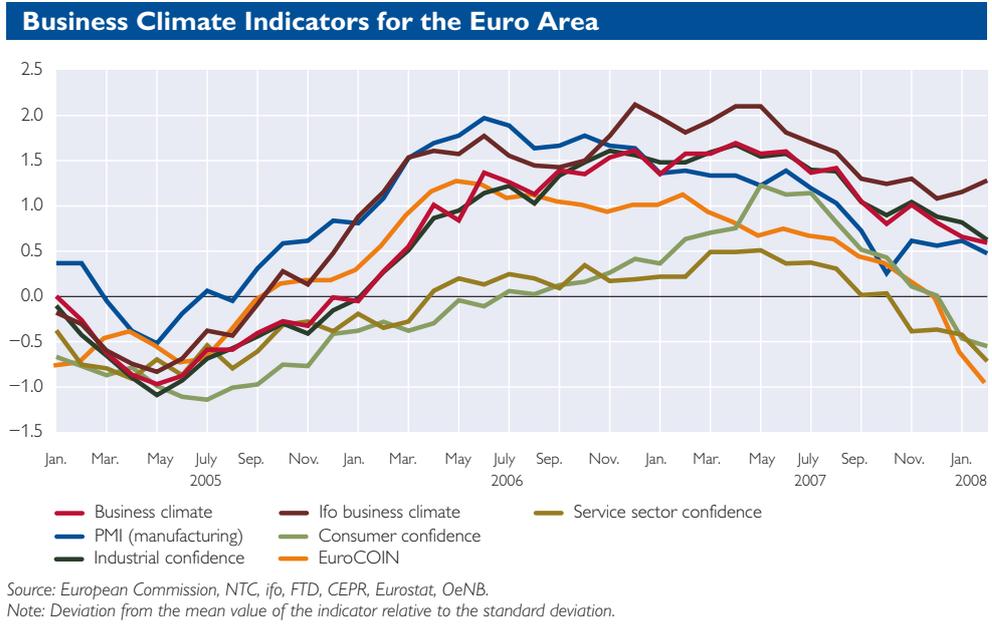
from 1.44 to 1.49. The EUR/USD exchange rate has risen steadily from early March 2008. Positive economic signals in the euro area and negative ones in the U.S.A. are likely to have contributed to this development. The euro's effective exchange rate has also strengthened. In addition to the USD/EUR exchange rate, the GBP/EUR exchange rate has also softened. Since August 2007, it has depreciated by some 10%.

### 2.3 Leading Indicators Signal More Sluggish Growth

Although indicators for short-term economic trends currently signal a slowdown in the euro area's GDP growth, individual country indicators (e.g. the Ifo Business Climate Index for Germany) recently rallied. The European Commission's economic sentiment indicator further deteriorated in February 2008 and now exactly matches its historical average. The services confidence indicator fell particularly sharply, and the industry and construction components registered declines. In particular, consumer expectations for the next 12 months have worsened, with confidence stagnating on the whole. However, the financial services indicator rallied strongly, making up for much of its decline in the second half of 2007.

The Ifo Business Climate Index for the German manufacturing industry advanced for the second time in a row in February 2008. This time the rise was exclusively attributable to the improved assessment of the current situation. Business expectations continued to deteriorate slightly. Although Germany's manufacturing industry is in good health on the whole, expectations continue to indicate economic distress.

Chart 2



In January 2008, the deterioration since mid-2007 in industrial confidence surveyed by the European Commission continued and has now undershot its low of 2007. This recent decline was attributable to the deterioration in business expectations. In February 2008, the Purchasing Managers' Index fell to 52.8. Although the index still indicates a rise in euro area industrial production, it falls well short of its average level of 2007. Both the purchasing and selling prices of the survey's respondents advanced in February 2008. The European Commission's business climate indicator continued to fall in February 2008, reaching a record low since March 2006. The indicator is nevertheless still at a relatively high level, thus signaling further, albeit less vigorous, industrial production growth. The decline was triggered primarily by poorer output expectations.

#### 2.4 Forecasts Predict Dampening of Both GDP Growth and Inflation

The latest macroeconomic projections by ECB staff experts of March 2008 assume that real GDP growth in the euro area will be somewhat lower in 2008 than in 2007. As before, the euro area's economic fundamentals do not show any major imbalances. Although investment growth will be dampened by the cooling global economy, in view of the high capacity utilization levels and sustained growth in profitability it is likely to continue contributing to GDP growth. At the same time, employment and the labor force participation rate soared on the back of the improved economic situation and wage restraint. Although private consumption growth is currently being dampened by higher commodity prices, it is likely to continue to contribute to GDP growth in tandem with employment growth.

According to the latest projections, annual real GDP growth will range between 1.3% and 2.1% in 2008 and between 1.3% and 2.3% in 2009. Compared with the predictions made by Eurosystem experts in December 2007, the ranges projected for real GDP growth in 2008 and 2009 were corrected downward. This is attributable to more sluggish global demand, stronger pricing pressures from commodity prices and more unfavorable financing conditions. Available forecasts by international organizations largely confirm these prospects.

According to the projections of March 2008, HICP inflation will range between 2.6% and 3.2% in 2008 and between 1.5% and 2.7% in 2009. Compared with the predictions made by Eurosystem experts in December 2007, the projected ranges for inflation shifted up primarily owing to future steep food and energy price rises. As far as the domestic economy is concerned, wages in 2008 – particularly, in the public sector – are likely to climb more steeply than of late. In addition, profits will grow at a slower pace owing to the economic downturn. Risks to inflation are currently pointing to the upside over the forecasting horizon and include, in particular, future oil and

agricultural product price rises, which could continue their steep uptrend of the past few months. Besides, there is the possibility that wage increases could be higher than currently expected owing to high capacity utilization and the favorable labor market situation.

### 3 GDP Growth in Central, Eastern and Southeastern Europe (CESEE)

#### 3.1 Continued Strong Momentum in CESEE Member States

The economies of the CESEE Member States under review (Bulgaria, Poland, Romania, the Slovak Republic, Slovenia, the Czech Republic and Hungary) continued to grow robustly in the second half of 2007. At 6.1%, real GDP growth was extremely dynamic in the fourth quarter on a weighted average basis, accelerating by 0.4 percentage points compared with the third quarter of 2007. Growth benefited, above all, from favorable trends in Poland, which accounts for about 42% of the region's economic performance. In addition, the Slovak Republic, which was one of the world's fastest expanding economies in the fourth quarter of 2007, registered higher-than-average GDP growth of 14.3%. Hungary, where extensive budget consolidation mea-

Table 1

#### GDP Growth in Selected CESEE Member States

Annual change in real GDP growth in %

	2006	2007	Q1 07	Q2 07	Q3 07	Q4 07
Bulgaria	6.1	..	6.2	6.6	4.5	..
Poland	6.2	6.5	7.2	6.4	6.4	6.1
Romania	7.7	6.0	6.1	5.7	5.7	6.6
Slovak Republic	8.5	10.3	8.3	9.3	9.4	14.3
Slovenia	5.7	6.1	7.2	6.0	6.4	4.7
Czech Republic	6.4	6.5	6.5	6.5	6.3	6.6
Hungary	3.9	1.3	2.7	1.2	0.9	0.8

Source: Eurostat.

asures have been dampening growth since mid-2006 already, posted considerably lower-than-average GDP growth. Another growth-dampening factor in the country was the impact of crop failure, which also hit Bulgaria and Romania.

In most CESEE Member States, GDP growth in the second half of 2007 was driven by domestic demand. Only Hungary saw a continued decline in domestic demand, which has been evident for some time. Private consumption benefited from the favorable development in the labor markets. Employment growth was dynamic in most countries of the region. Only Hungary suffered a slight decline. Unemployment fell in all countries under review here, and, in some, even reached historical record lows. In certain CESEE Member States, this led to a supply-side tightening in specific labor market segments, which has increasingly contributed to rising wages. Despite higher price pressures, real wages in recent months have grown significantly throughout this group of countries, and in Bulgaria and Romania by as much as more than 10%. In addition, lending, which is still rising rapidly, fueled private consumption, with Bulgaria and Romania leading regionally with growth rates of 36.4% and 68.2%, respectively (in real terms, on an annual basis).

In the second half of 2007, corporate investment accounted for the largest contribution to growth in Poland, Slovenia and the Czech Republic. In most of the other countries, this component grew strongly as well. In particular, continued robust industrial activity, which can be seen from high and, in some countries, from still growing capacity utilization and industrial production,

had a positive effect. In addition, building activity growth was also very dynamic in Bulgaria and Romania. Although investment activity in Hungary recovered somewhat in the fourth quarter of 2007, it remained modest. However, it should be noted here that this poor performance stemmed less from the manufacturing industry than from a decline in construction investment and from generally low levels of government spending.

The external sector made an appreciable contribution to growth only in the Slovak Republic, in Hungary and in the Czech Republic. In the Slovak Republic, large volumes of production capacity were created in recent years in export-oriented industries, frequently financed via foreign direct investment (FDI). This development sharply boosted exports. In Hungary, a competitive industrial sector is boosting the external sector's contribution to growth in the face of falling domestic demand. In the Czech Republic, import activity lost significant momentum in the fourth quarter of 2007. In Bulgaria and Romania, net exports dampened GDP growth substantially. Extremely dynamic domestic demand in Bulgaria and Romania resulted in high levels of import growth. In addition, export activity lost steam in both these countries.

### **3.2 Rapidly Mounting Pricing Pressures as a Result of Both Global and Local Factors**

In the second half of 2007 and in early 2008, inflation rose markedly in the CESEE Member States under review, ranging from 3.4% in the Slovak Republic to 12.2% in Bulgaria in February 2008. In the period from September 2007 to February 2008, the rise

Table 2

### Price Developments in Selected CESEE Member States

Annual change of the HICP in %

	2006	2007	Sep. 07	Oct. 07	Nov. 07	Dec. 07	Jan. 08	Feb. 08
Bulgaria	7.4	7.6	11.0	10.6	11.4	11.6	11.7	12.2
Poland	1.3	2.6	2.7	3.1	3.7	4.2	4.4	4.6
Romania	6.6	4.9	6.1	6.9	6.8	6.7	7.3	8.0
Slovak Republic	4.3	1.9	1.7	2.4	2.3	2.5	3.2	3.4
Slovenia	2.5	3.8	3.6	5.1	5.7	5.7	6.4	6.4
Czech Republic	2.1	3.0	2.8	4.0	5.1	5.5	7.9	7.6
Hungary	4.0	7.9	6.4	6.9	7.2	7.4	7.4	6.7

Source: Eurostat.

in inflation in the Czech Republic and Slovenia was particularly steep. In the Czech Republic, this development was however largely attributable to especially high inflation since early 2008, which was influenced by the hike in the lowest VAT rate, the introduction of medical fees and price rises in housing, water, power, gas and other fuels in early 2008. In Slovenia, inflation momentum was strongly driven by food and, toward the end of 2007, by energy as well. Above all, after the end of dual pricing following the introduction of the euro (June 2007), seasonal products are likely to have been subject to inflation to a greater extent.

In general, price developments in the region were driven by both global and local factors. High global market prices for food and energy exerted particularly strong inflationary pressures owing to these product groups' high weighting in the consumer price index of the CESEE Member States under review. In addition, a number of countries (Hungary, Romania, Bulgaria) were hit by poor harvests, and Slovenia witnesses a low degree of competitive intensity in its retail sector, which facilitated a knock-on effect of the food price increases on consumers.

In most CESEE Member States, however, price developments were also influenced by local factors. These included high consumption growth (especially in Romania and Bulgaria), decreasingly negative or increasingly positive output gaps (especially in the Czech Republic, in Poland, Slovenia and the Slovak Republic), higher growth rates in unit wage costs, which were attributable to labor force shortages in some countries (especially in Bulgaria, Romania and Poland), changes in indirect taxes and administered prices (especially in the Czech Republic), sharp currency devaluation (in Romania) and procyclical fiscal policies in all the countries under review (except for Hungary).

To counter these developments, some central banks in the region raised their key interest rates. Since September 2007, the Czech central bank has hiked its key interest rate three times from 3% to 3.75%, its Polish counterpart four times from 4.5% to 5.5% and its Romanian equivalent three times from 7% to 9%. Particularly in the Czech Republic, the Slovak Republic and in Poland, monetary conditions were additionally tightened by an appreciation of the respective country's currency.

### 3.3 Impact of Financial Turmoil in the Region – Still Minimal

Robust domestic demand and adverse developments in the terms of trade contributed to the persistence and, in part, to the deepening of existing external imbalances in some CESEE Member States. Particularly in Bulgaria and Romania (both countries have especially high current account deficits), FDI coverage of the current account gap also narrowed and external debt continued to deepen. In addition, the structure of the external debt shifted toward short-term financing. In view of deteriorating international financing conditions, a heavy reliance on external capital flows to finance growth in some countries of this region represents a key risk factor.

So far, however, the capital markets of the CESEE Member States have been affected only to a relatively small extent by the latest turmoil in the international financial markets. In the region under review, the rise in bond market risk premia has been lower than in comparable emerging markets since October 2007. Similarly, equity market losses have so far been less marked than in other emerging markets, the euro area or the U.S.A. Of the region's currencies, only the new Romanian leu depreciated to a significant degree and for a protracted period. In general, the losses suffered by the countries under review were higher in countries with major economic imbalances (e.g. Bulgaria and Romania).

The continuation or intensification of the current global financial distortions could impact the region via several channels. The consensus view is that the direct impact on the CESEE Member States from a downturn in U.S. growth would be rather limited. Owing to the euro area's importance as a trading partner, a decline in euro area growth on the back of a cooling U.S. economy would, however, lead to a dampening of the region's exports and thus to a deterioration of its external positions. The transfer of risk via financial market linkages could play a comparatively more significant role and be reflected in higher financing costs and/or falling capital inflows. On the one hand, such a development may be triggered by a further decline in international investors' willingness to take risks vis-à-vis emerging markets. On the other, a restriction in foreign banks' lending to their subsidiaries in the region's often largely foreign dominated banking markets could have an impact as a channel of contagion. The concentration of a few international creditor nations (in particular, Austria, France, Germany and Italy) in the CESEE Member States increases this risk furthermore. The data on capital flows, of which some items are available up to the fourth quarter of 2007, do not indicate ebbing financial flows to the region, though. While the net capital inflows to some CESEE Member States are negative, this pattern basically reflects the accumulation of foreign assets by CESEE nationals.

## 4 Austria: Only Modest Economic Downturn in the First Half of 2008

### 4.1 Austrian Economy Grew by 3.3% in 2007

The Austrian economy looked in excellent health in 2007. Real GDP growth was 3.3% (seasonally and working day adjusted). Although the momentum of Austrian exports slowed during 2007 owing to the steadily rising external value of the euro and to the slackening global economy, exports performed relatively well in the fourth quarter of 2007. As a result of the sharp depreciation of the U.S. dollar against the euro, a further slowdown in export momentum can however be expected in the first half of 2008. This development is also signaled by the declining momentum of export orders. The performance of Austria's domestic economy varies greatly depending on both the sector and demand component. Although the momentum of

goods production has eased, the manufacturing industry still enjoys above-average order book levels. The construction sector and tourism industry are currently performing very well. However, business-related services are suffering a sharp slowdown in growth. According to the EU business survey, companies expect their business activity to fall in the months ahead.

In 2007 as a whole, investment activity was even stronger than in 2006. Nonetheless, 2007 saw a sharp slowdown in growth, which appears set to continue in 2008. Despite healthy employment growth, private consumption did not pick up momentum during the economic boom of the last two years. Higher inflation – primarily owing to steep increases in energy and food prices – is also dampening real household income. Consumer demand is therefore not expected to gain momentum in the next few months.

Table 3

#### Results of the National Accounts (in Real Terms)

	2005	2006	2007	Q1 06	Q2 06	Q3 06	Q4 06	Q1 07	Q2 07	Q3 07	Q4 07
	Annual change in % <sup>1</sup>			Quarterly change in % <sup>1</sup>							
GDP	2.3	3.1	3.3	0.7	0.8	0.8	0.8	0.9	0.8	0.7	0.6
Private consumption	2.3	2.0	1.5	0.6	0.5	0.4	0.3	0.3	0.5	0.5	0.3
Government consumption	1.6	2.0	2.6	0.5	0.5	0.4	0.4	0.4	0.4	2.0	1.2
Gross fixed capital formation	1.6	3.1	3.7	0.6	1.0	1.2	1.2	1.0	0.8	0.6	0.4
Exports	6.7	7.6	7.0	2.3	0.9	2.0	2.3	2.1	1.2	1.2	1.2
of which: goods	7.2	8.0	7.6	2.6	0.5	2.2	2.8	2.2	1.2	1.2	1.3
services	5.4	6.4	7.0	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.6
Imports	6.1	4.7	6.1	0.9	1.4	1.7	1.9	1.5	1.1	1.6	1.2
of which: goods	6.5	5.8	6.4	1.3	1.5	1.6	1.9	1.8	1.1	1.6	1.1
services	2.3	5.2	4.4	1.4	1.7	1.4	0.8	0.6	1.0	1.7	1.8

Source: WIFO.

<sup>1</sup> Seasonally and working day-adjusted.

### OeNB Economic Indicator of March 2008 Signals Only a Modest Downturn in Growth for the First Half of 2008<sup>1</sup>

Despite the international financial crisis and its globally dampening effects, the outlook for the Austrian economy in the first half of 2008 looks surprisingly favorable. As anticipated so far, although real GDP growth in 2008 as a whole will be markedly lower than in 2006 and 2007, a dramatic collapse of the Austrian economy does not currently look to be on the cards. On the basis of the available data – which however map only the developments occurring up to early 2008 – the OeNB economic indicator signals real GDP growth of 0.6% in the first quarter of 2008, followed by 0.5% in the second quarter (seasonally and working day adjusted, on a quarterly basis).

Table 4

#### Short-Term Real GDP Forecast for Austria for the First and Second Quarters of 2008 (Seasonally and Working Day-Adjusted)

2005				2006				2007				2008	
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Quarterly year-on-year change in %													
2.3	2.2	2.2	2.7	3.2	3.1	3.0	3.3	3.4	3.4	3.3	3.0	2.8	2.4
Quarterly change in %													
0.3	0.9	0.9	0.6	0.7	0.8	0.8	0.8	0.9	0.8	0.7	0.6	0.6	0.5
Annual change in %													
2.3				3.1				3.3					

Source: Results of the OeNB economic indicator of March 2008, Eurostat.

<sup>1</sup> The OeNB economic indicator has been published four times year since the first quarter of 2003. It forecasts real GDP growth for the current quarter and the next (in each case, on a quarterly basis, using seasonally-adjusted data). The forecast's values are based on the results of two economic models, a stochastic decision space model and a factor model. Further details on the models used can be found at [www.oenb.at](http://www.oenb.at) in the Monetary Policy and Economics/Forecasts section. The next publication is due in July 2008.

#### 4.2 Labor Market in Excellent Health in Early 2008

Austria's labor market still looks in excellent health thanks to the booming economy in recent quarters. Moreover, temporary factors such as the favorable tourism season and the construction sector are boosting the demand for labor.

In February 2008, payroll employment numbers rose by 3.0% on an annual basis and the number of those reported unemployed fell by 11.9%. The jobless rate (Eurostat) declined to 4.2% in January 2008, reaching a record low since May 2003. The number of reported vacancies, the growth of which steadily declined in 2007, has increased

sharply since early 2008. Despite the slackening economy, the labor market outlook for the next few months therefore remains bright.

#### 4.3 Food and Energy Prices Continue to Fuel Inflation

At the start of 2008, inflation eased compared with its peak in December 2007 (+3.5%). In February 2008, the HICP rose by 3.1%. This increase was primarily attributable to the rise in prices for energy (+12.8%) and food including alcoholic drinks and tobacco (+8.9%). However, prices for industrial goods excluding energy (+2.1%) and services (+0.6%) advanced only slightly.

#### 4.4 Sharply Increased Downward Risks for Output Growth

The downward risks to Austrian GDP growth outlined upon the release of the latest OeNB economic indicator in January 2008 have increased further owing to the developments of the last few weeks. The massive international financial distortions triggered by the U.S. real estate crisis are increasingly causing havoc, prompting international organizations to steadily downgrade their forecasts. Reviving the confidence of financial agents as soon as possible in order to limit the impact of the financial crisis on economic growth, especially in the U.S.A., will be critical. In view of the given uncertainties, this is admittedly likely to take considerable time.

The extent of the spillover of the financial crisis to Europe also depends on whether and to what degree this crisis will induce investor and consumer restraint. Austria may benefit from the fact that the direct exposure of its domestic banking system to

the U.S. real estate crisis is limited. Owing to its strong external trade links, however, Austria will nonetheless be hit by the weaker growth expectations worldwide. The price of oil, which has already exceeded the USD 100 mark, will increase the risks as well. Furthermore, although the sharp depreciation of the U.S. dollar is bolstering the U.S. economy, it represents an additional negative factor for the euro area.

Under the currently prevailing circumstances, it should be highlighted in particular that the OeNB economic indicator of March 2008 reflects developments only up to the beginning of 2008. The indicator therefore does not cover the developments of the last few weeks. While this situation should not greatly affect the projection for the first quarter of 2008, the growth rate forecast for the second quarter of 2008 should be interpreted as an upper limit in the event that the financial crisis is stabilized.

# Current Inflation Developments in Austria

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HICP inflation in Austria increased from below 2% in the first half of 2007 to 3.5% in December 2007, and stood at 3.1% in both January and February<sup>2</sup> 2008. As in other countries, this increase can be mostly attributed to the surge in international energy and agricultural commodity prices. Whereas the increase in the price of crude oil was passed on to fuels very quickly, electricity and gas prices exhibit a delayed reaction. The increase in global prices of agricultural commodities fed through to the prices of dairy products and oils and fats more strongly than it did to bread and cereal product prices. Rates of inflation exceeding 5% were also recorded for clothing and footwear from September to December 2007.

The inflation expectations of consumers and professional forecasters for 12 months ahead have risen in light of this; however, professional forecasters generally agree that inflation will decrease to around 2% again in 2009. For the first half of 2008, the Oesterreichische Nationalbank (OeNB) expects the rate of inflation to remain above 3%. Yet by the end of 2008, inflation should slow down significantly to 2.3% as a result of the expected dissipation of the food price shock and the base effect of past energy price increases. On the whole, the OeNB expects the rate of inflation to average 2.8% in 2008.

Against this backdrop, the social partners and public policy bear an especially high responsibility: The parties involved in negotiating wage settlements in the coming fall wage round must rise to the challenge of preventing second-round effects. An intensification of competition and the elimination of quantitative agricultural production limits can slow price increases by limiting companies' price-setting power and/or increasing the supply of agricultural commodities. Given high capacity utilization, stimulating demand through fiscal policy would be detrimental to the goal of reducing inflation. The OeNB estimates that annual inflation in 2008 would be reduced by around  $\frac{1}{4}$  percentage point if all public fees were frozen at their 2007 level.

JEL classification: E31

Keywords: inflation in Austria, inflation expectations, administered prices.

## 1 Significant Increase in Inflation in Austria since the Fourth Quarter 2007

In December 2007, the rate of inflation in Austria as measured by the HICP<sup>3</sup> reached 3.5% – the highest monthly value since January 1993 – after having already climbed to values above 3% since November 2007. At

2.2%, annual inflation in 2007 was also markedly above the previous year's value of 1.7%. Rising energy and food prices, as well as the rising prices of nonenergy industrial goods – in particular clothing and footwear – were the key drivers of inflation (see the contribution of main components in chart 1). In contrast,

<sup>1</sup> The authors would like to thank Elisabeth Augustin, Ernst Glatzer, Wolfgang Harrer and Beate Resch for their excellent research assistance.

<sup>2</sup> The rate of inflation for Austria in February was published on March 14, 2008. In March 2008, it rose again to 3.5%. Owing to the editorial deadline of March 6, 2008, the rest of the article refers only to the development of inflation through January 2008.

<sup>3</sup> All inflation values cited in this article are based on the HICP. The HICP (instead of the national CPI) is used here, because, on the one hand, it is the relevant indicator for monetary policy in the euro area, and on the other hand, it is particularly suitable for international comparison owing to the harmonization in the method of calculation.

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Editorial close:  
March 6, 2008

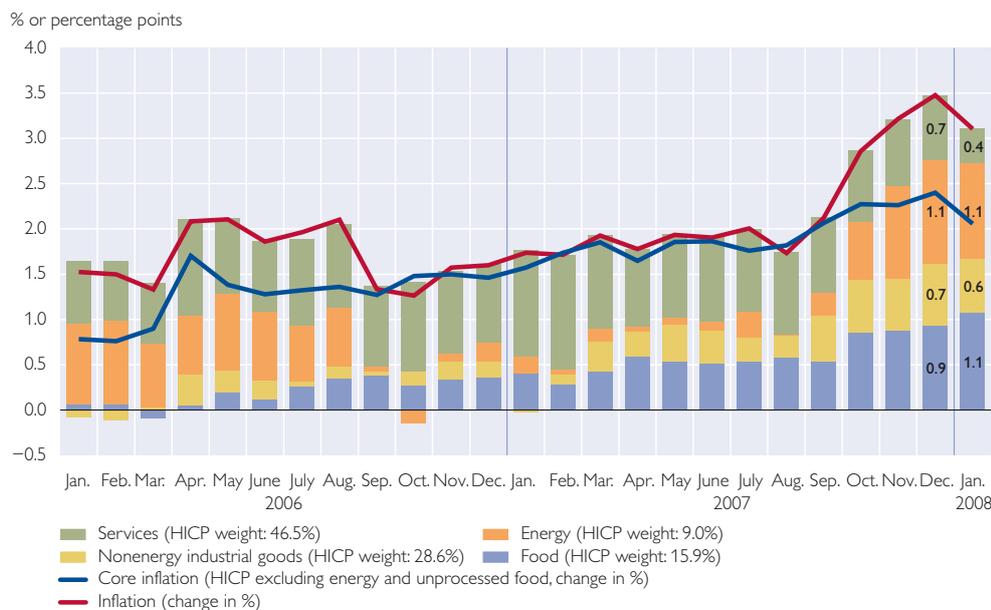
the rate of inflation in services decreased and was below average. In January 2008, the inflation dynamics once again slowed slightly. The rate of inflation fell to 3.1%; however, the inflation drivers of the preceding months – energy and food – continued to dominate (chart 1). The strong influence of energy and food on the rate of inflation in recent months is also evidenced by the fact that core inflation – the rate of inflation without energy and unprocessed food – rose considerably less than overall inflation after the third quarter 2007.

Nevertheless, not only were the dynamics of the increase in prices surprising, but also their extent. While the recent acceleration in inflation is a thoroughly international phenomenon, reflecting global price increases in energy (in particular

crude oil), commodities and food, the inflationary surge in Austria temporarily exceeded the average rate of inflation in the euro area (which was also accelerated), which is unusual for Austria.<sup>4</sup> After coming to 1.7% in August 2007 both at the Austrian and the euro area level, annual inflation started to accelerate in September 2007 both in Austria and in the euro area as a whole. The Austrian inflation rate exceeded that of the euro area from October to December 2007. In December 2007, this difference was particularly striking with 3.5% against 3.1% (chart 2). In particular, inflation accelerated at a faster pace in Austria than in Germany and Italy, Austria's most important trading partners. From September to December 2007, inflation was higher in Austria than in Italy; in October

Chart 1 Inflation Started to Accelerate in the Fourth Quarter of 2007

### HICP Inflation and Contributions by Main Components



Source: Statistics Austria; discrepancies may arise from rounding.

<sup>4</sup> The average rate of inflation since the beginning of 1999 is 1.7% for Austria and 2.1% for the euro area.

Chart 2 Inflation Surged as from the Fourth Quarter of 2007 on a Global Scale

## Harmonised Index of Consumer Prices



Source: Statistics Austria, Eurostat.

and December 2007 as well as January 2008, it was also higher than in Germany.<sup>5</sup> In January 2008, Austria's international position in inflation statistics improved; the Austrian value of 3.1% was once again just below that of the euro area (3.2%), but remained above that of Germany (2.9%), while it was on par with Italy's.

The difference in inflation developments between Austria and the euro area in December 2007 can be mainly explained by a stronger rise in the price of food (6.0% compared to 4.3%) and energy (14.0% compared to 9.2%) in Austria. The rate of inflation in Austria in December 2007 also exceeded that of the euro area in other expenditure categories, such as clothing and footwear (5.2% compared to 1.0%) and leisure and culture (1.6% compared to 0.1%). Food and energy prices in Austria also increased above average in January 2008 compared to the euro area

(food: 7.0% compared to 3.7%; energy: 13.0% compared to 10.6%). At the same time, Austria recorded a noticeably lower rate of inflation compared to the euro area in December and January with respect to services (1.5% compared to 2.5% in December and 0.8% compared to 2.5% in January).

The dynamic and above-average price increase – both historically and compared to the euro area – in recent months has set off a lively discussion in politics and the media regarding its causes and the appropriate response by Austrian economic policymakers. Numerous questions were raised: What share of current inflation can be attributed to international price shocks, and how much has been caused domestically? What are the causes of a domestically-triggered rise in prices? How great is the risk that a temporary increase in inflation will set off a wage and price spiral via increased price expectations and wage

<sup>5</sup> In comparing the rate of inflation to Germany, one must consider that Germany increased its VAT rate from 16% to 19% effective January 1, 2007.

demands? And what measures can national economic policy implement to stem the rise in prices?

This article is intended to support the formation of an opinion on the issue at hand through figures and facts, as well as through analyses of the causes of the increase in prices. First, the development of prices in those sectors most affected by rising prices will be examined in detail in section 2, elaborating on possible causes and transmission channels. If relevant, differences in the development of prices between Austria and the euro area, as well as the neighboring countries Germany and Italy, will be discussed. Section 3 examines to what extent second-round effects can already be observed or are to be expected. On the one hand, wage development will be observed; and on the other, an attempt will be made to obtain information regarding the development of inflation expectations

in Austria on the basis of two indicators previously rarely utilized in Austria. Building on the preceding sections, section 4 presents the OeNB's current inflation forecast. Section 5 summarizes and derives some conclusions.

## 2 Which Sectors Currently Exhibit the Strongest Inflation Dynamics?

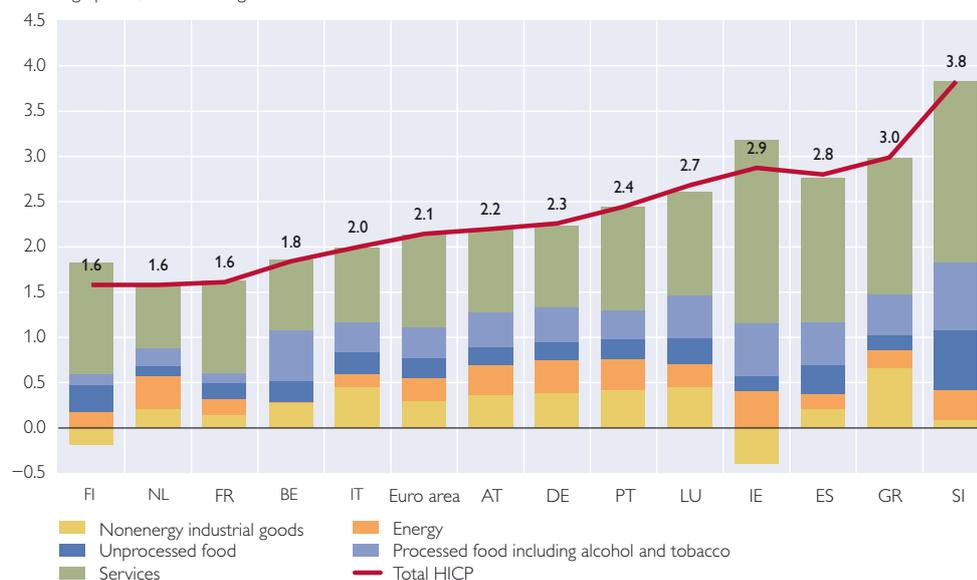
### 2.1 International Comparison of Inflation Developments: Energy and Food are the Main Price Drivers

The development of inflation in the individual euro area countries deviates considerably from the euro area average in some cases. The Netherlands, Finland and France were significantly below the average euro area annual rate of inflation of 2.1% in 2007. In contrast, Austria and Germany were slightly above it, while Spain, Greece and Slovenia were significantly above it (chart 3).

Chart 3 Energy and Food Prices Drove Up Inflation across the Euro Area

#### Contributions to HICP Inflation from Main Components by Country

Percentage points, annual average for 2007



Source: Eurostat.

A breakdown of annual inflation in 2007 into its main components<sup>6</sup> shows a surprisingly strong contribution from energy in Austria, Germany, Ireland and the Netherlands (chart 3). Despite the low weight of this component, it has a considerable effect on the respective HICP of nearly all countries in the euro area. In addition, Austria, Spain, Finland and Slovenia recorded a comparably high inflation contribution on the part of unprocessed food. The contribution of processed food was even more important for Austria's inflation dynamics than the contribution of unprocessed food, and was above the euro area average also in Belgium, Germany, Luxembourg, Ireland and Slovenia. Finally, the inflation contribution of nonenergy industrial goods also exceeded the euro area average in 2007 in the case of Austria, reflecting above all the comparably strong increase in clothing and footwear prices in the last four months of the year.

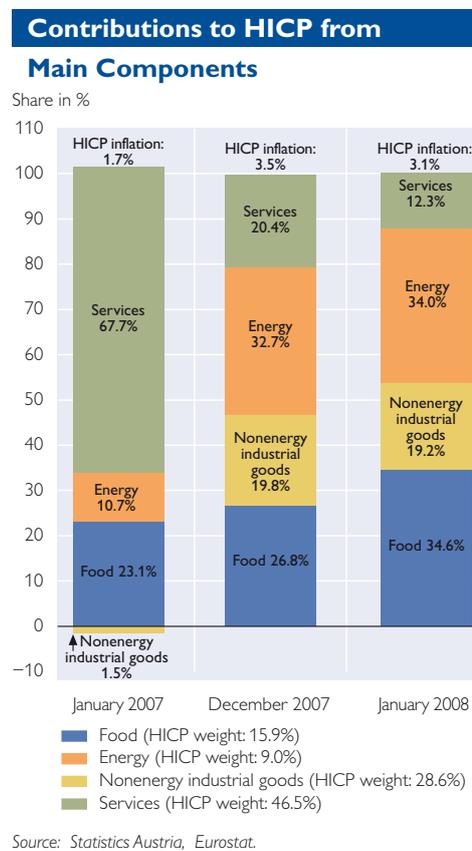
## 2.2 The Main Inflation Drivers Shifted in Austria in the Course of 2007

The inflation contributions of the main individual components varied significantly during the course of 2007. From January to September 2007, price changes in services (see inflation contribution in chart 4) contributed the most to previously moderate inflation. Price changes in this component strongly affected overall inflation given their weight of 47.4% in the HICP. The rate of inflation for services was relatively stable in recent years, averaging 2.2% since 1999. This can be explained above all by

moderate wage policies in Austria. Since services are labor-intensive, the development of labor costs is largely determined by the rate of inflation in services.

The inflation contribution of energy, which was still quite low in January 2007, increased significantly up to January 2008. In January 2007, no inflation pressures were forthcoming from nonenergy industrial goods, whereas those pressures were strong in January 2008. As previously mentioned, the above-average hike in clothing and footwear prices was responsible for this. The inflation contribution of food increased from

Chart 4 Main Drivers of Inflation Varied during 2007



<sup>6</sup> A definition of the five main components which this article repeatedly refers to (i.e. unprocessed food, processed food, nonenergy industrial goods, energy, and services) can be found in the annex.

23% in January 2007 to 35% in January 2008 and thus consistently drove inflation despite its rather small weight of 15.5%. In the past, price changes in food always had a strong effect on HICP inflation in the case of supply-side shocks – for instance, the BSE crisis or periods of drought. The most recent increases in this component have been driven not only by the supply side, but by the demand side as well (droughts in important cereal-exporting countries, rising global demand).

### 2.3 Energy Prices – A Primary Driving Force for Inflation Acceleration

In 2007, the price of crude oil rose considerably – with a short interruption in the third quarter. The price of crude oil rose from just below 60 USD/barrel at the beginning of 2007 to more than 90 USD/barrel at the end of the year. This signifies an annual increase of nearly 60%.<sup>7</sup> When calculated in euro, this increase was, however, considerably lower owing to the appreciation of the euro.

As can be seen in chart 5, the price of crude oil (Brent, traded in Rotterdam) has been generally rising with increasing volatility since 2004. Rising crude oil prices have a strong influence on prices of the energy component (chart 6). Therefore, it is no surprise that the price of oil essentially determined the development of inflation in Austria between the second quarter of 2004 and the third quarter of 2006. The rate of inflation for energy was just over 16% year-on-year in September 2005. From September 2006 to the beginning of 2007, the price of oil generally fell. Thus, the inflation contribution of energy was relatively low and was even negative in October 2006. However, with the surge in crude oil prices since the beginning of 2007, the rate of energy price inflation accelerated in Austria once again to 14% by the end of the year.

#### *Transmission of Crude Oil Price Shocks to Different Sources of Energy Varies*

The transmission of changes in the price of crude oil to the individual

Chart 5 Crude Oil Prices Reached Record Highs, but EUR/USD Exchange Rate Dampened Price Shocks in the Euro Area

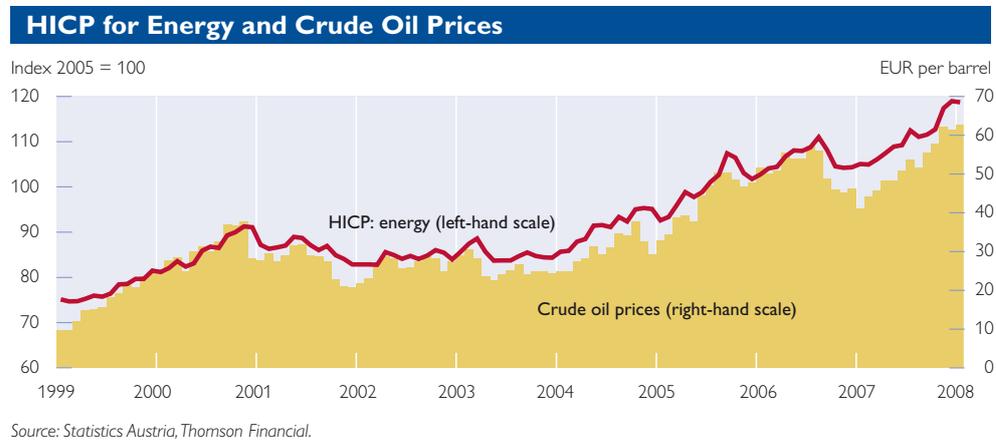
#### Development of Brent Crude Oil Prices in Spot Markets



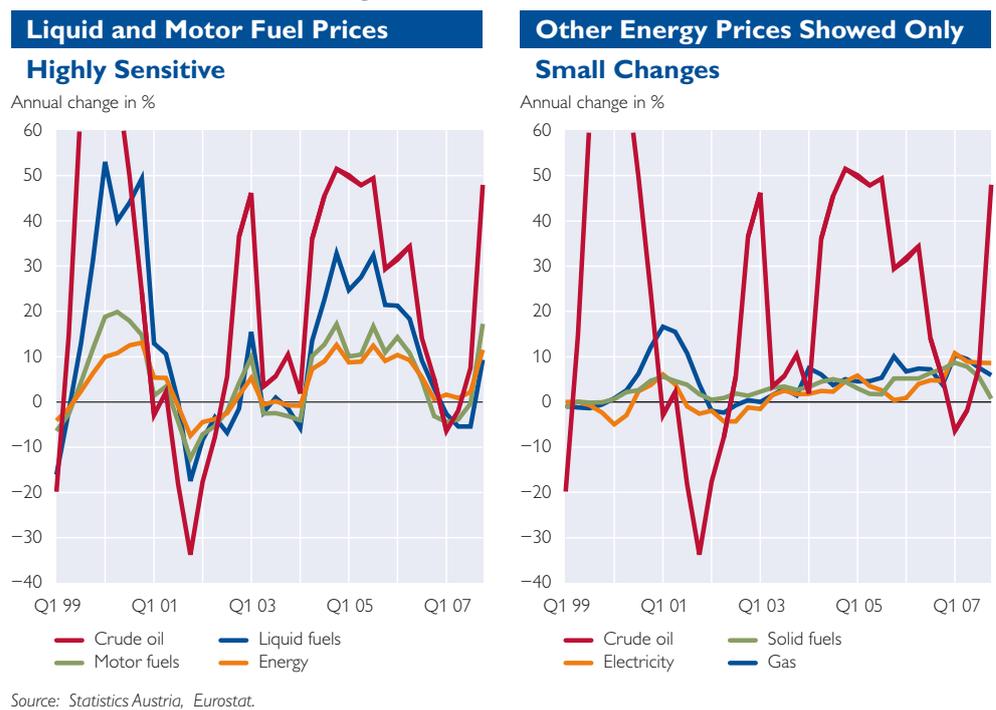
Source: Thomson Financial.

<sup>7</sup> The price of crude oil was around 100 USD/barrel at the end of February 2008.

**Chart 6** Consumer Price Index for Energy Highly Correlated with Developments in Crude Oil Prices



**Chart 7** Prices for Various Energy Sources Reacted Differently to Changes in Crude Oil Prices



sources of energy varies in terms of speed as well as intensity. Liquid fuel and motor fuel prices exhibit the strongest and quickest reaction to changes in crude oil prices (chart 7).

Crude oil price shocks produce the strongest price reaction in liquid fuels (heating oil) and motor fuels with a maximum time lag of one month.<sup>8</sup> The price dynamics of the expendi-

<sup>8</sup> The transmission speed of crude oil price shocks to the individual sources of energy was taken from Arpa et al. (2006).

ture category fuels for private passenger transportation were one of the reasons for the strong increase in the Austrian rate of inflation since November 2007. Fuel was 20% more expensive year-on-year at the end of 2007 and in January 2008. As a result of the lower domestic fuel prices at the end of 2006 and beginning of 2007, a base effect occurred which will also be apparent in the following months, so that high annual rates of inflation with regard to fuel prices can continue to be expected. The same applies to liquid fuels.

The strongest reaction with respect to gas and electricity is likely to occur with a delay of around one year or more (see footnote 7) and will be significantly weaker than is the case with liquid fuels and motor fuels. Accordingly, the high rates of annual inflation in 2007 with respect to electricity and gas (between 7.9% and 11.4% for electricity, and between 4.3% and 10.7% for gas) do not (yet) reflect the increase in the price of crude oil over the course of 2007. These high values can be explained above all by price increases on the part of most suppliers in the period from December 2006 to February 2007. In January 2008, the rate of inflation for electricity and gas declined significantly (despite the minor upward adjustment in prices for electricity and natural gas in some regions, according to data from E-Control). This was the result of the base effect of the strong price increases at the beginning of 2007.

#### *Energy Price Dynamics in Austria and the Euro Area Differ*

The difference between the rates of inflation with respect to energy in Austria (14.0%) and the euro area (9.2%) was 4.8 percentage points. The inflation gap also remained high in January 2008 at 2.4 percentage points (Austria: 13.0%; euro area: 10.6%). The development in energy inflation began to drift apart in October 2007, before which the rates of inflation were approximately equal. There was an inflation gap between Austria and the euro area above all with respect to motor fuels (January 2008: Austria, 23.6%; euro area, 15.0%). One explanation for this difference is, among other things, the increase in petroleum tax in Austria in July 2007, which raised the rate of inflation with respect to motor fuels by 6.2 percentage points after July 2007. Thus, the increase in the petroleum tax in Austria explains a large part of the motor fuel inflation gap vis-à-vis the euro area observed in December 2007 and January 2008.<sup>9</sup>

In 2007, the rates of inflation with respect to electricity and gas in Austria were also higher than in the euro area. Price increases by some Austrian energy providers at the beginning of 2007 (in Vienna, an increase of 6.5% in electricity prices and 5.3% in gas prices effective January 2007) contributed to this. The rate of inflation with respect to electricity in Austria was between 7.9% and 11.4% and thus was up to 6.1 percentage points above the euro

<sup>9</sup> The petroleum tax effect has been observable since July 2007. The difference in the rates of motor fuel inflation between Austria and the euro area was greater than 6.2 percentage points in January 2008 and December 2007 and less than 6.2 percentage points from July until November 2007. This means that motor fuel inflation in Austria, adjusted for the petroleum tax increase for diesel and gasoline, was greater than in the euro area in January 2008 and December 2007, and less than in the euro area from July 2007 until November 2007.

area average. Inflation with respect to gas fluctuated between 4.3% and 10.7% in Austria in 2007 and was thus up to 8.7 percentage points above the euro area average. At the beginning of 2008, the price increase of the preceding year caused a base effect and contributed to the fact that inflation with respect to these sources of energy in Austria (electricity: 1.0%; gas: -0.8%) was below the euro area average (electricity: 3.3%; gas: 2.4%).

#### *Indirect Effects of Energy Inflation on Other Sectors*

Since fossil energy sources are used in the production of many goods and services, as well as for the transportation of most goods, the increase in the price of crude oil also affected the prices of many other goods and services with a certain time lag. Simulations with the OeNB's inflation forecast model show that a 10% increase

in the crude oil price in U.S. dollars raises inflation up to 12 months after the shock by a total of 0.17 percentage points. The indirect effects on other HICP components begins to unfold around four months after the shock and amounts to between 20% and 30% of the overall effect.

An indirect effect of motor fuel inflation can be presumed in particular with respect to services associated with transportation, such as public passenger transport, air travel, and package tours. In fact, the rate of inflation in public rail transportation was a constant 1.5% after March 2007 and did not start to increase slightly until December 2007 (3.1%) and January 2008 (2.6%). Nonrail public transportation even recorded slightly decreasing rates of inflation from the third quarter 2007 onward (December 2007: 1.7%; January 2008: 0.8%). The rate of inflation for air travel even declined strongly in

Chart 8 Direct and Indirect Impact of Crude Oil Price Increase

#### Simulated Effects of a 10% Rise in Crude Oil Prices



recent months with values between –29.4% and –38.4%. This, however, would appear to reflect above all industry-specific alterations in price data collection and the current market situation. A moderate increase in the rate of inflation was observable with respect to package tours in the fourth quarter 2007 from around 0% to 3%, which may reflect increased transportation costs (however, in January 2008, inflation in this service fell again to 0.8%). Overall, no indirect effects of crude oil inflation can be observed in the price data for transportation services (with the exception of package tours).

In summary, the indirect effects of energy inflation on other HICP components which can be expected on the basis of simulations using the OeNB forecast model cannot (yet) be ascertained in either the data or on the basis of available information.

#### **2.4 High Food Price Inflation: International or Domestic Causes?**

During the course of 2007, the prices of some basic foodstuffs<sup>10</sup> – above all cereals and milk – rose sharply on world and EU markets. The world food price index of agricultural commodities (wheat, sugar, milk, etc.) has accelerated sharply since the fourth quarter 2006 (chart 9). The surge in prices was caused both by increased demand and drought-related shortages in supply. Without a doubt, global price increases in agricultural commodities also drove up

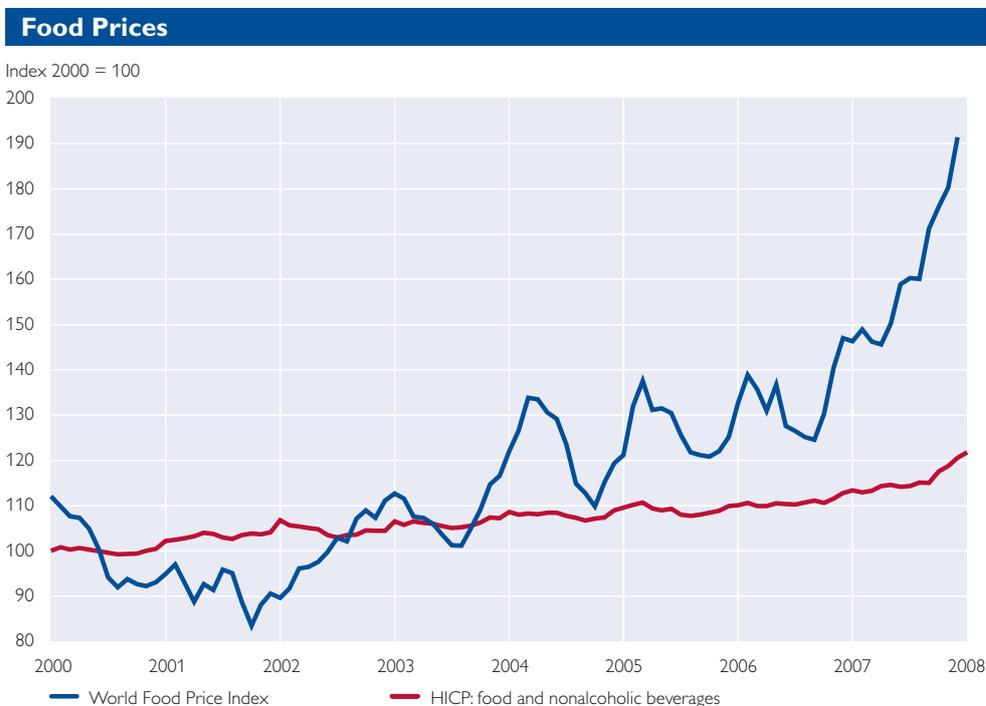
consumer prices via food production costs. The rate of inflation of the food component climbed from 3.5% in September to 7.0% by December 2007. In January 2008 – as in 2007 as a whole – food price inflation (including nonalcoholic beverages) in Austria accelerated further to 7.5% and thus exceeded the euro area average (January 2008: 5.4%). In this respect the question arises as to how much of the increase in food prices can be attributed to the development of world commodity prices and/or whether domestic production and competition factors supported the increase in prices or hindered a slow-down.

The expenditure categories most affected by the increase in world commodity prices are milk, cheese and eggs; bread and cereal products; as well as oils and fats (e.g. butter, margarine, vegetable oil). The consumer prices of these products are comprised of the agricultural production value (producer component) plus the margin (value added in the form of transportation, energy, storage, processing and capital costs). Thus, producer proceeds (the agricultural production value) amount to around 2.6%<sup>11</sup> of consumer expenditure for bread and cereal products, and the previously defined margin amounts to 97.4%. For example, if the price of cereal were to increase by 100% and was completely passed on to the consumer via the first stage of production, consumer prices for bread and cereal products would increase by

<sup>10</sup> *The rising prices of fruit and vegetables observable in recent months have also contributed considerably to the increase in the rate of inflation. The current price development of these expenditure categories is highly subject to seasonal fluctuations and cannot be attributed to global developments on the agricultural commodity markets. Owing to the high volatility of price developments in the seasonal agricultural products segment, the inflation rate for these expenditure categories is likely to decline again in the coming months.*

<sup>11</sup> See Sinabell (2005).

Chart 9 World Commodity Prices<sup>1</sup> Sole Drivers of the Food Price Boom in Austria?



Source: Bloomberg, Eurostat.

<sup>1</sup> Based on the world food price index of agricultural commodities, which reflects prices for internationally traded foodstuffs paid on benchmark commodity markets.

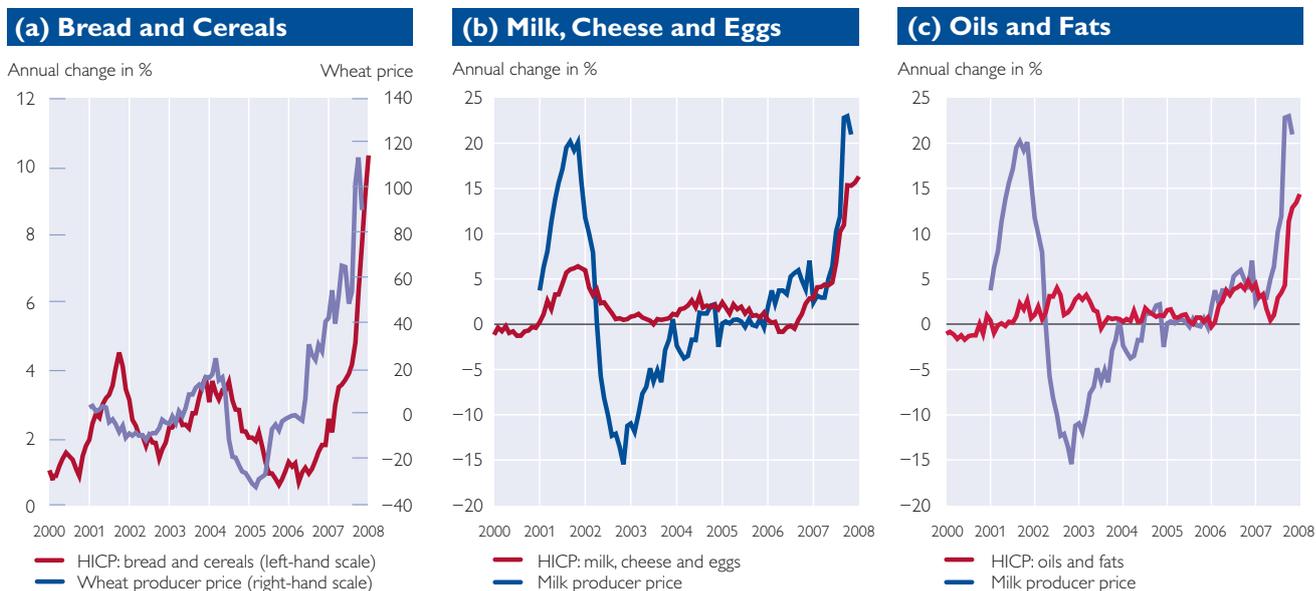
2.6% (assuming that the margin remains unchanged). A rise in consumer prices of more than 2.6% would, therefore, suggest an increase in the margin, whereas an increase of less than 2.6% would indicate an incomplete transfer of the input price increase to the consumer.

The producer price of wheat rose sharply in the second half of 2007 – much greater proportionally than the consumer prices of bread and cereal products (chart 9a). However, considering the low producer component of cereals, the sharp rise in consumer prices can only be partially explained by the strong increase in producer prices. A complete transfer of producer prices to the consumer would have meant an increase in consumer prices for bread and cereal products of slightly more than 2 percentage

points in 2007. In fact, consumer prices for this expenditure category increased by more than twice this amount. Thus, the margin must have gone up as well.

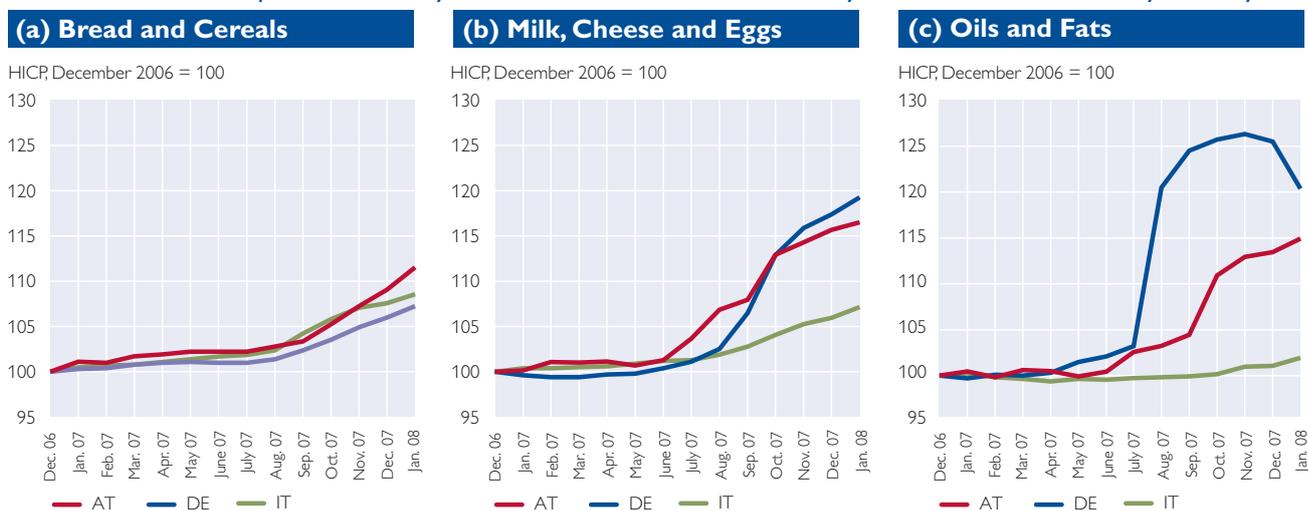
At around 44%, the producer component of milk, cheese and eggs as well as of oils and fats is significantly greater than the producer component of bread and cereal products. Therefore, changes in producer prices have a stronger effect on the associated consumer prices (charts 9b and 9c show the close correlation between producer and consumer prices in these expenditure categories). Presuming a producer component of around 44%, the increase in consumer prices observed in 2007 in the expenditure category milk, cheese and eggs cannot be entirely attributed to the increase in the producer price

Chart 9a to c Changes in Producer Prices and Consumer Prices for Important Foodstuffs



Source: Statistics Austria.

Chart 10a to c Expenditure on Key Processed Food Products – Price Dynamics in Austria, Germany and Italy<sup>1</sup>



Source: Eurostat.

<sup>1</sup> These index figures merely reflect price changes during the year but do not give any indication of price levels, as the index is based on the figure for December 2006 (= 100).

of milk.<sup>12</sup> In contrast, the increase in the consumer price of oils and fats is fully attributable to the producer price development.

The overall result is that the increase in the world food price index of agricultural commodities can entirely explain the price increase in the expenditure category oils and fats. In the case of bread and cereal products as well as in the case of milk, cheese and eggs, however, there seem to have been additional mark-ups in downstream production stages.

The analysis above regarding the development of the producer component and margins is subject to high uncertainty. Still, it cannot be ruled out that the increase in food prices in Austria is to some extent a domestically-created problem.

As mentioned at the beginning of section 2.3, food inflation in Austria even exceeded the euro area average. If price developments in Austria with regard to milk, cheese and eggs are compared with respective developments in Germany and Italy, it can be seen that the price increase in Austria and Germany was significantly stronger than in Italy (and most recently in Germany even greater than in Austria). The dynamics of bread and cereal products were nearly the same in all three countries. In contrast, the respective price changes for oils and fats are diverging considerably (charts 10a to c).

### **2.5 Are Administered Prices and Indirect Taxes Driving Prices?**

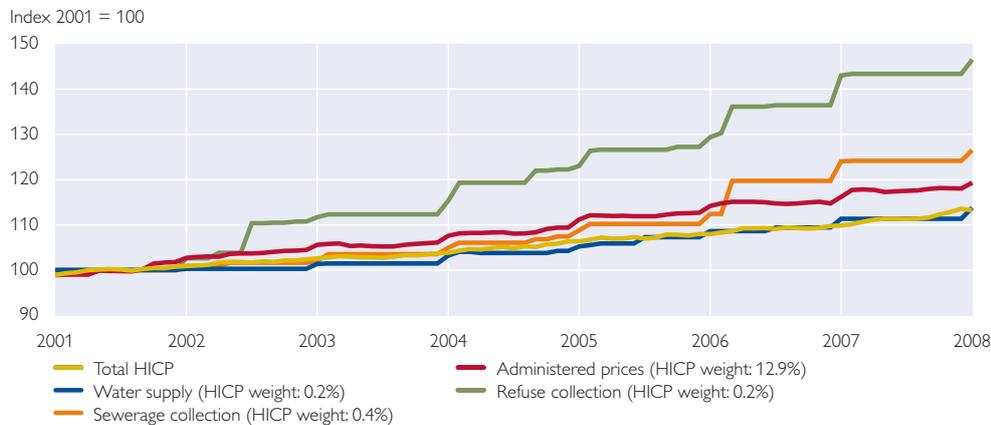
Administered prices are prices that are either directly or indirectly influenced by regional authorities (federal,

regional or local governments). This includes all public fees established by regional authorities (for instance, passport fee, parking fee, trash pickup fee), but also public services such as health, transportation, postal and public leisure services (such as theaters and museums). The goods and services affected by administered prices have a total HICP weight of 12.9%. Chart 11 shows the price development of some selected administered prices since 2001. Some administered prices, such as the fees for refuse and sewerage collection, have evidently increased more than average, yet the overall dynamics of administered prices do not significantly exceed the HICP increase. The rate of inflation of the subindex of administered prices and fees amounted to 2.4% overall for 2007 (i.e. slightly above average compared to overall inflation of 2.2%) and 2.7% in January 2008 (i.e. below average compared to January's overall rate of inflation of 3.1%). The rate of inflation for refuse collection amounted to 6%, while it was 4.7% for sewerage collection in 2007. The contribution of administered prices to overall inflation fluctuated between 0.49 percentage points (2002) and 0.28 percentage points (2006) since the beginning of this time series in 2001. In 2007, administered prices provided an inflation contribution of 0.31 percentage points to headline inflation, and 0.34 percentage points in January 2008. The increase in the petroleum tax as of July 2007 added around 0.1 percentage points to the annual inflation rate for 2007.

<sup>12</sup> *Despite relatively high world commodity prices, Austrian farmers expanded milk production just slightly in 2007. For example, the increase in the production of milk in the first eight months of 2007 in Germany was 2.0%, while it was only 0.1% in Austria (European Commission, 2007). Without the milk quota, Austrian milk producers would have been able to supply 17% more milk at the prices given in the first half of 2007 (Federal Ministry of Agriculture, Forestry, Environment and Water Management, 2007).*

Chart 11 Administered Prices as Inflation Drivers?

## Changes in Prices for Selected Administered Prices



Since the rate of inflation for administered prices in 2007 was around the same level as overall inflation, administered prices can be regarded neither as driving inflation, nor as slowing it – at least in 2007.

In the public debate, freezing all public fees has been suggested as a way to fight inflation.<sup>13</sup> If all public fees were frozen at their 2007 level in 2008, this would slow the rate of annual inflation in 2008 by between 0.2 percentage points (using the OeNB's weight and assuming that fees would increase in sync with headline inflation) and 0.3 percentage points (using the weight of Statistics Austria weight and assuming that fees would rise faster than headline inflation).

## 2.6 Above-Average Inflation for Clothing and Footwear

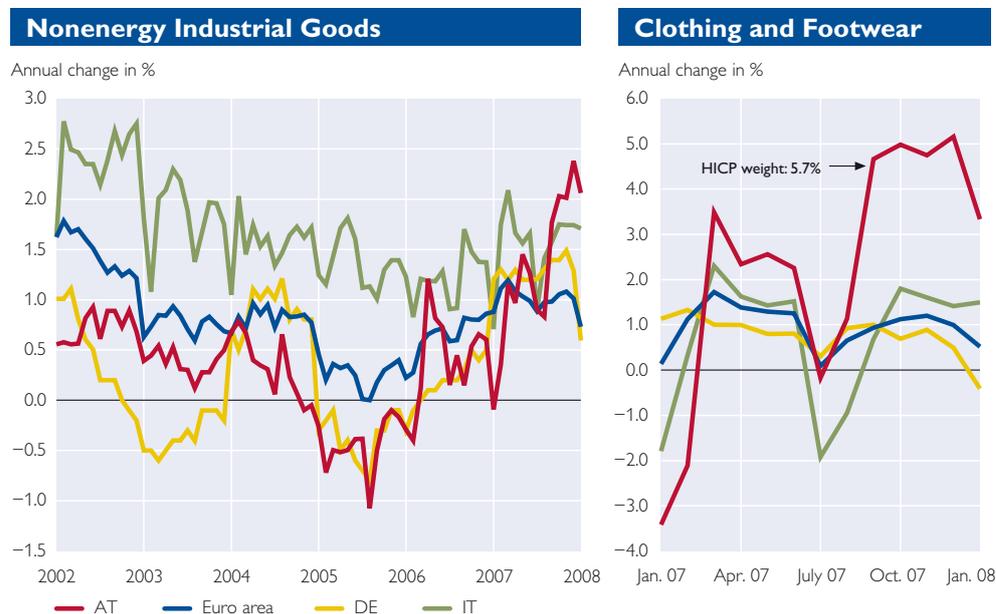
The development of inflation for clothing and footwear has deviated

significantly from that of the euro area since September 2007 (chart 12). Since then, clothing and footwear inflation increased to 5.2% in December in Austria, which is a historical peak since the beginning of the HICP time series in 1988 and based on a rate of 4.9% for clothing and 6.8% for footwear. In January 2008, the combined rate of inflation for clothing and footwear in Austria fell to 3.3%, but it is still significantly above the value of 0.5% for the entire euro area.

So far, there is no sufficient explanation for this increase. According to the clothing industry association, there is no upward pressure being exerted on consumer prices by either the clothing industry, the leather-working industry, or from imports in recent months. This is also confirmed by the comparison of the development of the HICP subindex for clothing

<sup>13</sup> As mentioned, public fees only represent a portion of administered prices. Statistics Austria uses a weight of 9.1% for fees in its HICP product mix. In contrast, the OeNB arrived at a weight of 7.1% when limiting fees to the subgroup of all administered prices that are directly set by government bodies, i.e. prices that are fully administered. In order to calculate the effect of a freeze in fees, an assumption must also be made regarding the price development of fees in 2008. According to Statistics Austria, the rate of inflation of fees in 2007 was 2.6% and thus somewhat above average. At 2.5%, the rate of inflation of fully-administered prices (OeNB delimitation) was slightly above average as well. Therefore, it can be assumed that fees will continue to rise slightly above average in 2008, namely by 2.8%.

Chart 12 Comparatively Sharp Increase in Nonenergy Industrial Goods Prices in Austria



Source: Eurostat.

and the subcomponent textiles and clothing of the producer price index.

According to the clothing industry association, import prices have generally fallen since the expiration of import quotas from China at the end of 2007. According to Statistics Austria, even a shift in seasonality (for instance, when clearance sale periods begin or end earlier or later as a result of demand considerations) cannot be the reason for the upward development in recent months, since it has continued unabated since September 2007. According to Statistics Austria, since the methods for collecting clothing prices have not been adjusted in recent months, statistical or survey-related reasons for the observed development can be eliminated. Even an occasionally presumed transfer of increased transportation costs as a result of rising fuel prices cannot be the primary reason for the increase, since such an effect would have to affect all euro area countries similarly.

### 3 Are Second-Round Effects to be Expected?

#### 3.1 The Role of Inflation Expectations in Price and Wage Setting

International price effects are transferred to domestic consumer prices in multiple stages. As analyzed in section 2, world commodity prices have a *direct* influence on consumer price inflation. This direct effect on Austrian inflation depends above all on the share of commodities in the overall HICP. Rising commodity prices, however, also raise the production costs of goods for which these raw materials are input factors. The *indirect* effects caused by this transmission channel may be fully or partially passed on to the consumer, or not at all – depending on the degree of competition on the product markets. Direct and indirect effects collectively form the *first-round effects*.

In contrast, additional upward pressures on consumer prices, in-

duced by higher wage agreements and increasing inflation expectations<sup>14</sup> on the part of market participants are known as *second-round effects*. Wage negotiations and inflation expectations can interact in such a way that they set a wage-price spiral in motion. That is, increased past and/or expected inflation results in higher nominal wage settlements. This, in turn, increases production costs. In order to hold the profit margin constant, businesses raise prices, etc.

However, independent of actual wage increases, retail price increases can also be induced by mere expectations of future wage and/or price increases. For example, expected wage increases reduce the expected profit margin and suggest anticipatory price increases in order to maintain the profit margin, if the competitive environment permits such a move. This can be an expression of increased risk regarding future profit margin development in an environment of increased inflation and regarded as a “risk premium.” In particular in the case of weak competition, however, it is conceivable that businesses deliberately try to increase their profit margins, if only temporarily, by taking

advantage of the fact that increased inflation blurs the signal function of relative prices.

### 3.2 Second-Round Effects with Regard to Wage Agreements in Austria?

As will be shown below, wage growth accelerated significantly at the beginning of 2008. But is this an indication of second-round effects? The question regarding the existence of such effects in relation to wage developments cannot be thoroughly discussed and answered at this time. This article, for example, cannot answer whether these recent wage increases have already had repercussions on consumer prices.<sup>15</sup> However, an attempt is made to determine whether the higher wage growth is a reaction to the higher rates of inflation in recent months (and therefore to increased price expectations).

With a view to assessing recent wage developments, let us look at the annual changes in the index of agreed minimum wages (“Tariflohnindex”). This index is published monthly with comparatively little delay and thus represents the most recent information regarding current wage developments.<sup>16</sup>

<sup>14</sup> From the point of view of economic theory, such a connection is postulated in the New-Keynesian Phillips curve. The majority of empirical estimates of these relationships shows a significant and rising effect of expected inflation for euro area countries including Austria in recent years (see e.g. Rumler, 2007). The results, however, vary according to the estimation method. Generally, the lower the rate of inflation – and thus the inflation persistence – the larger the role played by expected inflation for those countries and periods.

<sup>15</sup> More thorough studies would be necessary for this, such as company surveys or detailed industry studies.

<sup>16</sup> One could raise the objection that collective wage settlements (= developments of industry-specific minimum wages) are hardly relevant for the evolution of actual labor costs, because many employees receive wages and salaries which exceed the collectively negotiated minimum wages. However, the growth of standard wages is, indeed, a good indicator for the growth of labor costs. Some industries also negotiate “actual wage” increases, which in fact broadly reflect the rise in minimum wages. At the same time, the growth of collectively negotiated wages is highly correlated with the growth of actual labor costs, according to national accounts data (compensation per employee); i.e. the “wage drift” is generally low in Austria. An additional objection would be that it would make more sense to discuss changes in nominal unit wage costs rather than changes in nominal wages, since the former are more relevant for the inflation pressure induced by wages. However, current productivity ratios are necessary for the calculation of unit wage costs. These were only available until the third quarter 2007 at the time of editorial close.

Until the end of 2007, the aggregate data reflected hardly any increases in wage growth. This is related to the time pattern that characterizes the collective negotiation of wage agreements: In Austria, collective agreements are typically concluded for one year in line with a staggered schedule – agreements expire or new ones take effect virtually every month. At the same time, the effective date of most collective agreements is highly concentrated on three months: More than 15% of all collective agreement wage changes (above all in the metal industry and other export-

oriented industries, whose wages are renegotiated in the “fall wage rounds”) take effect in November, 50% in January (e.g. trade, civil service, and many small sectors), and 15% in May (above all construction and restaurants). The remaining collective agreement changes occur in other months.<sup>17</sup>

Table 1 shows selected collective agreements concluded in November 2007 or January or February 2008. It can be seen that the current wage increases tend to be noticeably higher than those concluded in the previous year.

Table 1

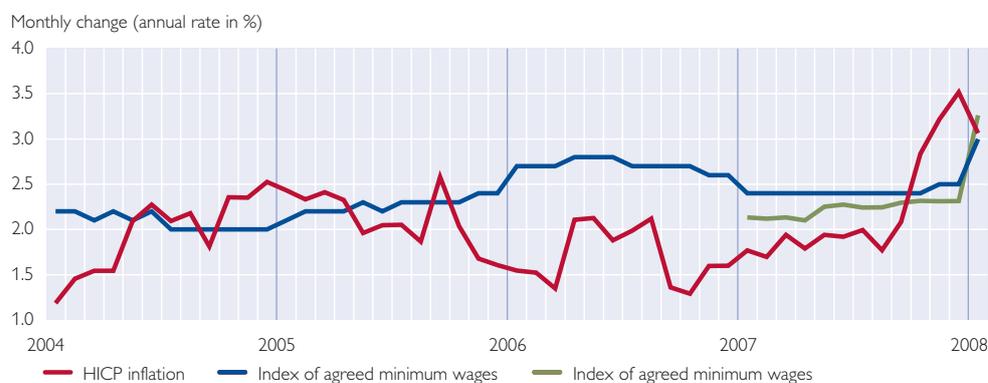
### Selected Collective Wage Agreements Implemented or Adopted since November 2007

%	Collective wage agreement effective since	Agreed wage increase	Previous-year increase	
	Metal industry	November 2007	+3.6	+2.6
	Stone and ceramics industry	November 2007	+3.0	+3.0
	Wholesale/retail trade	January 2008	+3.1	+2.35
	Public sector employees	January 2008	+3.3	+2.35
	Telekom Austria	January 2008	+3.1	+2.2
	Freight industry (blue-collar workers)	January 2008	+3.3	+3.0
	Refined petroleum industry	February 2008	+3.9	+2.6

Source: Austrian Trade Union Federation.

### Chart 13 Second-Round Effects in Wage Settlements?

#### Collectively Agreed Wages and Inflation in Austria



Source: OeNB.

<sup>17</sup> See Knell and Stiglbauer (2008).

These higher wage settlements are reflected in the erratic increase in annual minimum wage growth rates to values of around 3% or slightly higher in January 2008 (chart 13).<sup>18</sup> In contrast, further significant acceleration of wage growth is not expected until fall 2008, since approximately two-thirds of the aggregated wage changes in the current wage round (from November 2007 until October 2008) were locked in in January.

Are these higher wage increases a reaction to the higher inflation rates observable since fall 2007? There are many reasons to the contrary: On the one hand, it was not yet foreseeable at the beginning of the latest wage round, in October 2007, that the rate of inflation would increase so much.<sup>19</sup> Since the metal sector tends to set the tone for subsequent pay deals (“wage leadership”), the estimates from fall 2007 are more likely to have influenced current agreements than the most recent inflation figures.<sup>20</sup> If it was not inflation, what is the reason for higher wage growth? The consensus opinion of economic researchers is that the extremely dynamic economic and employment growth in 2007, as well as efforts not to let the wage share of GDP fall any further have been the key drivers. In the first case, businesses are already exhibiting higher profit margins, and in the second case, they are forgoing price increases in order to hold their profit margins constant following the wage

agreements. From this perspective, there is thus no significant evidence for the existence of second-round effects in the wage negotiations.

In international comparison, the risk that the increase in inflation forecast for 2008 will lead to permanently higher wage growth is comparatively smaller than in other countries given the dynamics of the Austrian wage negotiation system. In contrast to some other countries, wage increases are not (automatically) indexed to inflation in Austria. Furthermore, the one-year duration of the agreements is relatively short. The high coordination of wage agreements through the system of wage leadership offers a good basis for avoiding wage-price spirals. Hence, the social partners have great responsibility in the coming wage round.

### 3.3 Consumers More Pessimistic about Inflation Outlook than Professional Forecasters

As illustrated, second-round effects can be induced by an increase in inflation expectations, among other things. Owing to a lack of data regarding long-term inflation expectations in Austria,<sup>21</sup> indicators for short-term inflation expectations with a time horizon of one year, or for the next calendar year will be observed below. On the one hand, we use monthly Consensus Economics data to construct a series reflecting professional forecasters’ inflation expect-

<sup>18</sup> The annual growth rate of the index of agreed minimum wages 1986 increased in January 2008 compared to December 2007 from 2.5% to 3.0%. With respect to the new index of agreed minimum wages 2006, there was even an increase from 2.3% to 3.3%.

<sup>19</sup> Thus, for example, the inflation forecast of WIFO for 2008, which is particularly important for the collective agreement negotiations, was not revised upward (from 2.0% to 2.6%) until December 2007.

<sup>20</sup> There is also empirical evidence for the wage leadership of the metal sector (Knell and Stiglbauer, 2008).

<sup>21</sup> In contrast to the euro area, there are no data on long-term inflation expectations (time horizon of five or ten years), as can be calculated for instance from inflation-indexed bonds or collected in the euro area’s Survey of Professional Forecasters.

tations for the 12 months ahead and for the next calendar year.<sup>22</sup> On the other hand, we use the Consumer Confidence Barometer, which is also collected monthly, to derive the inflation rates expected by Austrian consumers in the 12 months ahead.

The Consensus Forecasts can be used to derive monthly annualized inflation forecasts for the current year and the following year. In the following, we therefore calculate 12-month-ahead inflation expectations in order to generate a data series that is comparable with the inflation expectations reflected in the Consumer Confidence Barometer.<sup>23</sup> In the entire period examined since 1999, these short-term inflation expectations are relatively smooth over time, a pattern that is fairly typical for expert forecasts (chart 14). Increases in the actual rate of inflation were accompanied by moderate parallel adjustments in short-term expectations of future inflation developments. The sharp increase to 2.8% in professional forecasters' most recent inflation expectations in the 12 months ahead (based on Consensus data for February 2008) is striking – it lies around three-quarters of a percentage point above the highest expert expectations since 1999.

Changes in these very short-term inflation expectations of professional

forecasters can, of course, partly be attributed to the fact that inflation shocks continue to have a direct effect on the rate of inflation for a period of 12 months, as the rate of inflation is by definition calculated as the year-on-year change in the price level. In order to be able to estimate whether inflation has temporarily or permanently increased in the expectations of professional forecasters, it appears advisable to also observe the annual rate of inflation for the coming calendar year.<sup>24</sup> This series shows that so far professional forecasters regard the current increase in inflation as predominantly temporary, because with 2.1% in February 2008, their inflation expectations for 2009 were only slightly above the average since 1999.

The survey for the Consumer Confidence Barometer, which is conducted monthly for the European Commission in all EU member states, contains questions regarding the perceived rate of inflation as well as the rate of inflation expected in 12 months. Based on the answers, it is possible to calculate an “expected inflation” series that is comparable with the traditional concept of inflation rates – under a number of assumptions.<sup>25</sup>

The inflation expected 12 months ahead collected in this manner has generally increased since 1999. More-

<sup>22</sup> An explanation of the collection method of Consensus Economics can be found at [www.consensuseconomics.com/what\\_are\\_consensus\\_forecasts.htm](http://www.consensuseconomics.com/what_are_consensus_forecasts.htm)

<sup>23</sup> A proxy variable is constructed which reflects a weighted average of annual forecast values for the current and following year. The weight of the forecast for the current year is the number of months from the forecast month until the end of the year divided by 12; the weight of the following year for the forecast is one minus the weight of the current year.

<sup>24</sup> Depending on the timing of the Consensus survey, the annual inflation rate for the next calendar year covers a more or less distant time horizon. In January of any given year, the expected rate of inflation for the coming calendar year is 11 months further away than in December of the same year. This – analytically unsatisfactory – characteristic of such a series as “Consensus forecasts for the next calendar year” is, however, acceptable in order to at least obtain an approximate estimate of the professional forecasters' inflation expectations beyond the 12-month horizon.

<sup>25</sup> Please refer to Berk (1999) for more information on the calculation of perceived inflation. The estimation of inflation expectations follows the same method. Naturally, all limitations arising from the potential influence of the order and design of questions on response behavior also apply to both of these derived inflation values.

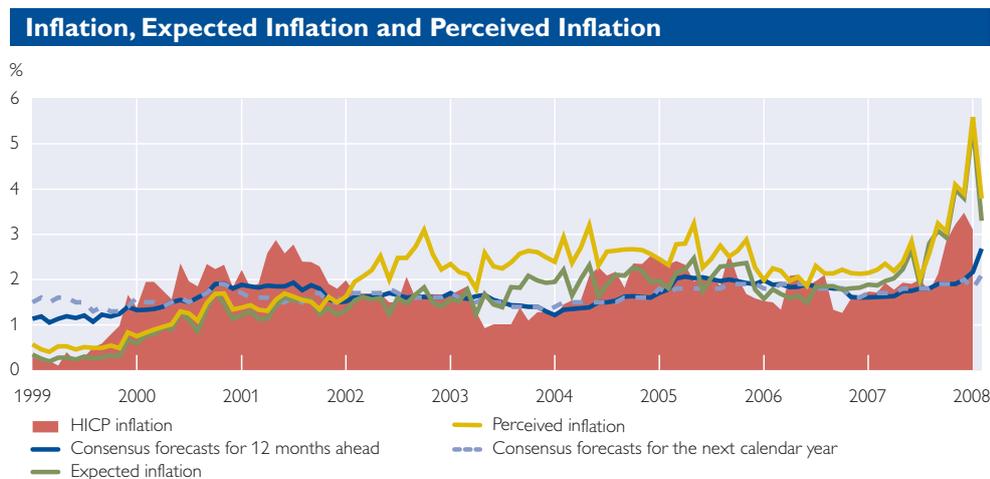
over, with the introduction of euro cash at the beginning of 2002, the development of expected inflation, which until then had been closely correlated with the perception of current inflation, became less predictable. Expected inflation did not follow the significant increase in current inflation perceptions in 2002. Whereas the consumers questioned at the time perceived the current inflation to be high (higher than evidenced by the official statistics),<sup>26</sup> their expectations of future inflation remained mostly stable and low in the short term. Not until 2004 and 2005 did consumers' inflation expectations of consumers rise above 2% more frequently. After a phase of calm in 2006 and in the first months of 2007, the consumers' inflation expectations surged to more than 5% in the latter half of the year. In February 2008, however, the value had once again fallen significantly to 3.3%.

It is interesting to note that the gap between current perceived inflation and inflation expected in 12 months,

ranging between ½ percentage point and 1 percentage point for more than five years since 2002, narrowed to zero in the second half of 2007. In other words, the erratic increase in perceived inflation fed through one-to-one to inflation expectations. That is, the consumers no longer presume that inflation will be lower in one year than they currently perceive it to be. In February 2008, the difference between the calculated perceived and expected inflation increased once again to around ½ percentage point.

The development of expected and perceived inflation must be interpreted cautiously, however. It *could* mean that consumers changed the way they form their inflation expectations in the second half of 2007 such that current inflation is carried more strongly forward in building their future inflation expectations – based, however, on the perceived rather than the actual rate of inflation. The numerical values may not be taken at their face value, since they reflect an estimate derived from a

Chart 14 Consumers More Pessimistic about Inflation Outlook than Professional Forecasters



Source: Statistics Austria, Consensus Economics, OeNB.

<sup>26</sup> For an explanation and discussion of the primarily psychological reasons for this deviation, please refer to Fluch and Stix (2005) and Stix (2005), among others.

survey under various assumptions. For these reasons, the inflation outlook of the professional forecasters can be considered to anticipate the future development of inflation more accurately.

Thus, the increase in Austrian inflation in recent months affected the very short-term inflation expectations of both professional forecasters and consumers. The outlook of the professional forecasters is, however, less pessimistic, particularly for 2009, by which time the forecasters evidently expect the inflationary effects of the current price shocks to have largely dissipated.

#### 4 OeNB Forecast: Decrease in HICP Inflation to 2.3% by the End of 2008; Annual Inflation 2008: 2.8%

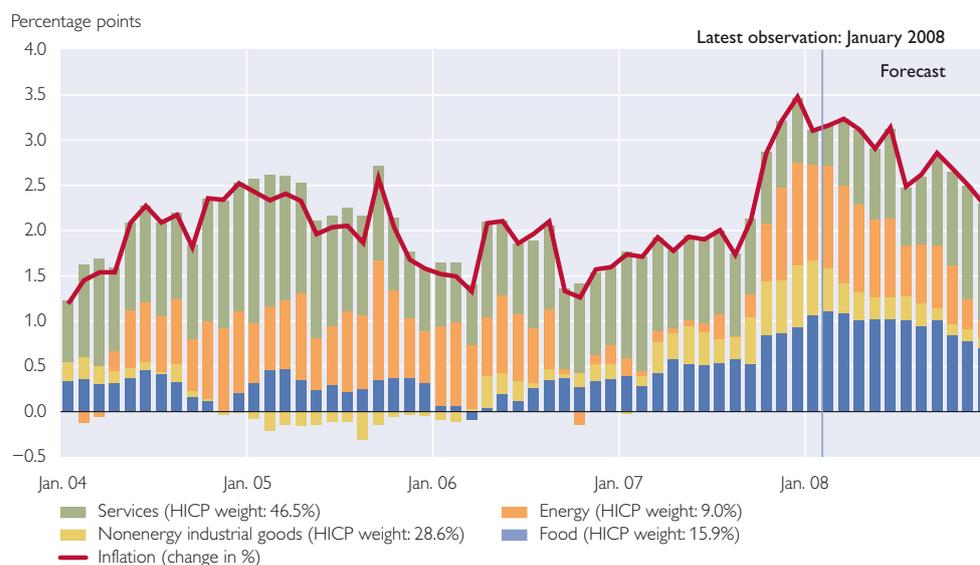
According to the OeNB's inflation forecast from March 2008, the annual rate of inflation in Austria in 2008 will be 2.8% (revised upward by 0.4 percentage points compared

to December 2007). Core inflation (HICP, excluding energy and unprocessed food) should be around 2.2% in 2008 (revised upward by 0.2 percentage points).

Those figures (chart 15) mask a sharp drop in inflation over the course of the year from 3.1% (January 2008) to 2.3% (December 2008). The increase in prices of nonenergy industrial goods will slow as soon as the current price shock of clothing and footwear dissipates in the next few months. In contrast, service inflation will climb above 2%, consistent with its medium-term trend. The European world football championship will temporarily drive up hotel and restaurant prices in the four cities hosting the event. The effect on the overall rate of inflation will reach a maximum of 0.4 percentage points in June 2008, after which it will once again decline. The increase in public television fees of 9.4% in June 2008 will contribute 0.07 percentage points to service inflation and 0.03 percent-

Chart 15 Latest OeNB Forecast Expects Inflation to Drop to 2.3% by the End of 2008

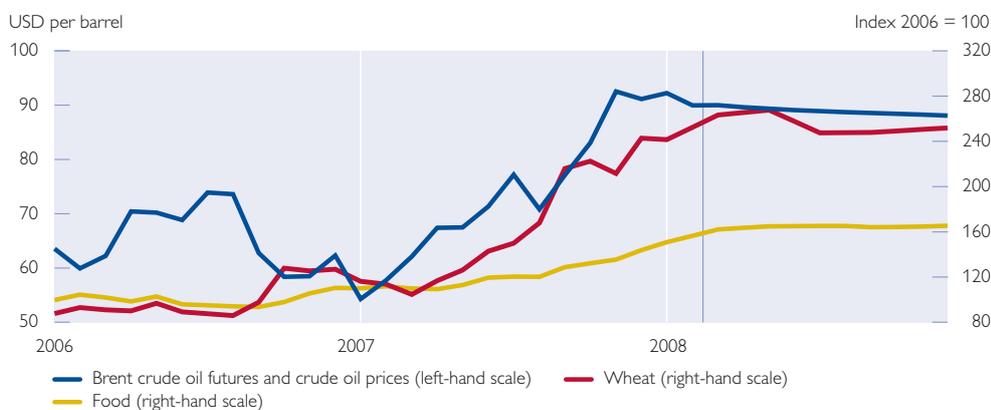
#### HICP Inflation and Contributions by Main Components



Source: OeNB, Statistics Austria.

Chart 16 Futures Prices Signal Relaxation of Earlier Tensions in Commodity Markets

## Commodity Prices



Source: Bloomberg.

Note: Futures prices as on February 15, 2008.

age points to headline inflation beginning in June 2008.

The significant weakening of inflation forecast over the course of the year is based foremost on the assumption that there will be no further crude oil and food price shocks over the forecast horizon. This assumption was derived from the price development for futures of food commodities and crude oil (chart 16). Thus, the effects of past shocks should disappear from the annual rate of inflation after the base effect dissipates one year after the shock occurred. This should be the case after September 2008 for the crude oil price shock and after October 2008 for the food price shock.

In addition, the forecast assumes that inflation expectations will continue to be solidly anchored and that there will be no second-round effects – therefore, it is presumed that the increase in both measures for inflation expectations explained in section 3 will only be temporary. As a forecast based on a time series model, the OeNB forecast also necessarily presumes that no structural changes

in the inflation process have occurred recently. Thus, the structural relations of the macroeconomic variables of the past continue to prevail.

Finally, both the producer price index and the wholesale price index can be assumed to have a leading indicator function for the HICP. The wholesale price index reflects prices which are of interest for the purchasing side of the retail industry. While the change in the wholesale price index was just over 3% until August 2007, it accelerated to around 6.5% in September 2007 and 8.3% in January 2008 (chart 17). This sharp increase raises the expectation that the rate of inflation will also remain high in the next few months or decline only slowly. However, the wholesale price index, which includes 387 items, is much more volatile than the HICP, which is why it was not possible to observe a strong correlation between both series in the past. The most recently available value for the producer price index is for October 2007; its growth was not exceptionally high until then (chart 17).

Chart 17 Sharp Increase in Wholesale Prices May Dampen Decline in Inflation

## Selected Inflation Indicators



Source: Statistics Austria.

## 5 Summary and Conclusions

### *Mostly International, but also Domestic Causes of Inflation*

This study shows that, starting in October 2007, the HICP rate of inflation in Austria climbed to its highest value since the creation of the euro area in recent months. Inflation even temporarily exceeded the euro area average, which is unusual for Austria. The difference can be explained mainly by the fact that food and energy prices rose more sharply in Austria than in the euro area. But the rate of inflation in Austria has lately been above that of the euro area also with respect to clothing and footwear and leisure and culture.

The increase in global prices for agricultural commodities feed through more strongly to the prices of dairy products and oils and fats than to bread and cereal product prices.

In the energy sector, basically half of the difference can be explained by the increase in the petroleum tax effective July 1, 2007, and the other half by increases in electricity and gas prices of some local suppliers at the beginning of 2007. In addition to the known direct effects on motor fuels

and heating oil, the price increase of crude oil should also indirectly affect other components of the HICP. However, such an effect should be minor and cannot (yet) be determined based on the available information.

With respect to clothing and footwear, consumer prices have been observed to have decoupled from price developments at the upstream producer and import price levels. Since Statistics Austria has made no statistical adjustments which would explain the observed developments, the increase in consumer prices must be a trade phenomenon.

In 2007, administered prices contributed 0.31 percentage points to overall HICP inflation (December 2007: 0.37 percentage points). The increase in the petroleum tax on diesel and gasoline effective July 2007 contributed 0.1 percentage points to annual inflation in 2007.

### *Consumers More Pessimistic about Inflation Outlook than Professional Forecasters; Higher Nominal Wage Increases in 2008*

The most recent increase in Austrian inflation is reflected in the very short-term inflation expectations of both

professional forecasters and consumers. Professional forecasters are less pessimistic in their inflation outlook, especially for 2009, evidently expecting the inflationary effects of the current price shocks to have mostly dissipated by then.

In 2008, the collective agreements concluded in 2007 will noticeably drive up wage growth. However, since most collective agreements of the current wage round have already been concluded, wage developments are fairly unlikely to increase inflationary pressures in the next few months beyond the levels currently forecast.

*OeNB Raises its Inflation Forecast for 2008 to 2.8%; However, a Significant Decrease to 2.3% is Expected by December 2008*

The current OeNB inflation forecast already takes these wage developments into account and presumes that annual HICP inflation in 2008 will be 2.8%. However, the monthly inflation rate should decrease to 2.3% year on year over the course of the year by December 2008. This forecast is based on the one hand on the assumption that international crude oil and commodities prices will not increase further. On the other hand, it is important for this scenario that inflation expectations remain stable and anchored at a low level.

*Inflation-Cooling Measures from Stability-Oriented Monetary Policy of the Eurosystem Need to Be Complemented by ...*

Finally, how can monetary and economic policy best address this situation?

The monetary policy of the Eurosystem is clearly and credibly committed to its primary goal of safe-

guarding price stability in the medium term. Monetary policy cannot prevent short-term external price shocks (crude oil booms, global food price increases). However, it can focus on ensuring that the increase in inflation remains temporary. It is important that inflation expectations remain anchored at low levels. So far, the Eurosystem has been successful in its endeavors. Already in 2001, the temporary increase in inflation above 3% did not affect inflation expectations. And current long-term inflation expectations continue to show high trust in the Eurosystem's stability-oriented policy.

*... National Economic Policies*

Monetary policy cannot precisely control inflation in every single member state of the euro area. Additional measures at the national level are necessary. These can use three levers.

*– Wage Policies*

In the coming fall wage round, the parties negotiating wage settlements will need to rise to the challenge of preventing second-round effects. The social partnership framework and the established system of wage leadership offer a good basis for this, since this setup allows the persistence of wage inflation to be broken more easily than less coordinated wage negotiation systems. An international commodity and crude oil price shock means that the relative prices of energy and other commodities increase compared to goods produced in Austria. In other words, Austria receives fewer foreign in exchange for domestically produced goods. Wealth thus shifts from crude oil and raw materials importers, such as Austria, to the exporters.

– *Structural Policies*

Maintaining price stability is not tantamount to preventing the prices of individual product groups that become scarce – e.g. currently energy and food – from increasing. In contrast, it is important that prices should rise provided such an increase signals scarcity. Rising prices make it worthwhile for businesses to expand their production capacities and thus stimulate the supply.<sup>27</sup> At the same time, price hikes slow demand, since the real income of households falls and, presumably, less of the now more expensive good is consumed. That means that both substitution and income effects can be observed on the demand side. Thus, the high energy prices should result in the more economical consumption of energy and/or in a shift to alternative forms of energy.

Structural policy measures can support the process of adjusting to the commodities price shock and slow the price increase. Measures to intensify competition and eliminate quantitative production limitations, for instance, as they still exist in the form of milk quotas on the basis of EU's Common Agricultural Policy, dampen upward price pressures by limiting the price-setting power of companies and/or increasing the supply of agri-

cultural commodities. In the long term, measures to conserve energy or utilize alternative domestic energy sources signify an adequate response to increased relative prices of fossil energy sources and other imported commodities. Such measures also make Austria less sensitive in the future to possible further international energy price shocks.

– *Fiscal Policies and Administered Prices*

Fiscal policies can help slow inflation via two channels: the influence on aggregate demand and changes in taxes, fees and tariffs. Concerning the first channel, the Austrian economy has grown robustly for the last two years, and capacities are being fully utilized. Given high real growth and strong utilization of capacities, stimulating aggregate demand by incurring higher budget deficits would run counter to reducing the rate of inflation. The deficit should be lowered quickly under such economic conditions. Concerning the second channel, the public sector would be well advised to avoid stirring inflation by increasing taxes, fees and tariffs. If all public fees were frozen at their level in 2007, Austria's 2 annual inflation rate would be reduced by around ¼ percentage point in 2008 according to OeNB estimates.

<sup>27</sup> *The production capacity of crude oil is – for technical reasons or as a result of intentional shortages on the part of crude oil producers – relatively inelastic at least for the short term. However, the energy supply can also react to the increased price level, in particular by expanding alternative energy sources in the medium and long term.*

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## Annex: Breakdown of HICP – Main Components

### Processed food including alcoholic beverages and tobacco – HICP weight in 2007: 10.162%

Bread and cereals  
 Milk, cheese and eggs  
 Oils and fats  
 Sugar, jam, honey, chocolate and confectionery  
 Food products n.e.c.  
 Coffee, tea and cacao  
 Mineral water, soft drinks, fruit and vegetable juices  
 Spirits  
 Wine  
 Beer  
 Tobacco

### Unprocessed food – HICP weight in 2007: 5.315%

Meat  
 Fish  
 Fruit  
 Vegetables

**Energy – HICP weight in 2007: 8.143%**

Electricity  
 Gas  
 Liquid fuels  
 Solid fuels  
 Heat energy  
 Fuels and lubricants for personal transport equipment

**Nonenergy industrial goods – HICP weight in 2007: 28.946%**

Clothing materials  
 Garments  
 Other articles of clothing and clothing accessories  
 Shoes and other footwear including repair and hire of footwear  
 Materials for the maintenance and repair of the dwelling  
 Water supply  
 Furniture and furnishings  
 Carpets and other floor coverings  
 Household textiles  
 Major household appliances, small electric household appliances  
 Glassware, tableware and household utensils  
 Major tools and equipment, small tools and miscellaneous accessories  
 Nondurable household goods  
 Pharmaceutical products  
 Other medical products, therapeutic appliances and equipment  
 Motor cars  
 Motor cycles, bicycles and animal-drawn vehicles  
 Spare parts and accessories for personal transport equipment  
 Equipment for reception, recording and reproduction of sound and pictures  
 Photographic and cinematographic equipment and optical instruments  
 Information processing equipment  
 Recording media  
 Major durables for in/outdoor recreation including musical instruments  
 Games, toys and hobbies  
 Equipment for sport, camping and open-air recreation  
 Gardens, plants and flowers  
 Pets and related products including veterinary and other services for pets  
 Books  
 Newspapers and periodicals  
 Miscellaneous printer matter, stationery and drawing materials  
 Electric appliances and other appliances etc. for personal care  
 Jewellery, clocks and watches  
 Other personal effects

**Services (all items excluding goods) – HICP weight in 2007: 47.434%**

Cleaning, repair and hire of clothing  
 Actual rentals for housing  
 Services for the maintenance and repair of the dwelling  
 Refuse collection

Sewerage collection  
Other services relating to the dwelling n.e.c.  
Repair of furniture, furnishings and floor coverings  
Repair of household appliances  
Domestic services and household services  
Medical and paramedical services  
Dental services  
Hospital services  
Maintenance and repair of personal transport equipment  
Other services in respect of personal transport equipment  
Passenger transport by railway  
Passenger transport by road  
Passenger transport by air  
Passenger transport by sea and inland waterway  
Combined passenger transport  
Other purchased transportation services  
Postal services  
Telephone and telefax equipment, telephone and telefax services  
Repair of audio-visual, photographic and information processing equipment  
Maintenance and repair of other major durables for recreation and culture  
Recreational and sporting services  
Cultural services  
Package holidays  
Pre-primary, primary, secondary, etc. education and education  
not defined by level  
Restaurants, cafés and the like  
Canteens  
Accommodation services  
Hairdressing saloons and personal grooming establishments  
Social protection  
Insurance connected with the dwelling  
Insurance connected with health  
Insurance connected with transport  
Other insurance  
Other financial services n.e.c.  
Other services n.e.c.

# The Importance of Lease Financing for Austrian Municipalities

Bernhard Grossmann<sup>1</sup>

*The innovation of this paper is to use Central Credit Register (CCR) data to analyze and assess municipal (local government) leasing activities. Among other things, the analysis highlights the different accounting treatment of (real estate) lease transactions undertaken by local governments in their capacity as market producers and as nonmarket producers.*

*The lease financing volume of municipalities totaled roughly EUR 1.1 billion, thus corresponding to 8.5% on average of total municipal exposures as reflected in the CCR. This aggregate figure masks considerable differences across individual municipalities, for which it is hard to find meaningful theoretical evidence.*

*Those municipalities whose leasing deals have been subject to approval by provinces for the longest period tend to report lower lease shares. At the same time, there is little correlation between the credit quality of a municipality and its exposure to lease financing; evidently, credit quality checks are based on comparable criteria irrespective of the financing model of choice. Likewise, there is only a weak correlation between municipalities' exposure to lease financing and their level of (residual) debt. More highly indebted local government units have not been found to be more inclined to shifting their portfolios to financing forms that do not push up the level of debt.*

*These results suggest that municipalities thoroughly assess options of lease financing on a case-by-case basis as new borrowing needs arise, and that they have become less likely to go for lease financing ever since such deals have become subject to approval by the provincial governments, just like loans.*

*JEL classification: H63, H72, E62*

*Key words: lease financing, public debt, credit quality, municipalities.*

## 1 Introduction

In recent years, the fiscal policies of Austria's local governments (excluding Vienna) were strongly influenced by the requirements of the Austrian Stability Pacts of 2001 (effective until 2004) and 2005 (effective until 2007) to achieve balanced annual budgets within each of the provinces. Partly as a result of cyclical developments, municipal revenues mostly remained below municipal expenditures in the period covered by the two successive stability pacts, above all in the expenditure categories health and welfare, which further tightened the financial leeway of municipalities. At the same time, new tasks devolved to the local governments (such as the responsibil-

ity for maintaining residency records, issuing passports or offering a lost-and-found service) added to the need for consolidating municipal budgets. Austerity measures taken as a result mostly affected municipal investments and municipal infrastructure projects (investment projects were postponed or dropped, or delegated to units that were spun off or reclassified to the private sector); in other words, local governments reduced their discretionary spending. Given necessary tradeoffs between consolidation requirements and investment demand, the local governments were able to realize only some of their plans in this period for renewing and improving municipal infrastructure as

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outlined in the Financing Needs Report of 2002 for Austrian towns and municipalities.

Against this backdrop, municipalities reviewed existing financing structures and became more inclined to use alternative investment instruments, such as lease financing, especially in the period from 2000 to 2004.

The innovation of this paper is to use CCR<sup>2</sup> data to analyze and present municipal leasing activities. Section 2 summarizes the basics of lease financing that are of particular relevance for municipal budgets. Section 3 explains how the Central Credit Register works, what range of data it covers and how representative the data are with respect to municipal liabilities in general (including the liabilities of market producers, which many municipal enterprises are) and their exposure to lease financing in particular. Section 4 offers hypotheses why local governments have resorted more frequently to lease financing in some provinces than in others, and tests these hypotheses against empirical evidence. To this effect, the paper evaluates how the structure of the municipal debt portfolio (percentage of lease financing and residual debt) interrelates with other municipal characteristics (e.g. number of inhabitants, regional aspects, credit quality). Section 5 concludes with a summary of the key findings.

## 2 Lease Financing Basics

### 2.1 Leasing Real Estate and Other Capital Goods Is an Important Financing Option for Municipalities

Under a *lease* financing contract, the lessee obtains the (noncancellable) right to use an object bought or produced by the lessor during the agreed lease term in exchange for lease (i.e. rental) payments, without assuming ownership rights, which are retained by the lessor.<sup>3</sup> Objects to be leased may be vehicles, movable property (IT and other equipment) and immovable property (new buildings, renovations and additions), provided they can reasonably be used by third parties after the lease term expires.<sup>4</sup>

Local governments tend to lease above all immovable property, such as schools, kindergartens, administrative buildings, community centers, as well as movable capital goods, such as public utility service vehicles or equipment for schools, kindergartens and hospitals (Association of Austrian Leasing Companies, 2003). The distinction between movable and immovable assets is important above all for tax purposes, because the taxation of *municipal leasing* activities differs for different types of assets. Leasing equipment has the advantage that VAT is payable on a pro rata basis (i.e. on the regular lease payments rather than on the full asset value) and that the debt burden of local governments

<sup>2</sup> Based on the Guideline on CCR Reporting of 2004, which was replaced by a new guideline on January 1, 2008.

<sup>3</sup> Should the lessor and the lessee be residents of different countries, the transaction is called *cross-border-leasing*.

<sup>4</sup> See more details on leasing options e.g. in Kuhnle and Kuhnle-Schadn (2001). Objects such as public roads or bridges which cannot be leased as a rule because they are tailored to the specific needs of a lessee and can be used reasonably only by this lessee may be financed through *special lease agreements*. In such cases, the lessee will also acquire the economic ownership rights and thus lose all tax advantages.

does not rise in the process (section 2.2). Leasing real estate is attractive above all for local governments in their capacity as nonmarket producers, because this allows them to benefit from the input tax credits leasing companies may claim, just like municipal enterprises that qualify as market producers.

With regard to the design of lease contracts, municipalities may basically choose from among the full spectrum of lease types and models (see Lindhuber, 2005, for a systematic and comprehensive overview). The following section summarizes selected lease types and models which are particularly relevant for municipalities and for the accounting and tax treatment of lease payments.

#### 2.1.1 Full Payout or Less Than Full Payout

The existence of a residual value, i.e. *end-of-lease buyout costs*, makes a lease a *nonpayout lease*. The residual value is the purchase price (“balloon payment”) lessees need to pay if they decide to keep the leased property when the lease expires.

In contrast to a nonpayout lease, a *full payout lease* allows the lessor to recover, through the lease payments agreed for the lease term, the total equipment cost and financing charges.

#### 2.1.2 Leases with and without Up-Front Charges

Basically, lessors may reduce their capital input and total financing costs by requiring lessees to contribute to the financing costs by making *down payments up front*. These variants allow subsidies to be priced into the

leasing costs up front, thus reducing the periodical lease payments.

Furthermore, lessees may be required to pay a *refundable deposit* to provide additional security or to reduce the initial lease rate and/or the lease rate on the periodic rental payments. These payments are to be refunded to the lessee or will offset the buyout price at the end of the lease term.

Up-front payments by the lessee will typically not trigger a *reclassification of the leased property* to the lessee, provided the up-front costs do not exceed 30% of the purchase or capitalization costs. Leased property will, however, have to be fully accounted for by the lessee if the payments made by the lessee on top of the regular lease payments (such as rent down payments, deposits, subsidies passed on to the lessee) exceed 75% of the capitalized costs (excluding VAT) according to the income tax regulations for 2000.

#### 2.1.3 Operating Lease or Finance Lease

Other defining elements of leases are their financing and risk pattern as well as the lease term. In this respect, the two most common types of leases are *operating leases* and *financial leases*. This distinction not only reflects defining features of the underlying transaction but is also relevant for its accounting treatment, i.e. for the decision as to whether the lease deal does or does not increase the general government deficit on a Maastricht basis and/or the level of public debt.<sup>5</sup> In Austria, municipal lease transactions are, as a rule, operating leases.

<sup>5</sup> For definitions, see ESA 95, Annex II Leasing and hire purchase of durable goods.

In an *operating lease*, the lessee acquires the right to use a durable good for a period that is shorter than the entire or a predominant part of the good's estimated useful life. The lease term need not be fixed in advance, and the lease may be canceled at any time subject to the agreed notice period. The lessor typically possesses expert knowledge about the kind of durable goods leased, carries the full investment risk and normally assumes responsibility for maintenance and repairs as well as replace-

ment in case of a breakdown. Operating leases do not a priori specify the sale of the leased property when the lease expires, but in practice, the lessee (or a third party) is typically given a purchase option.

The leased property is capitalized by the lessor, who also writes down the value of the asset over its estimated useful life. The lessee, in contrast, expenses only the periodical lease payments, under administrative and operating expenses.

Box 1

### Tax Treatment of Leased Properties in Austria

In Austria the **tax treatment of leased properties** is governed by the **income tax regulations of 2000** based on the principle of economic ownership. As a rule, the lessor is treated as the owner of leased property except for specific cases in which ownership rights are deemed to have been transferred to the lessee. Under a **full payout lease** ownership rights are transferred to the lessee under the following conditions:

- if the lease term broadly corresponds to the estimated useful life of the property (which is expected to be the case if the lease term exceeds 90% of the estimated useful life),
- if the lease term is below 40% of the estimated useful life,
- if the lease contract provides for a bargain purchase or extension option (below 50% of the linear book value), or
- if the leased property has been tailored to the specific needs of the lessee and can be used reasonably only by this lessee when the lease term expires (special lease agreement).

Under **less-than-full-payout leases** ownership rights are transferred to the lessee up front under the following conditions:

- if the lease term broadly corresponds to the estimated useful life of the property,
- if the lessee carries both the risks and the rewards of ownership,
- if the lessee may purchase the leased property at a residual value that lies well below the presumed market value, or
- if the underlying lease is a special lease.

With regard to the classification of **immovable goods**, premises and buildings need to be treated separately. In the case of premises, the civil law owner will, as a rule, be treated as the owner. Yet by way of exception, the lessee will be deemed to be the owner of premises if a purchase option has been agreed and any buildings on the premises are already owned by the lessee. Buildings are to be treated in line with the criteria outlined above except for the following cases: Buildings are deemed to be owned by the lessor if the lessor also owns the premises and

- if the underlying lease is neither a full payout lease nor a special lease,
- if the agreement to use the premises runs well in excess of the lease term for the building, or
- if the lessor may lease or sell the building to a third person when the lease expires.

Under *ESA 95 (European System of Accounts)*, the lease payments need not be subdivided into interest rate payments and repayments of principal. The lease payments to be recorded under administrative and operating expenses are fully reflected in the deficit or surplus no matter whether the lessee engages in market or non-market production. Liabilities arising from an operating lease qualify as administrative liabilities (liabilities arising from the purchase of goods or services, payment commitments or payment arrears) and are therefore not deemed to increase the level of debt.

Under a *finance lease* the lessee assumes the right to use a durable good for a predetermined period of time, which covers all or most of the economic life of the leased property. The lessee may not cancel the lease contract before it expires. The lessor's role is, as a rule, purely financial (he assumes the credit risk). In other words, the lessor will typically not possess specific expertise with regard to the leased property, and he offers no repair, maintenance or replacement services (the investment risk is transferred to the lessee). At the end of the lease term, the lessee often buys the leased property (often at a symbolic price in the case full payment), because the leased property is typically a tailor-made good for which third parties will have little use.

The lessor retains legal ownership of the leased property at all times. The leased property is, as rule, capitalized by the lessor unless the lessee assumes the economic ownership of the good.

Whether the lessee is the economic owner of a leased property also matters with regard to how that property is recorded under *ESA 95*. Under the *ESA* framework, leased goods are treated as if owned by the lessee from the beginning of the lease term, with the lease payments representing the (imputed) repayments of principal and interest rate payments to the creditor (i.e. the lessor). The interest rate payments add to the Maastricht-based deficit measure, whereas the capital share of the lease payments (repayment of principal) is reflected in the deficit measure only in the case of public entities classified as market producers. If goods are leased by a nonmarket producer, repayments of principal are recorded as financial transactions, and thus not reflected in the general government deficit under the Maastricht definition. The year-end present value of amounts outstanding under finance leases are fully reflected in the level of public debt, provided the lessor is classified under the public sector as defined in *ESA 95*.

#### 2.1.4 Sale-and-Leaseback Contracts

*Sale-and-leaseback contracts* constitute a special type of lease insofar as the lease transaction as such builds on the sale of property that is to be leased thereafter. Assuming the role of the lessee, the original seller leases the property from its new owner (lessor). This concept is typically used to free up cash by mobilizing hidden reserves (Lindhuber, 2005).

*The leased property is deemed to be owned by the seller or lessee*<sup>6</sup>

<sup>6</sup> In such case the sale and the leaseback are considered to be a loan contract, with the leased property transferred to the lessor as collateral.

- if the conditions relevant for a full payout lease are met (box 1),
- if the purchase price differs considerably from the value of the leased property, or
- if the contract contains unusual clauses negotiated in order to achieve tax advantages (misuse under Article 22 of the Federal Fiscal Procedures Act).

## 2.2 Advantages and Disadvantages of Municipal Leasing

The advantages and disadvantages of lease deals need to be assessed from the perspective of the respective agents. The case for corporate lease financing is made very compellingly by Credit Suisse (2006) or by the Association of Austrian Leasing Companies (2003); the arguments put forth by those two institutions by and large also hold for the public sector. Yet in the context of municipal leasing, a number of additional aspects come into play, as outlined by Plach (2006).

Important *advantages* for local governments are as follows:

- Lessors typically have *long-standing expertise* in planning and implementing investment projects. As a result, it is often possible for the lessee to negotiate *additional services* (such as providing planning and construction management, including the responsibility for overall project management, procurement, construction supervision or turnkey installation; by the same token, the lessor may take on a number of risks).
- Lessees may benefit from *cost advantages* (such as advantages that come with the lessor's market position), gain *planning security* (e.g. through agreed fixed prices and finalization deadlines) or *transfer part of the administrative burden* to the lessor.
- Lease financing enables the lessee to *purchase goods* without using *own funds* or incurring additional debt, as all funding is provided by the lessor. As a result, local governments may avoid financing constraints and implement investment projects earlier than would otherwise be possible.
- Lease rates become payable upon completion or transfer of the leased property; in other words, lease deals do not require *any prefinancing or bridge financing*. Accrued construction interest is added to the amount on the basis of which lease rates are calculated.
- Lease payments, i.e. the financing volume and the periodic lease rates, may be reduced through by subsidies or *up-front payments*, subject to the relevant limits (section 2.1.2).
- Unlike local governments, leasing companies may claim full *input tax credit* for investments made in nonmarket production facilities. Such tax credits lower the financing volume, e.g. limiting it to the net construction costs.<sup>7</sup> The periodic lease rates are subject to VAT, however. Moreover, municipalities benefit from a *postponement effect* resulting from the gradual payment of VAT. Once the ten-year input tax adjustment period has expired, lessees still

<sup>7</sup> This is a tax advantage with which all properties leased by municipal market producers come; therefore, real estate leasing has its merits above all in the context of nonmarket production.

- have the option of claiming tax exemptions, as a result of which they will not have to pay VAT on the monthly lease rate, thus *saving on taxes*.
- In line with the *Maastricht criteria*, operating leases come with the advantage of not increasing the public debt level (section 2.1.3).
- Yet lease deals also have some *disadvantages*:
- The lessee *does not become the de jure owner* of leased properties, which means that the lessee may not sell leased goods if they are not needed or if he has to raise urgently needed cash. This limited room for maneuver is further reduced by the fact that lease rates must be paid *for the entire lease term* in the case of full payout leases.
  - The *overall lease costs* taking into account the entire economic life (i.e. taking into account the residual book value or the purchase price at the end of the agreed lease term) may turn out to be higher in the end than a loan-financed purchase of the property at hand, particularly in the case of property for which the lessee (local government) would as a rule be able to claim input tax credit.<sup>8</sup>
  - The periodical operating lease rates, *including the pro-rata repayment of principal*, increase the general government deficit or reduce the general government surplus.
- In the case of legal disputes, the involvement of a leasing company, i.e. of an *additional player*, may make it more difficult to assert claims (e.g. in the context of warranty and liability issues).
  - Finally, a *property purchase tax* of 3.5% is payable on the residual value of leased property.

### 3 Evidence from CCR Data on the Role of Municipal Leasing

The empirical evidence provided here is derived from the CCR<sup>9</sup> that the OeNB's Credit Division maintains and analyzes. On December 31, 2006, the CCR showed 2,095 municipalities to be indebted, and three-quarters of this category (1,585 municipalities or 75.7%) to have incurred lease liabilities. In 2006 the average lease finance volume totaled EUR 522,000 (or EUR 691,000 excluding municipalities without lease liabilities), with the lease deals of individual municipalities ranging from EUR 16,000 to EUR 61 million. The following section highlights the development of lease volumes and the share of lease financing in municipalities' total exposure (sum of all liabilities) and assesses the representativeness of the CCR data through a cross-check with other sources (Statistics Austria, Association of Austrian Leasing Companies).

<sup>8</sup> However, in the case of a nonpayout lease only a portion of the capital used is repaid during the contract period. Consequently, a nonpayout lease comes with lower periodical costs than a fully loan-financed project or a full payout lease.

<sup>9</sup> The legal framework governing the CCR is the Austrian Banking Act and the OeNB's CCR Reporting Regulation. A new Guideline on CCR Reporting has been in force since January 1, 2008. Based on CCR reports, credit and financial institutions as well as insurance companies can obtain information on the potential or actual loan exposure of major borrowers.

### What is the Central Credit Register?

The purpose of the Central Credit Register (CCR) is to pool information on all borrowers (other than the federal government and the regional governments up to January 1, 2008) whose aggregate **credit volumes, credit lines or legally binding loan commitments** with an institution that is subject to reporting requirements under Article 1 paragraph 1 of the CCR Reporting Regulation (basically credit institutions, financial institutions and insurance companies) total **EUR 350,000** or the euro equivalent of that sum. The reporting entities are required to submit the following information, apart from **identifying data and outstanding amounts**: collateral value, account-specific provisions, credit quality, groups of connected clients<sup>1</sup> as well as internal standards and rules applied by the reporting agents (with regard to the valuation of collateral, internal ratings or the establishment of account-specific provisions).

Outstanding loans become subject to reporting requirements as soon as they exceed the threshold of EUR 350,000 and cease to be subject to reporting requirements as soon as repayments cause the aggregate volume to fall below that threshold. Liabilities to a number of financial institutions that add up to more than EUR 350,000 but do not exceed this threshold at the individual financial institutions do not require reporting to the CCR.

**Credit subject to reporting requirements** (or credit lines) include credit operations, discounting operations, guarantee schemes (including state guarantees at the federal and regional government level), factoring and lease transactions as well as asset securitization transactions and special off balance sheet transactions.<sup>2</sup>

<sup>1</sup> Under the Banking Act and the Commercial Code, a group of connected clients exists when major borrowers control each other or are interlocked through commercial law partnerships, as general partners, etc.

<sup>2</sup> For definitions and detailed explanations, see the Guideline on CCR Reporting (2004 and 2008).

### 3.1 Development of Lease Volumes and Relative Lease Shares in the Total Exposure of Municipalities

#### 3.1.1 Lease Share of Total Municipal Exposure Averaged 8.5% in 2006

Claims arising from lease transactions are treated as credit equivalents in the CCR by recording the present value of lease rates including the residual value of the leased property. Lease payments reduce the underlying credit line and the extent to which it is drawn down. While the credit line is gradually reduced in line with the repayment scheme, irrespective of actual payment of lease rates, the use of the credit line reflects the amount of outstanding lease rates or other claims against the customer. Balances that exceed the credit line would thus

point to payment arrears of the lessee.

Based on CCR data, the lease financing volume of municipalities excluding local government-owned companies totaled approximately EUR 1.1 billion at the end of 2006. This corresponds to an average lease share in municipalities' total exposure of 8.5%.<sup>10</sup> During the period under review (1990 to 2006), lease volumes expanded gradually, peaking at EUR 1.4 billion in 2004. Since then, the year-end volumes have been going down. The average lease share of municipalities' total exposure did not start to rise until 1998 and thus also peaked in 2004 at 9.3% (see tables 1 und 4).

Reflecting above all fiscal policy framework conditions, the lease vol-

<sup>10</sup> In relation to municipalities including local government-owned companies (see box 4), the lease financing volume totaled EUR 1.3 billion, corresponding to a share of 7.8% of total exposure in 2006.

Table 1

Development of Municipal Leasing by Province										
EUR million	Burgenland	Carinthia	Lower Austria	Upper Austria	Salzburg	Styria	Tirol	Vorarlberg	Total	Change in %
1995	1	14	135	66	38	65	107	63	490	x
1996	1	12	154	61	36	88	114	56	521	6.4
1997	2	11	152	59	38	91	143	61	557	6.9
1998	5	14	148	57	37	113	150	65	589	5.6
1999	5	14	151	67	42	129	152	70	629	6.9
2000	13	14	229	68	49	162	176	70	780	23.9
2001	24	13	355	95	62	225	193	81	1,048	34.4
2002	31	11	408	121	63	236	196	83	1,150	9.7
2003	32	10	449	168	73	245	190	79	1,248	8.5
2004	46	26	474	183	74	270	212	76	1,361	9.1
2005	54	17	417	161	71	259	225	71	1,276	-6.2
2006	54	19	307	120	68	237	225	63	1,095	-14.2

Source: OeNB (CCR), author's calculations.

Note: Municipalities excluding local government-owned companies (see box 4).

ume jumped in 2001.<sup>11</sup> That is the year in which the Austrian Stability Pact of 2001 became effective, under which Austria's municipalities (excluding Vienna) were required to achieve balanced budgets within each of the provinces. With the local governments' obligation thus pinned down, municipalities reacted, among other things, by adjusting their discretionary spending – i.e. spending (on investment, etc.) that is optional rather than mandatory. This led to a significant reduction in the investment ratio of local governments (Government Debt Committee, 2005; Municipal Finance Report of 2005). The effect of falling investment volumes also increased in anticipation of a further strengthening of municipalities' balance sheets through alternative sources of finance (such as operating leases) – the reason being that properties acquired through (operating) leases are not capitalized as in-

vestment in public sector accounting; it is only the lease rates that are expensed. Traditional loans, in contrast, need to be expensed, while the assets purchased with that loan need to be capitalized and thus increase the investment ratio accordingly.

### 3.1.2 Lease Share in Total Exposure Highest in Municipalities with over 5,000 and up to 10,000 Inhabitants

Based on *municipal size* (table 2), per capita lease shares were highest (EUR 273) in the bracket from 5,001 to 10,000 inhabitants, second-highest (EUR 224) in the bracket from 10,001 to 20,000 inhabitants and third-highest (EUR 199) in the bracket from 20,001 to 50,000 inhabitants. Conversely, the per capita share was lowest in municipalities with 50,000 inhabitants or more (EUR 92), followed by the bracket from 501 to 1,000 inhabitants (EUR 115).

<sup>11</sup> To some extent, the increase in the lease volume can also be ascribed to the fact that, following the changeover to the euro, the threshold for reportable exposures was lowered from ATS 5 million (EUR 363,364) to EUR 350,000.

Table 2

**Municipal Lease Volumes by Size of Municipality in 2006**

Number of inhabitants	Total volume	Volume per inhabitant
	EUR million	EUR
≤ 500	5	122
From 501 to 1,000	32	115
From 1,001 to 2,500	232	140
From 2,501 to 5,000	236	171
From 5,001 to 10,000	258	273
From 10,001 to 20,000	142	224
20,001 to 50,000	91	199
≥ 50,001	100	92

Source: OeNB (CCR), author's calculations.

Note: Municipalities excluding local government-owned companies (see box 4).

Box 3

**Per Capita Exposure Highest in Small Municipalities**

The deficit of Austria's local governments (excluding Vienna) reached EUR 11.0 billion in 2006 (compared with EUR 10.8 billion in 2005), with the bracket from 1,001 to 2,500 inhabitants accounting for both the highest number of inhabitants within a bracket and the highest share of total exposure (table 3).

While the average municipal exposure per inhabitant (excluding Vienna) totaled EUR 1,694 in 2006, small municipalities (up to 1,000 inhabitants) had the highest debt level per inhabitant (EUR 2,068), followed by the bracket from 20,001 to 50,000 inhabitants (EUR 2,054). The seven largest municipalities (excluding Vienna), which all have 50,000 inhabitants or more, reported the lowest per capita debt, namely EUR 1,442.

Table 3

**Financial Debt of Austrian Municipalities by Size in 2006**

	Number of municipalities	Number of inhabitants	Financial debt in 2006	
			EUR million	EUR per capita
<b>Municipalities excluding Vienna</b>	2,356	6,482,803	10,980.8	1,694
Up to 1,000 inhabitants	598	375,358	776.3	2,068
From 1,001 to 2,500 inhabitants	1,129	1,814,899	3,164.3	1,743
From 2,501 to 5,000 inhabitants	413	1,388,322	2,273.8	1,638
From 5,001 to 10,000 inhabitants	144	953,094	1,527.8	1,603
From 10,001 to 20,000 inhabitants	49	622,440	1,041.6	1,673
From 20,001 to 50,000 inhabitants	16	458,772	942.5	2,054
From 50,001 to 500,000 inhabitants	7	869,918	1,254.6	1,442
<b>Municipalities including Vienna</b>	2,357	8,032,926	12,454.3	1,550

Source: Statistics Austria, author's calculations.

Note: Number of inhabitants based on the census of 2001.

### 3.1.3 Average Lease Share of Total Exposure between 1.6% (Carinthia) and 23.9% (Tirol) in 2006

The importance of municipal lease financing varies considerably across the various provinces. On the one

hand, the share of average lease volumes in the total annual exposure ranged from as little as 1.6% for Carinthia's municipalities to close to one-quarter for the municipalities of Tirol (2006 data; table 4 and chart 1).

Table 4

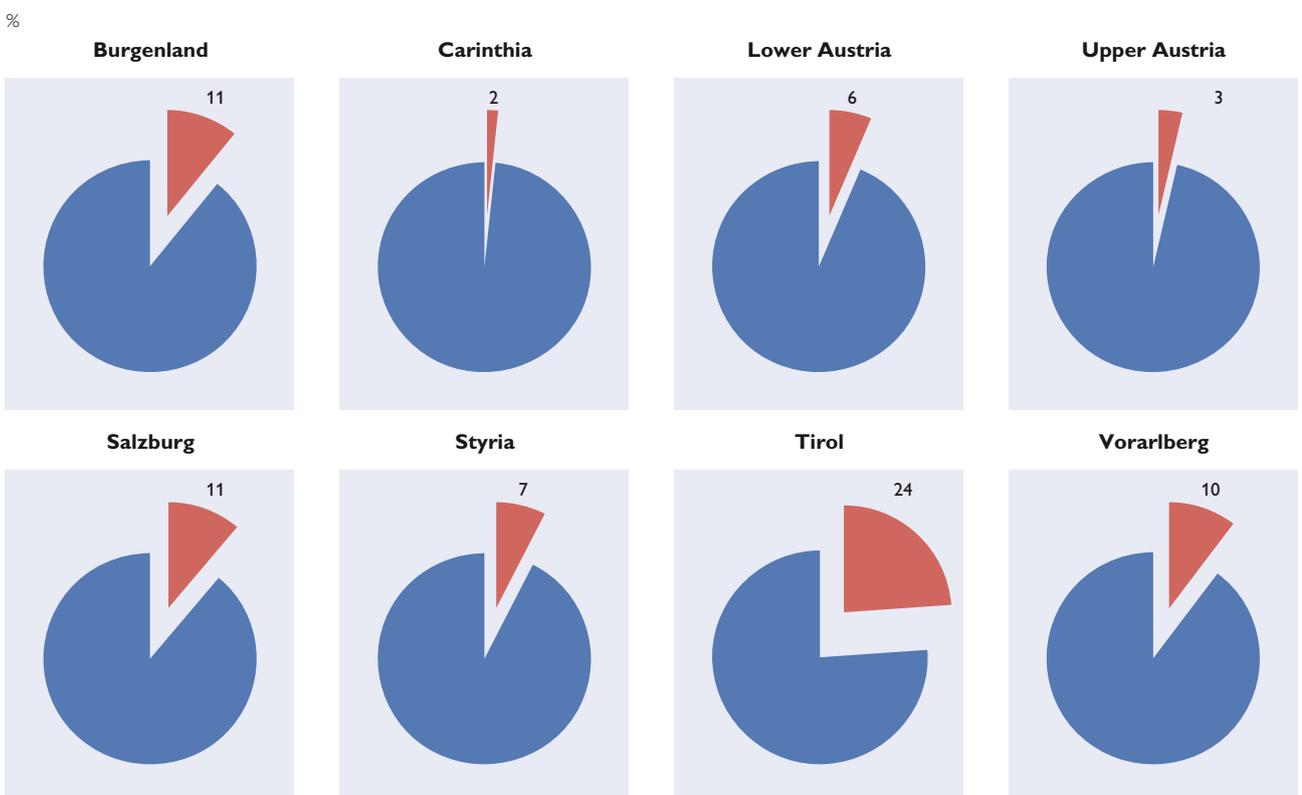
Average Leasing Ratio in the Total Exposure of Municipalities by Province										
%	Burgenland	Carinthia	Lower Austria	Upper Austria	Salzburg	Styria	Tirol	Vorarlberg	Total	
1995	1.6	1.7	6.8	27.4	7.0	6.6	29.9	23.4	12.1	
1996	1.1	1.4	6.2	8.4	6.2	7.0	27.5	20.0	9.2	
1997	1.8	1.2	4.8	7.0	6.7	5.9	25.6	18.8	8.2	
1998	1.5	1.3	4.0	5.4	6.4	4.8	23.1	16.0	7.0	
1999	2.5	1.4	3.9	4.9	9.8	5.0	21.9	16.0	7.1	
2000	3.7	1.2	4.6	3.8	9.2	6.0	21.8	14.2	7.3	
2001	6.1	1.1	6.1	5.1	10.6	8.1	23.0	14.6	8.7	
2002	8.6	1.3	6.2	5.2	10.5	7.9	22.3	14.2	8.8	
2003	9.7	1.1	6.3	5.2	9.8	8.6	23.1	13.6	9.0	
2004	10.6	1.5	6.9	5.4	10.2	8.9	23.8	11.1	9.3	
2005	11.7	1.3	6.9	4.7	10.9	8.7	24.2	10.5	9.3	
2006	10.8	1.6	6.3	3.5	11.1	7.4	23.9	10.3	8.5	

Source: OeNB (CCR), author's calculations.

Note: Municipalities excluding local government-owned companies (see box 4).

Chart 1

Leasing Ratio of Municipalities' Total Exposure as Recorded in the CCR on December 31, 2006



Source: OeNB (CCR), and author's calculations.

Note: Municipalities excluding local government-owned companies.

On the other hand, the provincial breakdown also reveals considerable differences in developments over time: While the average lease share remained fairly constant in Carinthia, Lower Austria and Styria, it increased sharply in Burgenland and in Salzburg. At the same time, the volume of lease financing dropped in Upper Austria, Tirol and Vorarlberg, the three provinces with the highest initial levels, in fact plummeting to very low levels in Upper Austria.

### 3.2 Representativeness of the Central Credit Register Data

#### 3.2.1 Central Credit Register Data (OeNB) versus Government Finance Statistics (Statistics Austria)

Table 5 shows the debt volumes of Austria's local governments (excluding Vienna) on the basis of two different statistical sources – the Government Finance Statistics compiled by Statistics Austria and the CCR of the OeNB. Notwithstanding initial differences, the end-2006 levels were fairly well aligned, coming to EUR 11 billion according to the Government Finance Statistics and to EUR 10.5 billion according to the CCR. The narrowing of this gap can, however, basically be explained by two changes related to CCR reporting requirements. On the one hand, the reporting requirements were extended in 1997 to include securitized assets,

as a result of which the scope of the debt definitions has become more closely aligned. On the other hand, the threshold for volumes of credits subject to reporting requirements was lowered from initially ATS 5 million (EUR 363,364) to EUR 350,000. This increased the degree of coverage of the CCR in relation to the aggregate volume of Austrian debtors.

When taking into account the distinction between operating leases and finance leases made above,<sup>12</sup> the debt volumes of municipalities excluding local government-owned companies as reflected in the CCR (2006 data) corresponded to somewhat more than 85% of the financial debt recorded by Statistics Austria. In other words, the CCR data are highly *representative*.

A cross-check with the number of municipalities confirms the high degree of representativeness of the CCR database: Out of 2,356 Austrian municipalities (excluding Vienna) listed in the Government Finance Statistics of 2006, as many as 2,173 had reported a financial debt of more than EUR 350,000. Those municipalities would be candidates for the CCR, which in fact listed 2,095 municipalities as debtors in 2006. This gap suggests that the criterion mentioned above (EUR 350,000 in loans outstanding from *one* institution subject to reporting requirements) did not apply to 78 municipalities.<sup>13</sup>

<sup>12</sup> That is to say, before calculating the degree of representativeness, we deducted the lease financing volume of EUR 1.1 billion from the total debt burden of municipalities excluding local government-owned companies on a CCR basis.

<sup>13</sup> To some extent, the difference may also be explained by the number of credit lines below the threshold (and thus not covered) that had been provided to municipalities already covered by the CCR by other financial institutions.

Table 5

**Debt Level of Austrian Municipalities according to Different Sources**

Year-end level in EUR million

	Financial dept (Statistics Austria)	Municipal debt (excluding local government-owned companies) – CCR	Municipal debt (including local government-owned companies) – CCR
1990	5,223	2,086	2,542
1991	5,480	2,168	2,675
1992	5,857	2,323	2,872
1993	6,470	2,511	3,028
1994	7,028	3,455	4,127
1995	7,712	4,321	5,250
1996	8,181	5,027	6,260
1997	8,490	6,142	8,742
1998	8,800	6,916	9,780
1999	9,222	7,432	10,517
2000	9,594	8,333	11,830
2001	9,940	8,949	12,609
2002	10,097	9,343	13,158
2003	10,347	9,869	13,909
2004	10,655	10,491	14,899
2005	10,836	10,559	15,047
2006	10,980	10,479	15,171

Source: OeNB (CCR), Statistics Austria.

Note: See box 4 for definitions.

Box 4

**Central Credit Register: Conceptual Framework and Sectoral Classification**

The starting point for assessing the representativeness of CCR data compared with Government Finance Statistics<sup>1</sup> (section 3.2.1) must be a comparison of the underlying **concepts and definitions**. Financial debt as reflected in the Government Finance Statistics and as derived from the public debt statements published in line with the Budgeting and Accounts regulation is broadly defined in Article 65 paragraph 1 of the Federal Budget Act 1986 as “any cash liabilities ... incurred in order to ... obtain spending power.” Such liabilities include, among other things, bonds, loan liabilities as well as assignments of assets (i.e. the transfer of assets to financial institutions before maturity against the cash equivalent of those assets less interest rates and fees). This general definition of financial debt also covers the types of CCR credit subject to reporting requirements mentioned above. There is, however, an exception with regard to the treatment of lease transactions: Only the financial lease volumes are treated as financial debt, whereas operating leases qualify as administrative debt. In contrast, the CCR covers all lease volumes (irrespective of the type of lease transaction) that exceed the reporting threshold of EUR 350,000. This means that data stemming from different sources need to be adjusted for that aspect to allow a meaningful comparison (section 3.2.1).

With regard to **sectoral classification** it should be pointed out that both the financial debt statistics of the local governments (excluding Vienna) as well as the CCR data on indebted municipalities (excluding Vienna) provide an overall picture of the capital market activities of local governments. In this respect, no distinction is made as to whether they raised funds for the purpose of financing municipal market producers, nonmarket producers or third parties. Making that distinction is, however, crucial for calculating the general government debt under the Maastricht definition.<sup>2</sup>

<sup>1</sup> The Government Finance Statistics reflect the fiscal debt of municipalities based on the latter's finalized accounts. For a sectoral breakdown of general government debt, see the Statistics Austria publication “Gebarungen und Sektor Staat.Teil II” (annual series).

<sup>2</sup> This article does not provide a breakdown of debt into non-Maastricht-based and Maastricht-based debt measures; the latter do not include the liabilities of market producers but include offsetting entries for intergovernmental claims.

The CCR data can also be used to highlight the level of municipal liabilities including any entities that have close relations with municipalities. This allows us to include also public entities or nonprofit organizations (municipal cooperatives, municipal hospitals, municipal utilities, etc.) as well as borrowers with joint and several liability<sup>3</sup> constituting municipal entities and registered companies, with at least one local government holding at least a 50% stake. In contrast, the Government Finance Statistics reflect only the financial debt of municipal cooperatives, which reached roughly EUR 3 billion in 2006 (Statistics Austria, 2006).

<sup>3</sup> A borrower group with joint and several liability exists when several borrowers take out a joint credit line, which may only be drawn down from a joint account.

### 3.2.2 Comparability of the Representativeness of CCR Data on Lease Financing Is Limited

Apart from the OeNB's CCR, the Association of Austrian Leasing Companies is another key source for lease financing data at the municipal level. The Financing Needs Report 2002, commissioned by the Austrian Association of Towns and Cities and the Austrian Association of Municipalities, put the municipal leasing volume for the period from 2001 to 2004 at EUR 1,026 million.

For 2005 and 2006 the Association of Austrian Leasing Companies was able to provide the lease volume (present value before deduction of deposits) only for the public sector as a whole (table 6).

The overwhelming share of the public sector's lease volume, namely 90%, was real estate leasing, which totaled about EUR 3.5 billion in 2006. The major beneficiaries of real estate leasing are the provincial governments, which rely on real estate leasing above all in the area of (vocational) schooling and elder care. Demand for equipment leasing (10% share) and vehicle leasing (3% share) is comparatively low among public sector entities, but has been growing. On the whole, the public sector lease volume reached EUR 4 billion in 2006, thus accounting for one-fifth of the Austrian leasing market.

The possibility of cross-checking the CCR-based lease volumes for their *representativeness* is limited owing

Table 6

#### Leased Property in Austria<sup>1</sup>

Type of lease	2005		2006	
	EUR million	share in %	EUR million	share in %
Real estate, total	10,636	52	11,033	51
of which: leased by public entities	3,602	88	3,487	87
Equipment, total	3,467	17	3,598	17
of which: leased by public entities	419	10	396	10
Vehicles, total	6,264	31	6,926	32
of which: leased by public entities	73	2	117	3
Total leased property	20,367	100	21,557	100
of which: leased by public entities	4,094	100	4,000	100

Source: Association of Austrian Leasing Companies.

<sup>1</sup> These figures are representative for approximately 96% of the Austrian leasing market.

to the lack of specific data sources. The evidence provided by the finance needs report 2002, which is based on a survey of the Austrian Association of Leasing Companies, would appear to confirm the CCR measures. Yet the Financing Needs Report only reflects the sum total of new leasing business from 2001 to 2004 (roughly EUR 1 billion), which merely allow for a rough comparison, as the data are not adjusted for repayments and the pre-2001 volumes. Last but not least, no municipal data are available for the final years of the review period. The lease volume recorded by the Austrian Association of Leasing Companies for the public sector as a whole cannot be broken down further due to data limitations.

#### 4 Possible Reasons for the Different Role of Municipal Leasing Across Provinces

The following section contains a number of *working hypotheses*<sup>14</sup> established to explain the differences in the incidence of leasing across provinces. These hypotheses are tested below based on municipalities excluding local government-owned companies:

- *Financing behavior is influenced by municipal supervisors.* In their capacity as municipal supervisors, the provincial governments may affect the choice among different financing forms in a number of ways (e.g. by giving incentives through subsidies).
- *Leasing may solve problems of credit-worthiness.* Municipalities with poor

credit records find it difficult to raise the required funds through “traditional” loans.

- *Municipalities with high per capita debt volumes are more inclined to opt for leasing.* Municipalities that are already highly indebted (e.g. based on per capita measures of debt) might have a particular interest in looking into alternative financing options – such as leasing – that do not increase the level of debt (further).

#### 4.1 Is Lease Financing Affected by Institutional Requirements Imposed by Municipal Supervisors?

There are a number of municipal transactions that require *supervisory approval*. The type and scope of those transactions differ across provinces and are outlined in the respective local bylaws. Taking out a loan or assuming a guarantee or liability is typically subject to approval. As demand for lease financing rose, lease deals became subject to approval in more and more municipalities.<sup>15</sup> The different periods in which municipal bylaws were amended basically reflects the diverging role of lease financing across provinces: As a rule, the earlier the time at which lease transactions became subject to approval, the lower the share of leases is in the overall exposure. In Carinthia, where the average lease share of local governments’ overall exposure was lowest at 2% in 2006, lease contracts have been subject to approval by the

<sup>14</sup> The list provided here is not exhaustive.

<sup>15</sup> The approval requirements differ across provinces. Different provinces may treat different types of leasing differently; in some instances approval may be subject to different criteria, such as the financial strength of a community. However, real estate leasing – which accounts for the bulk of municipal leasing – is either subject to approval as a rule (in Burgenland, Carinthia, Lower and Upper Austria, Tirol and Vorarlberg) or subject to approval under certain conditions (in Salzburg and Styria). See Mösenbacher (2004).

provincial government since mid-1998. Conversely, those provinces in which municipalities recorded relatively high lease shares (such as Burgenland, Salzburg and Vorarlberg) introduced approval requirements for lease deals as late as in 2003 or 2004.

Furthermore, the municipal supervisors may also *make approval of municipal investment projects dependent on a specific form of financing*. Such a concept may reflect many different intentions, such as the wish to compare the costs of different financing alternatives, to reach specific targets, like Maastricht-based deficit and debt measures, or to influence the structure of the debt portfolio.

#### 4.2 Are Lease Deals a Way Out for Municipalities with Poor Credit Records?

To test the working hypothesis, namely that municipalities with poorer credit records – measured in terms of the average default probability (all credit lines taken together) of a borrower<sup>16</sup> – tend to rely more heavily on leasing in order to circumvent banks' credit standards for the approval of loans or credit lines, a correlation matrix was built for the purpose of this article.

This matrix is composed of correlation coefficients that describe the linear relationship of the variables and that range between 0 (no correlation) and 1 (complete correlation). Correlations are broad-brush indicators of the relationship between variables, but they cannot answer the causality question, i.e. highlight cause-effect relationships.<sup>17</sup>

If lease financing is assumed to play a minor role at low default probabilities (i.e. high creditworthiness), the correlation coefficient should be positive and close to 1. As is evident from table 7, the correlation coefficient is indeed positive, but it is close to 0. In other words, there is no statistical evidence of such a relationship.

This lack of a relationship between low lease finance and high creditworthiness can be explained by the fact that like loans, lease deals are subject to an approval process and creditworthiness criteria that are similar to the standards applied for loans. Before entering into a contract, leasing companies will test the prospective lessee's default probability using numerous sources of information (trade inquiries, annual financial statements, income statements, credit statements

Table 7

#### Correlation Matrix – Probability of Default and Lease Financing

	Probability of default	Leased property per inhabitant	Lease ratio in % of total exposure
Probability of default	1	0.051*	0.006
Leased property per inhabitant	0.051*	1	0.620**
Lease ratio in % of total exposure	0.006	0.620**	1

Source: OeNB (CCR), author's calculations.

Note: \*The correlation is significant at a level of 0.05 (both sides). \*\*The correlation is significant at a level of 0.01 (both sides).

<sup>16</sup> In this context it appeared to useful to take the arithmetic mean rather than the median to reflect the actual default probability characteristics of individual credit lines.

<sup>17</sup> Causality is typically tested with experiments followed up by regression analysis. This approach was, however, not a useful option for this paper.

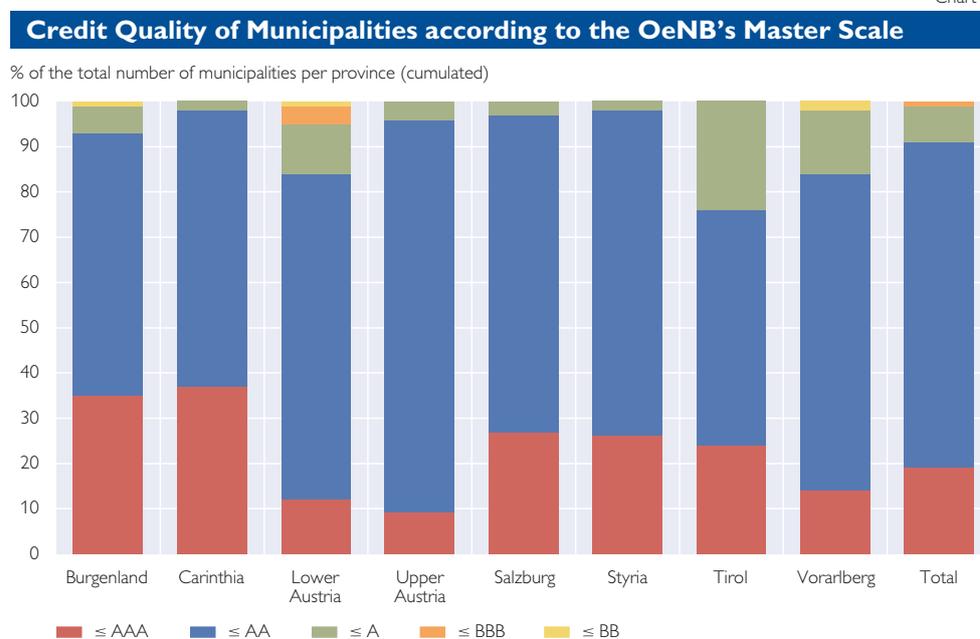
and, in the case of municipalities, in particular existing levels of per capita debt).

#### 4.2.1 Digression: The Larger a Community, the Better its Credit Quality

Banks assess the credit quality (ability to pay interest and repay principal) of municipalities on the basis of different measures (e.g. measures of financial strength) and assign them to a given rating grade. Such internal ratings have been applied to municipalities based on CCR reporting requirements since early 2003. Banks are thus meeting the growing institutional demand for information on credit quality (e.g. on the part of the OeNB, the IMF and the World Bank) as well as the requirements of the new

capital adequacy (Basel II) rules (Datschetzky et al., 2003). As the individual financial institutions use different classification frameworks, the OeNB transfers the credit quality data provided in CCR reports to a master scale in order to make them comparable. Depending on their probability of default, municipalities are assigned to one of eight rating grades of the OeNB master scale (grade 1: highest credit quality; grade 8: default).<sup>18</sup> The lower the default probability, the higher the credit rating to be assigned. As communities tend to have more than one credit line or numerous exposures, which may come with different probabilities of default, it is necessary to establish an “average” default probability that reflects the entire debt portfolio of the

Chart 2



Source: OeNB (CCR), and author's calculations.

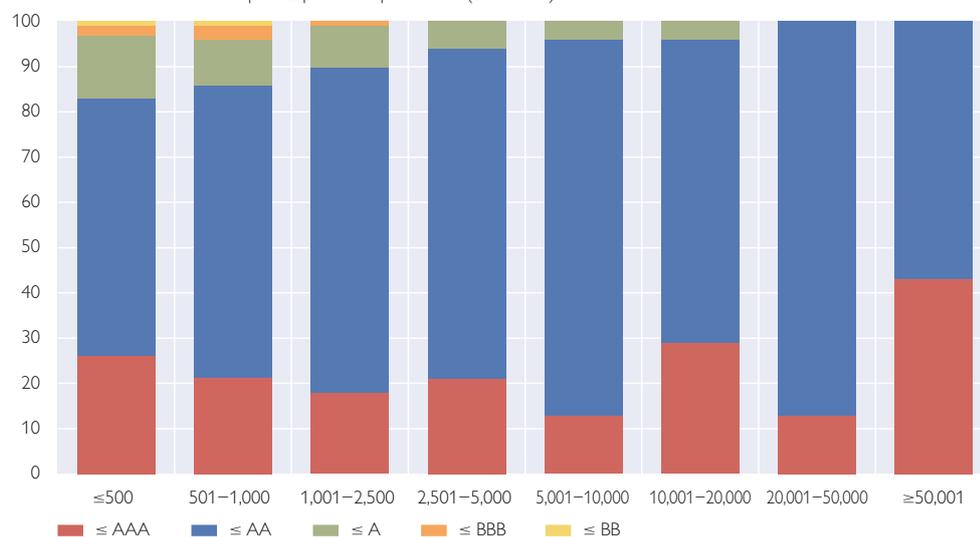
Note: Based on the rating framework of Standard & Poor's, AAA denotes the highest rating.

<sup>18</sup> The OeNB's master scale contains eight rating grades, which are further broken down into 27 subgrades (21 “viable” grades and 6 default grades).

Chart 3

### Credit Quality of Municipalities according to the OeNB's Master Scale

% of the total number of municipalities per municipal bracket (cumulated)



Source: OeNB (CCR), and author's calculations.

Note: Based on the rating framework of Standard & Poor's, AAA denotes the highest rating.

given municipality. To this effect, and to prevent outliers from skewing the rating, the OeNB calculates the median of the default probabilities for all individual credit lines. To put the OeNB master scale data in a wider perspective in this article, the results were translated into the rating framework of Standard & Poor's (S&P), where AAA indicates the highest credit quality. According to the S&P framework, the municipalities in the five best rating grades are rated AAA to BB.<sup>19</sup>

Credit quality differs highly across individual municipalities. A breakdown by individual provinces (chart 2) shows that Carinthian and Styrian municipalities have a particularly high

credit rating: approximately 98% of all communities are rated AA or better.

In Tirol, in contrast, little more than three-quarters of all municipalities are rated that highly. Extending the scope to A broadly suffices to cover the majority of all Austrian municipalities. Only in Burgenland, Lower Austria and Vorarlberg are there also municipalities rated BBB or BB.

A breakdown by municipal size shows that credit quality deteriorates as size increases (chart 3). In other words, the more inhabitants in a municipality, the higher the share of rating grades that correspond with higher probabilities of default, and vice versa.<sup>20</sup>

<sup>19</sup> For an exact definition of the underlying S&P ratings for long-term issuer default rates see [www2.standardandpoors.com](http://www2.standardandpoors.com)

<sup>20</sup> However, as the correlation coefficient calculated from the original time series (number of inhabitants, probability of default) is close to 0, the statistical evidence backing up this relationship is not significant.

### 4.3 Does High Per Capita Debt Prompt Portfolio Shifts toward Lease Finance?

This section looks into the question of whether highly indebted communities are more inclined to shift their portfolios toward instruments that do not constitute financial debt.

In order to test this relationship, a debt variable representing the per capita level of debt excluding lease liabilities (residual debt per inhabitant) is cross-tabulated with the available leasing variables in a correlation matrix. If the working hypothesis holds, the correlation coefficient between residual debt and leasing per capita should be positive and close to 1. The correlation between residual debt and the leasing share ought to be similar if the leasing share rises at a disproportionate scale as residual debt increases. In actual fact, the coefficient between residual debt per capita and leasing volume per capita is indeed positive according to the correlation matrix; at the same time, a measure of just 0.16 indicates a rather weak relationship between the two variables (table 8).

When the second leasing variable, the share of leasing in total exposure, is used, the correlation coefficient turns negative. Apparently, the observations reflect that the increase in residual debt is higher than the increase in the lease volume, as a result of which the lease share in the aggregate

exposure tended to decline as the residual debt rose. This would imply that the working hypothesis, based on using the leasing share as an indicator for a high share of leasing financing when per capita debt is high, does not hold. This result confirms the weak relationship derived above.

One reason for that weak relationship might be that the per capita debt of communities is an important criterion in the rating test to which leasing companies subject potential lessees. In other words, it may well be the case that a high (residual) debt is the very reason why access to leasing finance is limited for municipalities.

## 5 Conclusions

The CCR provides a database with detailed information on the debt situation of municipalities and on the characteristics of municipal finance. As indicated by a cross-check with the Government Finance Statistics, which reflect the financial debt of municipalities on the basis of finalized accounts, the CCR data reflect 85% of the total exposure of municipalities and are thus fairly representative measures of municipal debt (even though liabilities become subject to reporting requirements only once they exceed EUR 350,000 in total). Given this high degree of representativeness, the CCR is an important data source for analyses.

Table 8

### Correlation Matrix – Debt per Capita and Lease Financing

	Residual debt per inhabitant	Leased property per inhabitant	Lease ratio in % of total exposure
Residual debt per inhabitant	1	0.155**	-0.190**
Leased property per inhabitant	0.155**	1	0.620**
Lease ratio in % of total exposure	-0.190**	0.620**	1

Source: OeNB (CCR), author's calculations.

Note: \*\*The correlation is significant at a level of 0.01 (both sides).

The CCR facilitates a systematic assessment of the role of lease financing at the municipal level. The development of lease volumes reflects, at least to some extent, the effects of institutional and legal framework conditions (such as Maastricht-based requirements). What is striking is that the lease volume jumped in 2001. This was the year in which the Austrian Stability Pact of 2001 became effective, which produced consolidation pressures at all levels of government. Municipalities responded above all by lowering their investment ratio and by looking for alternative financing instruments, such as lease financing. The ensuing increase in municipal leasing thus reinforced the decline in municipal appropriations in the financing account.

The average lease volumes or shares in local governments' total exposure (within each province) as reflected in the CCR show a high degree of heterogeneity. Yet it is fairly difficult to back up those differences across provinces with theoretical evidence.

Furthermore, there is no conclusive evidence as to the role municipal supervisors play in approving investment projects, as the approval process is influenced by a range of factors (costing exercises, Maastricht relevance etc.), which do not a priori imply a systematic bias for particular forms of financing.

At the same time, the leasing ratio of the aggregate exposure appears to be correlated with the date at which municipal lease finance deals became subject to approval under municipal bylaws. The earlier in time approval became mandatory, the lower the leasing volume as a ratio of the aggregate exposure tends to be.

Conversely, it was not possible to provide empirical evidence of a posi-

tive correlation between a higher share of leasing in total exposure with poorer credit quality. The starting point for testing this relationship was the hypothesis that communities with a poorer credit quality might try to circumvent stringent credit standards of banks by opting more readily for leasing. While the credit ratings made by financial institutions that are subject to reporting requirements confirm that those ratings made some difference, they do not confirm that lease deals might have substituted loans as a result of poorer credit records. This may be ascribed to the fact that potential borrowers are subjected to comparable credit quality checks no matter whether they want to take out a loan or lease.

A high per capita level of debt correlates with the scope of lease financing to a rather limited extent. Thus, a high existing exposure will provide little motivation for shifting portfolios toward lease financing so as not to increase the level of debt any further, as under an operating lease framework.

The decision for or against lease financing can be expected to be taken on an ad hoc basis in most instances. Neither supervisory framework conditions nor a community's level of indebtedness are likely to have a systematic influence on lease deals. While municipal leasing is a useful alternative to traditional financial instruments under certain conditions, it is not a panacea to ease the burden on municipal households and/or to control public debt levels (Wölker, 1996). While municipal leasing can be expected to have its merits above all when it comes to real estate leasing for nonmarket producers, the case for this instrument will always have to be made on an ad hoc basis.

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# The Treaty of Lisbon

## Amendments to the EU Treaties and Their Consequences for EMU

Sylvia Gloggnitzer<sup>1</sup>

The Treaty of Lisbon is the EU's new legal framework. The EU heads of state or government have agreed on a new EU treaty conceived to ensure that the enlarged EU consisting of 27 Member States functions more efficiently than under the Treaty of Nice, which is currently in place. The Treaty of Lisbon was signed by EU heads of state or government on December 13, 2007, in Lisbon. The Treaty of Lisbon is to replace the EU Constitutional Treaty rejected in national referendums in France and the Netherlands; it has retained large parts of the constitutional treaty's substance. First and foremost, the new EU treaty represents a reform that introduces increased majority voting, a clear delimitation of EU competences and a changed institutional framework for EU institutions.

Other than the general institutional changes, elements of the Treaty of Lisbon relevant to Economic and Monetary Union (EMU) include, above all, the introduction of price stability to the new treaty's list of objectives, the institutional status of the ECB and the protection of its independence as well as the strengthening of the Eurogroup. The conditions for EMU set out in the Treaty of Maastricht are now reinforced politically in the Treaty of Lisbon.

For the EU's new legal basis to enter into force on January 1, 2009, as scheduled, the Treaty of Lisbon needs to be ratified by all 27 Member States prior to the elections to the European Parliament in 2009.

JEL classification: A12, E50, F15, F55, K0, K10, N44

Keywords: Treaty of Lisbon and EMU, ECB an institution of the EU, independence of the ECB.

### 1 Introduction

This study describes the consensus-finding process for the Treaty of Lisbon<sup>2</sup> and outlines the major results of the 2007 Intergovernmental Conference and possible effects of the treaty on the EU and EMU.<sup>3</sup> This study attempts to provide an overview of the approach pursued at the Intergovernmental Conference. Section 2 tries to span a bridge between the Treaty of Nice and major revisions introduced by the Treaty of Lisbon. Section 3 describes the structure of the Treaty of Lisbon. Section 4 is dedicated to consequences for EMU

with a focus on changes relating to the ECB and the Eurogroup. The study concludes with section 5, which provides an overview of the Member States' ratification process, which is currently scheduled to be concluded by January 1, 2009.

### 2 From the Treaty of Nice to the Treaty of Lisbon

By amending the EU treaties, the EU intends to pave the way for future integration processes to widen and deepen the EU. The current legal basis of the EU is the Treaty of Nice, which has been in effect since 2003.

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<sup>2</sup> Original name of the treaty: "Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community." See OJEU 2007/C 306/01; referred to as the Treaty of Lisbon in this study.

<sup>3</sup> This study does not describe all milestones leading to the consensus about the new legal basis for the EU, nor does it include information about articles that have been revised or added since the Treaty of Nice came into force; given that the treaty is several hundred pages long and that this endeavor would thus go beyond the scope and purpose of this paper.

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EU in Brussels.

Table 1

### Milestones Leading from the Treaty of Nice to the Consensus about the Treaty of Lisbon

Date	Milestone
February 26, 2001	Signing of the Treaty of Nice.
December 14/15, 2001	"Laeken Declaration." In Laeken (Belgium), the European Council decides to entrust consultations about the future of Europe to a convention, which concludes in 2004 with the signing of the Constitutional Treaty.
February 28, 2002	Constitution of the convention on the future of Europe, headed by Valéry Giscard d'Estaing, the former president of France.
February 17, 2003	The Treaty of Nice enters into force.
October 4, 2003	Opening of the 2003 intergovernmental conference.
June 16/17, 2004	Consensus about the Constitutional Treaty among EU heads of state or government in Brussels.
October 29, 2004	Signing of the Constitutional Treaty in Rome.
May 29, 2005	Referendum on the Constitutional Treaty in France – the majority rejects the treaty.
June 1, 2005	Referendum on the Constitutional Treaty in the Netherlands – the majority rejects the treaty. For the time being, reform efforts have thus failed.
June 17 to 18, 2005	Crisis summit in Brussels – initiation of a period of reflection about the rejected Constitutional Treaty.
March 25, 2007	"Berlin Declaration" on the occasion of the 50 <sup>th</sup> anniversary of the signing of the Treaties of Rome – EU heads of state or government commit to providing a new legal basis for the EU by 2009. (At that time, 18 Member States had ratified the failed Constitutional Treaty).
June 21/22, 2007	Political consensus about a detailed mandate for an intergovernmental conference on the reform treaty for Europe was reached at the European Council in Brussels.
July 23, 2007	Opening of the 2007 intergovernmental conference.
October 18/19, 2007	Political consensus about the reform treaty for Europe was reached among EU heads of state or government at the European Council in Lisbon (Treaty of Lisbon), following the shortest intergovernmental conference in the history of the EU.
December 12, 2007	Proclamation of the Charter of Fundamental Rights at the European Parliament in Strasbourg by the president of the European Parliament, the EU Council president and the president of the European Commission.
December 13, 2007	Signing of the Treaty of Lisbon by the heads of state or government of all 27 EU Member States; start of the ratification process.

Source: Weidenfeld and Wessels (2007); Borchardt (2006).

However, the number of Member States has increased from 15 to 27 since then. At the same time, EU Member States have stepped up their cooperation in specific areas to stand their ground in a globalized economy and in the international financial markets. Moreover, while the consensus expressed in the Treaty of Nice paved the way for the most recent enlargement of the EU, a forward-looking or comprehensive EU reform – to which the EU had already expressed its commitment even before the Treaty of

Nice was drafted – had yet to be achieved.<sup>4</sup>

Table 1 shows the milestones leading to the revision of the EU treaties since the signature of the Treaty of Nice in 2001.

#### 2.1 The Consensus-Finding Process at the 2007 Intergovernmental Conference

Following the conclusion of a period of reflection of several years and arduous negotiations, the foundations for a new common basis for the EU

<sup>4</sup> According to declaration No. 23 of the Treaty of Nice on the future of the Union, the debate about the reform was to focus on the following issues: the principle of subsidiarity, the future role of national parliaments, the status of the Charter of Fundamental Rights and the possible simplification of EU treaties.

were laid during a European Council meeting under the German EU Council Presidency on June 21–22, 2007. This breakthrough was achieved by the decision of the heads of state or government to convene an inter-governmental conference and their consensus about a mandate for this intergovernmental conference. This mandate for treaty reform was the groundwork to enhancing the efficiency and democratic legitimacy of the enlarged EU as well as the coherence of its external action compared to the situation today (European Council, 2007). The Intergovernmental Conference opened on July 23, 2007,<sup>5</sup> on the occasion of a meeting of the EU foreign ministers under Portuguese Presidency.

#### 2.1.1 Specifications for the Treaty of Lisbon – the Mandate for the 2007 Intergovernmental Conference

The basis for negotiations at the 2007 Intergovernmental Conference was a highly detailed 16-page mandate that largely determined the wording of the new treaty to reform the EU institutions. This paper was the only basis for negotiations and therefore, all work done by the Intergovernmental Conference relied on this mandate. All changes *vis-à-vis* the draft constitutional treaty had to be explicitly itemized in the mandate (European Council, 2007).

The main purpose of the mandate was to transfer the content envisaged for the Constitutional Treaty to the Treaty on European Union (TEU) and the Treaty establishing the European Community (TEC).<sup>6</sup> With this approach, the substance of the Constitutional Treaty remained mostly intact. The content of the mandate reflects previously agreed political solutions.

#### 2.1.2 Swift Negotiations at the Technical Level – A Decisive Factor for the Breakthrough

When Portugal assumed the EU Council Presidency on July 1, 2007, it aimed at reaching an agreement about the new Treaty during the informal summit of the heads of state or government held on October 18–19, 2007. It was to be the shortest Intergovernmental Conference in the history of the EU: formally opened on July 23, 2007, a political consensus about a new Treaty was reached on October 18, 2007. On December 13, 2007, EU heads of state or government signed the Treaty of Lisbon at the meeting of the European Council.

The conduct of negotiations during the 2007 Intergovernmental Conference differed greatly from the one at the 2003/2004 Intergovernmental Conference<sup>7</sup> which passed the Constitutional Treaty.

A tight timeline was applied at the 2007 Intergovernmental Conference

<sup>5</sup> The convening of intergovernmental conferences is based on article 48 of the TEU, which determines that, in the case of institutional changes to monetary matters, the ECB must be consulted, in addition to the European Commission, the European Parliament and the European Council.

<sup>6</sup> See section 3.

<sup>7</sup> The 2003/2004 intergovernmental conference was preceded by a convention whose members essentially drafted the Constitutional Treaty for Europe. Not only the governments of Member States participated in this European convention, but also two members of each national parliament. There was an extensive debate, which was also open to the general public, and negotiations documents were therefore made publicly available. This approach was to bring to bear the democratic element in the drafting process of the Constitutional Treaty.

– the goal being that it “... complete its work as quickly as possible, and in any case before the end of 2007 ...” (European Council, 2007).

Actual negotiations were not conducted at the political, but at the technical level, i.e. in the committee of legal experts of all 27 Member States, chaired by the Director-General of the Legal Service of the Council of the European Union. However, the previously specified timeline (IGC 6/07, 2007) was not fully met. The legal experts held meetings until October 3, 2007. Representatives of the European Parliament and the European Commission were closely involved in these negotiations. The General Secretariat of the Council was in charge of the conference’s secretarial tasks. All documents and information about the 2007 Intergovernmental Conference have been published on a dedicated European Council website.<sup>8</sup> EU heads of state or government had the overall responsibility for the Intergovernmental Conference and were supported by the Council of Foreign Ministers. Generally speaking, this was an unprecedented approach in the history of EU Intergovernmental Conferences (IGCs).

The group of legal experts carried out its work while strictly adhering to the IGC mandate. This mandate was the “manual” for amendments to fundamental EU treaties. Issues that could not be resolved at the technical level were addressed at the political level during the Council of Foreign Ministers<sup>9</sup> and at the European Council.<sup>10</sup>

On October 5, 2007 a “finished draft” of the reform treaty was available. On October 19, 2007, at the European Council in Lisbon, the Portuguese President of the European Council announced the agreement on a new constitutional basis for Europe, the Treaty of Lisbon. The ceremony for the formal proclamation of the Charter of Fundamental Rights by the European Parliament in Strasbourg took place on December 12, 2007. On December 13, 2007, the Treaty of Lisbon was signed by EU heads of state or government and foreign ministers at the European Council. The Treaty of Lisbon is scheduled to enter into force on January 1, 2009, before the elections to the European Parliament. However, the ratification process could still constitute a road-block.

## 2.2 Major Amendments vis-à-vis the Treaty of Nice

The Treaty of Lisbon contains the following major institutional amendments vis-à-vis the Treaty of Nice (Dippel, 2007).

- **A single legal personality for the EU:** The Treaty of Nice distinguishes between two separate entities, the EC and the EU. In contrast to the EC, the EU had not had any treaty-making power up to now. The EU was previously not entitled to enter into treaties with third parties (Seeger and Emmanouilidis, 2007). This will change as soon as the Treaty of Lisbon takes effect, because the EC – EU dichotomy will cease to exist in matters relating to exter-

<sup>8</sup> [http://www.consilium.europa.eu/cms3\\_fo/showPage.asp?id=1297&lang=en](http://www.consilium.europa.eu/cms3_fo/showPage.asp?id=1297&lang=en)

<sup>9</sup> *Meeting of foreign ministers of all member states: September 7 to 8 and October 15, 2007.*

<sup>10</sup> *Meeting of EU heads of state and government at the European Council, October 18 to 19, 2007.*

Table 2

The Treaty of Nice and the Treaty of Lisbon: Comparison of Specific Areas		
Regulatory area	Regulations in the Treaty of Nice	Regulations in the Treaty of Lisbon
Structure of the treaty	Treaty of Nice consists of two parts: EU Treaty (TEU) EC Treaty (TEC)	Treaty of Lisbon consists of two parts: Amendments to the EU Treaty (TEU) Amendments to the EC treaty and renamed "Treaty on the Functioning of the EU" (TFEU)
Legal personality	EU does not have legal personality	EU has legal personality
European Council	European Council is not an EU institution	European Council becomes an EU institution
External representation	High Representative for Foreign Affairs and Security Policy	High Representative for Foreign Affairs and Security Policy is also the vice president of the European Commission
European Parliament	732 seats in the European Parliament in accordance with the Treaty of Nice (due to the enlargement, currently 785 seats); Codecision procedure in selected areas	751 seats in the European Parliament, effective 2009 Codecision procedure becomes the rule
Charter of Fundamental Rights	Not legally binding	Legally binding
European Commission	1 commissioner per Member State, currently 27	Reduction of number of commissioners to two thirds of current number; effective 2014; introduction of a rotation principle with equal rights
Council of Ministers	Term of presidency six months	Term of "team presidency" 18 months
Vote allocation in the council	The system of Nice applies until November 1, 2014; principle of "qualified majority" with 255 out of 345 votes	Transitional period from November 1, 2014, to March 31, 2017; applicable as of 2017; principle of "double majority" representing 55% of EU Member States and 65% of the population
Majority votings	In 137 policy areas	In 181 policy areas
ECB <sup>1</sup>	The ECB is not an EU institution, but an institution "sui generis"	The ECB is an EU institution
Eurogroup <sup>2</sup>	No president Eurogroup is not part of the treaty	President elected for 2.5 years Eurogroup explicitly enshrined in primary law
Withdrawal from the EU	Not possible	Withdrawal possible

Source: Dippel (2007); OJEU 2007/C 306/01.

<sup>1</sup> See section 4.2.

<sup>2</sup> See section 4.3.

nal policy. In the future, the EU will have the right to negotiate international treaties and to become a member of international organizations.

- **The European Council will become an EU institution:** In the Treaty of Lisbon, the European Council is listed as an EU institution. The Treaty of Lisbon creates the function of President of the European Council, who is elected for two and a half years by the EU heads of state or government; the term is renewable once. The purpose of this innovation is to enhance the continuity of

political leadership in the EU (Schwarzer and Richter, 2007). The President of the European Council will preside over the four annual meetings of EU heads of state or government and will expedite the work of this committee, which is the EU's highest decision-making institution. The rotation of Councils of Ministers will be retained, with the effect that the chairpersons of Councils will change semiannually (except for the Council of Foreign Ministers). Three countries will have equal rights and work in a team presidency.

- **External representation of the EU:** The function of “High Representative of the Union for Foreign Affairs and Security Policy” will considerably increase in relevance. This function will combine the tasks of the former EU Representative for Foreign Policy and the EU Commissioner for External Relations. The High Representative will have a diplomatic service, will be the Vice-President of the European Commission and will preside over the Council of Foreign Ministers. The function of the Commissioner for External Relations at the European Commission will therefore cease to exist. The High Representative is to serve as the highest diplomatic authority of the EU.
- **Strengthened role of the European Parliament:** With the establishment of the codecision procedure as the primary law-making procedure in the EU, the European Parliament and the Council will now be on an equal footing as legislative bodies. This will lead to increased control and more democracy. In the future, the European Parliament will also elect the president of the European Commission. The reduction of the number of members of parliament from 785 to 751,<sup>11</sup> effective in 2009, will give the European Parliament more capacity for action. The new allocation of seats in the European Parliament will become effective even before the next elections to the European Parliament. Effective in 2009, Austria will have 19 seats in the European Parliament instead of 18. This maximum of 751 members of parliament will be retained even in the case of further EU enlargements. Hence, a new seat allocation within the European Parliament has to be introduced no later than in 2014 for the accession of Croatia.
- **A strengthened role for national parliaments:** National parliaments will now have eight weeks to scrutinize proposed EU legislation, allowing them to object to legislation if the Member States in question believe that national competences are threatened. The Treaty of Lisbon also strengthens the principle of subsidiarity by introducing clearly defined areas of competence between Member States and the EU and by increased monitoring of the subsidiarity principle by national parliaments.<sup>12</sup>
- **Binding legal force of the Charter of Fundamental Rights:** The Charter of Fundamental Rights establishes civil rights, e.g. the freedom of speech, in 54 Articles. Enshrined in Article 6 of the TEU by a cross-reference,<sup>13</sup> fundamental rights have binding legal force and can therefore be asserted before the European Court of Justice.

<sup>11</sup> Consensus was reached about a maximum of 750 members plus the President of the European Parliament because the seat of the President was attributed to Italy, which was established in a declaration.

<sup>12</sup> See the protocol on the application of the principles of subsidiarity and proportionality to the Treaty of Lisbon, which describes subsidiarity as the principle that the EU is to provide only those regulations that are required at the supranational level and which promise more positive effects than measures taken by single states or regional measures.

<sup>13</sup> The Charter of Fundamental Rights is not part of the treaty, but was formally passed one day prior to the signing of the Treaty of Lisbon. Article 6 of the TEU refers to the charter passed on December 12, 2007.

- **A smaller Commission:** Starting on November 1, 2014, the number of EU Commissioners will be reduced to two-thirds of the current number, and a rotation principle will be introduced. The European Council can determine the number of commissioners by unanimous vote. Details regarding the rotation principle have yet to be determined. The President of the Commission will, in the future, be elected by the European Parliament. The High Representative for the Union in Foreign Affairs and Security Policy will become one of the Vice-Presidents of the Commission.
- **Vote allocation in the Council of Ministers:** Until 2014, voting rules in the EU will continue to follow the qualified majority voting procedure established in the Treaty of Nice (Hummer and Obwexer, 2001). As of November 1, 2014, the “double majority” principle will be introduced, while respecting a transitional period applicable until 2017. This means that decisions taken by the Council of Ministers will require a double majority of 55% of the Member States representing at least 65% of the Union’s population. In the transitional period from 2014 to 2017, the system determined in the Treaty of Nice may be used for voting as long as a single Member State requests it. Poland’s demand to incorporate the “Ioannina clause”<sup>14</sup> into primary law of the new TEU was met by annexing the “Ioannina clause” to the Treaty of Lisbon as a protocol.
- **Increased use of qualified majority voting:** Decision-making processes in the EU will be made easier because in many cases,<sup>15</sup> unanimity will no longer be required, potentially making the EU’s work more efficient. However, the principle of unanimity will remain in place for decisions in sensitive areas, for instance foreign policy, fiscal policy and social policy as well as for amendments to EU treaties.
- **The EU’s enlargement strategy:** In the Treaty of Lisbon, no specifications about the criteria for enlargement with regard to the EU’s capacity of integration have been made. A reference has been added to Article 34 of the TEU to take into account the conditions of eligibility agreed upon by the European Council. Hence, defining the capacity for integration and/or absorption capacity is incumbent on the European Council.
- **Withdrawal from the EU:** The Treaty of Lisbon provides the possibility for a Member State to withdraw from the EU on its own accord. Member States now have the option of systematically withdrawing from the Union within a timeframe of two years. During the course of these two years, a withdrawal agreement determining the political and economic relations between EU Member States and the withdrawing Member State is to be drafted.

<sup>14</sup> The “*compromise of Ioannina*” provides that Council members backed by at least 75% of the required blocking minority (either in terms of number of states or population) may demand further discussion of a given issue. If that is the case, the European Council commits to doing everything within its power within a reasonable period of time to find a satisfactory solution to the problem at hand.

<sup>15</sup> See section 4.3.

### 3 The Structure of the Treaty of Lisbon

The Treaty of Lisbon consists of the Treaty on European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU), including annexed protocols and declarations. Table 3 shows the structure of both treaties.<sup>16</sup>

All treaty innovations were introduced by way of traditional amendments and were incorporated into the existing structure of the TEU and the Treaty establishing the European Community (TEC). As a consequence, the Treaty of Lisbon is, like previous treaties, an amendment instruction. Article 1 of the Treaty of Lisbon amends the TEU and Article 2 of the Treaty of Lisbon amends the TEC. The TEU will, by definition, remain in place, and the TEC will be renamed TFEU (Treaty on the Functioning of the European Union).

The Treaty of Lisbon (OJEU 2007/C 306/01) is more than 250 pages long and consists of the introductory preamble, the TEU, the TFEU, 13 protocols and 65 declarations. The TEU and the TFEU have the same legal force and are interpreted as such. Both have the status of primary law, as do the protocols annexed to the Treaty of Lisbon. The term “Community” has been replaced by the term “Union” in the entire TEU. The three-pillar structure of EU treaties has been abandoned.

In its current version, the Treaty of Lisbon is difficult to read and understand. This lack of accessibility is, among others, due to the fact that different treaties dating from different eras of the EU’s history of unification have been combined. An official consolidated version will probably not be available before the conclusion of the ratification process by the Member States.

Table 3

#### Structure of the TEU and of the TFEU

The TEU is divided into six titles:	The TFEU is divided into seven titles:
Title I. Common provisions	Part One: Principles
Title II. Provisions on democratic principles	Part Two: Non-discrimination and citizenship of the Union
Title III. Provisions on the institutions	Part Three: Policies and internal actions of the Union
Title IV. Provisions on enhanced cooperation	Part Four: Association of the overseas countries and territories
Title V. General provisions on the Union’s external action and specific provisions on the common foreign and security policy	Part Five: External action by the Union
Title VI. Final provisions	Part Six: Institutional and budgetary provisions
	Part Seven: General and final provisions

Source: OJEU 2007/C 306/01.

<sup>16</sup> The articles in the Treaty on European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU) cited in this study are derived from [http://cms.euro-info.net/received/\\_4580\\_Unionsvertraege\\_Lissabon\\_MWalther.pdf](http://cms.euro-info.net/received/_4580_Unionsvertraege_Lissabon_MWalther.pdf), published by the Austrian Society for European Politics on November 20, 2007, and [http://www.consilium.europa.eu/cms3\\_fo/showPage.asp?id=1317&lang=de&mode=g](http://www.consilium.europa.eu/cms3_fo/showPage.asp?id=1317&lang=de&mode=g) under “Oktober 2007: (CIG 1/1/07 REV 1)”. At the time of writing, no official, consolidated version of the Treaty of Lisbon was available.

#### 4 The Treaty of Lisbon and EMU

This section describes possible consequences of the Treaty of Lisbon on key areas of EMU.<sup>17</sup>

Since the Treaty of Maastricht (1993), EMU has been one of the main pillars promoting the integration process of the Union. Hence, treaty changes relating to EMU will have a decisive effect on the EU as a whole. EMU relies both on the idea of an independent ECB and its exclusive competence for monetary policy in the euro area and on the coordination of national measures taken by Member States (Breuss, 2002). EU Member States regard economic policy as an issue of common European interest with the goal of promoting growth, employment and price stability in the EU. Given this high priority, EU heads of state or government have accepted the application of common rules for budget discipline and coordination procedures for economic matters to all Member States. All this has been included in the Treaty of Lisbon.

Since the Union's three-pillar structure will not be retained, the new treaty explicitly specifies the allocation of competences between the Union and its Member States. Competences will now be divided into "exclusive" competences, competences shared among the Member States and competences that are subject to the process of "open coordination:"

According to Article 3(1) of the TFEU, the Union will have **exclusive competence** in the following areas: "... (a) customs union; (b) the establishing of the competition rules necessary for the functioning of the

internal market; (c) monetary policy for the Member States whose currency is the euro .... and (e) common commercial policy."

**Shared competence** (while respecting the principle of subsidiarity) between the Union and the Member States applies in the following principal areas as defined in Article 4(2) of the TFEU: "... (a) internal market; (b) social policy ...; (c) economic, social and territorial cohesion; (d) agriculture and fisheries ...; (e) environment; (f) consumer protection; (g) transport; (h) trans-European networks; (i) energy."

Economic and employment policies will, in accordance with Article 2(3) of the TFEU, be organized in through the "**open coordination**" method with Member States. This applies especially to employment programs (Gutmann, 2007).

Generally speaking, the Treaty of Lisbon stipulates no substantial fundamental changes in areas relevant to EMU (e.g. Brady and Barysch, 2007; Garach, 2007). Most changes were technical. In the Treaty of Lisbon, provisions affecting EMU are mainly found in the Part Three of the TFEU, Union Policies and Internal Actions, Title VII Economic and Monetary Policy. Regulations concerning EMU are now found in four chapters: "chapter 1 – the economic policy, chapter 2 – the monetary policy, chapter 3 – institutional provisions, chapter 3a – provisions specific to Member States whose currency is the euro, and finally chapter 4 – transitional provisions."

In my comments below, I will focus on the criterion for price stability, the ECB as an EU institution, the

<sup>17</sup> This section does not include an exhaustive itemization of all changes made to EMU-related provisions. Rather, it describes the major effects changes introduced in the new treaty will have on EMU.

Ecofin Council and the Eurogroup, and the role of the euro in the Treaty of Lisbon.

#### **4.1 Price Stability Is Now a More Important Objective of Economic Policy than before**

EMU is based on an independent monetary policy oriented toward stability, whose primary objective is to maintain the price stability of the euro. The definition of the ESCB as part of the Union's monetary policy, which also emphasizes the primary objective of price stability, is specified in Article 105 (1) of the TFEU. "The primary objective of the European System of Central Banks ... shall be to maintain price stability. Without prejudice to that objective, the ESCB shall support the general economic policies in the Union as long as this does not affect its objective of maintaining price stability ..." The orientation of the ECB's monetary policy strategy toward the objective of price stability has been an essential element of the success story of the euro so far and thus of EMU as a whole. This objective has now also been incorporated into the list of objectives specified in the Treaty of Lisbon. The list of objectives specified in Article 3(3) of the TEU states, among others, the following: "The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, ..." (OJEU 2007/C 306/01). Since price stability has been defined as an objective of economic policy within the entire Union, it will now be the guiding principle of all actions by its institutions and Member States. There-

fore, price stability as a premise of stability-oriented monetary policy will remain an intrinsic part of the Union's new legal basis.

#### **4.2 The ECB As a New "Body" of the EU**

According to Article 48 of the TEU, at intergovernmental conferences, the ECB has to be consulted in the case of institutional changes in the area of monetary policy. In a declaration, the ECB welcomed the opening of an intergovernmental conference for the elaboration of a treaty to amend existing treaties (ECB, 2007). At the 2007 Intergovernmental Conference, the ECB Council introduced a "Task Force of the Eurosystem," as it had previously done in 2003 (Lindner and Schmidt, 2004), where possible effects of institutional changes on the ESCB/Eurosystem and the ECB were discussed. Special provisions relating to the ECB as established in the Treaty of Lisbon are described below.

##### **4.2.1 The ECB in the Treaty of Lisbon**

A major innovation compared to the Treaty of Nice is the status of the ECB as a body. In Article 9(1) of the TEU, the ECB is included in a list of EU institutions, along with the European Council, the European Parliament, the Council of Ministers, the European Commission and the Court of Auditors and is thus part of the "institutional framework" of the EU. However, pursuant to Article 9(3) in the TEU part of the Treaty of Lisbon, "provisions concerning the ECB are specified in the Treaty about the functioning of the Union ..." (OJEU 2007/C 306/01). Hence, the legal and institutional basis for a common monetary policy by the ECB has been determined both in the TEU part and

in the TFEU part of the Treaty of Lisbon.<sup>18</sup> In the Treaty of Lisbon, provisions concerning the ECB can be found in the following parts and chapters:

- TEU: in Title III “Provisions on the institutions”: Article 9 of the TEU.
- TFEU: Part Three of the TFEU: “Union Policies and Internal Actions” in Title VII – chapter on monetary policy: Articles 105 to 111, especially Article 105 and
- TFEU: in Part Six of the TFEU: “Institutional and Financial Provisions” in chapter 4a “The European Central Bank”: Articles 245a, 245b and 245c.

Prior to the agreement on the Treaty of Lisbon, the ECB and EU Member States had different positions regarding the new approach of listing the ECB as an institution along with other EU institutions. The ECB pursued the goal<sup>19</sup> of being distinguished from other EU institutions by being named under “other institutions” in the treaty. There had already been an intensive debate about the “institutional status” of the ECB at the 2004 Intergovernmental Conference. This debate was revived at the 2007 Intergovernmental Conference. The goal was to emphasize the special status of the ECB’s tasks and the legal basis (personal, operational, financial and legal independence) within the institutional framework of the EU (European Commission, European Council and European Parliament). These demands brought forward by the ECB were not granted at the Intergovernmental Conference. The argument against these demands was that the

ECB’s independence was not threatened by the new treaty. The status of the ECB as an EU institution does not affect the ECB’s or the ESCB’s structure, tasks, statutes or objectives. Revisions to the statutes of the ESCB and the ECB, which are annexed to the TFEU as a protocol, were mostly of technical nature (Garach, 2007). Some of the Articles of the Treaty of Lisbon that are relevant to the ECB are analyzed on more detail below.

#### 4.2.2 Guaranteed Independence of the ECB

Provisions regarding the ECB’s *freedom from receiving instructions* are specified in Article 108 of the TFEU: “When exercising the powers and carrying out the tasks and duties conferred upon them by the Treaties and the Statutes of the ESCB and ECB, neither the ECB, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Union institutions or bodies, from any government of a Member State or from any other body.”

In Article 245a (1) of the TFEU, the most important provisions regarding the functioning of the ESCB and the ECB’s Eurosystem are detailed (OJEU 2007/C 306/01). The *operational independence* of the ECB is emphasized in Article 245a (3) of the TFEU: “... The European Central Bank shall have legal personality. It alone may authorise the issue of the euro. It shall be independent in the exercise of its powers and in the management of its resources. Union institutions, bodies, offices and agencies and the governments of the Mem-

<sup>18</sup> It is also laid down in the statutes of the ESCB and the ECB, which have been annexed to the Treaty of; see [http://www.ecb.int/ecb/legal/pdf/en\\_statute\\_2.pdf](http://www.ecb.int/ecb/legal/pdf/en_statute_2.pdf)

<sup>19</sup> Germany, the Netherlands and Luxembourg supported the ECB in this approach.

ber States shall respect that independence.”

Regarding the *financial independence* of the ECB, it is especially Article 270b of the TFEU that was adapted to the needs of the ECB. Pursuant to Article 270b of the TFEU, “every EU institution, with the exception of the ECB, shall present a budget ...” Given this statutory exemption for the benefit of the ECB, its financial independence is explicitly acknowledged.

An *innovation regarding the appointment of members of the Executive Board of the European Central Bank* with a qualified majority by the European Council, but, just like in the past, upon recommendation by the Ecofin Council<sup>20</sup> and upon consultation of the European Parliament and the ECB Council was laid down in Article 245b of the TFEU. The current provision requires a consensual decision by the European Council when nominating the six members of the executive board of the ECB. This innovation will “... probably accelerate the nomination process and reduce the related insecurity on financial markets” (Walter and Becker, 2007).

The Treaty of Lisbon does not question the personal, operational, financial and legal independence of the ECB, nor does it have any substantive effects on the functioning of the ESCB.

### 4.3 The Ecofin Council and the Eurogroup

In accordance with Article 5 of the TFEU, EU Member States will continue to coordinate economic policies within the Union. For this purpose, the Ecofin Council adopts measures,

in particular broad policy guidelines. Specific provisions apply to Member States whose currency is the euro. In the TFEU, additional details about economic and monetary policy are specified under Part Three Title VII, “Economic and Monetary Policy” (OJEU 2007/C 306/01). In this chapter, changes introduced by the Treaty of Lisbon related to the Ecofin Council and the Eurogroup are described. This description is followed by the analysis of possible effects of interinstitutional cooperation on economic policy.

#### 4.3.1 Changes Concerning the Ecofin Council

The Council in the composition of the economics and finance ministers (Ecofin Council) is the primary body for the coordination of the Member States’ economic and financial policy. The Ecofin Council’s relevance resides mainly in its status as the primary law-making body for economic and fiscal policy. It usually meets once a month. Ecofin meetings are presided by the minister of the country that has the Presidency of the Council at the time of the meeting. The Council Presidency rotates every six months. Meetings of the Ecofin Council are, among others, prepared by the Economic and Financial Committee, whose institutional provisions have now been laid down in Article 112 of the TFEU without any substance changes.

In order to increase the Union’s capacity for action, the *qualified majority principle was extended to most EMU areas* in the Treaty of Lisbon. This will be reflected in the decision-making process at the periodic meet-

<sup>20</sup> Pursuant to article 116(h) of the TFEU, EU Member States who have introduced the euro may participate in the voting only.

ings of economics and finance ministers. One example is that decisions about excessive deficits of Member States no longer need to be unanimous. The principle of unanimity will be required in only a few areas, including the determination of the conversion rate between the euro and a Member State's national currency, employment policy and tax policy. The easier decision-making process should increase the Ecofin Council's efficiency.

#### 4.3.2 Eurogroup Enshrined in Primary Law for the First Time

Today, the Eurogroup is an informal forum for objective and open discussions about current problems of economic and fiscal policy between the respective ministers of countries whose currency is the euro. It is also intended to serve as a catalyst to accelerate the initiation of structural reforms. The Eurogroup is composed of Member States whose single currency is the euro as well as the Commissioner for economic and monetary affairs of the European Commission, the President of the ECB and the Chairperson of the Economic and Financial Committee. Jean-Claude Juncker, the prime minister of Luxembourg, has been the Chairman of the Eurogroup since January 1, 2005. His nomination was a result of negotiations about the Constitutional Treaty. While this treaty never entered into force, the nomination of a President for this informal body was anticipated. In September of 2006, Juncker's term of office was extended to run through December 31, 2008.

The term "Eurogroup" was formally used in the TEU for the first

time (Walter and Becker, 2007), and the concept of the Eurogroup was enshrined in primary law for the first time in a dedicated protocol<sup>21</sup> annexed to the Treaty of Lisbon. The official function of President of the Eurogroup, elected for two-and-a-half years, is explicitly laid down in the protocol. Special provisions concerning the Eurogroup are specified in "Provisions specific to Member States whose currency is the euro" (OJEU 2007/C 306/01). The room for independent decision-making by the Eurogroup had been extended accordingly. The increased use of independent decision-making processes had already been envisaged as a result of the 2004 Convention for the Constitutional Treaty (Lindner and Stubits, 2004). The increased competences of the Eurogroup are described below.

Member States whose currency is the euro have the right to jointly and independently decide about coordination measures and guidelines specifically referring to the Eurogroup. They can also make recommendations about the admission of new members into the Eurogroup and the Ecofin Council. However, the final decision about the admission of new members into the Eurogroup will remain with all EU Member States.

According to Articles 114ff of the TFEU, broad economic policy guidelines must be compatible with broad economic policy guidelines adopted by the European Union applicable to the entire Union. The Eurogroup also makes recommendations to members of the Eurogroup within the framework of multilateral surveillance, including surveillance regarding the stability program. It can also take

<sup>21</sup> Protocol no. 3 on the Eurogroup (OJEU 2007/C 306/01).

measures regarding excessive deficit procedures, provided that members of the Eurogroup are involved.

Another new element is the provision about the position of the Union at an international level as laid down in Article 115a of the TFEU. The new Treaty empowers the Council to “establish common positions on matters of particular interest for economic and monetary union within the competent international financial institutions” (e.g. the IMF) after consulting the ECB. Only members of the Eurogroup may vote. This innovation might have considerable consequences for the external representation of the euro.

Pursuant to chapter 4, transitional provisions apply to those Member States that with a derogation. An exhaustive list of these provisions is provided in Articles 116ff of the TFEU. For instance, the issue of the euro, the objectives and tasks of the ESCB and measures governing the use of the euro do not apply to these Member States.

#### 4.3.3 Consequences of Interinstitutional Cooperation on Economic Policy Matters Are Still Unforeseeable

In the interinstitutional cooperation between the Ecofin Council and the Eurogroup on the one hand and other EU institutions on the other hand, the new role of the European Council regarding the preparation of economic and employment policy programs will affect EMU to a yet unforeseeable degree. The European Council, as the highest-ranking body for the coordination of economic policies, will continue to play an important role for EMU by providing impetus. Changes to the EU Council Presidency will affect the Ecofin Council meetings insofar as the following

officeholders will now cooperate in economic and financial matters:

- The new President of the European Council
- The team Presidency of three Member States of equal rank for a period of 18 months following the rotational principle of the Council Presidency on the level of responsible ministers
- The new president of the Eurogroup

At the earliest, this new allocation principle might come into effect under the Czech Presidency of the European Council, starting on January 1, 2009.

Another noteworthy fact is that, regarding EMU issues, the roles of the European Parliament and of the European Commission have been strengthened in interinstitutional cooperation.

The *European Parliament has been strengthened* insofar as the codecision procedure will become the primary lawmaking procedure of the Union. This will give the European Parliament greater influence on EMU-related decisions.

The *position of the European Commission in its cooperation with the Ecofin Council has been strengthened* in the areas mentioned below. The European Commission may issue a warning directly to Member States whose national measures in the area of economic policy are not consistent with the broad guidelines of the common economic policy of the Union. The option of issuing such warnings might lead to increased efficiency in the implementation of national reform programs drawn up to achieve the objectives defined in the Lisbon Agenda, which would in turn result in improved competitiveness, higher employment rates and increased

growth within the Union (Weidenfels and Wessels, 2007). In the future and within the framework of multi-lateral surveillance, the European Commission will have the right to issue warnings to Member States if there are indications of an excessive deficit. The Commission can now make a “proposal” to the Ecofin Council rather than just a “recommendation.” These proposals include preliminary requests for correction addressed to the Member State in question. Revision of proposals by the Ecofin Council against the resolve of the European Commission require unanimous voting instead of a qualified majority, as was the case before (Walter and Becker, 2007).

From today’s perspective, specific consequences of crossfunctional interaction between the Presidency of the EU Council in its new composition and the strengthened Eurogroup and the one hand and strengthened EU institutions on the EMU on the other hand cannot be foreseen (Kurpas et al., 2007).

#### 4.4 The Role of the Euro in the Treaty of Lisbon

The Constitutional Treaty provided that the euro become a symbol (among other symbols, such as the flag, the anthem and the motto) of the EU. Since all elements that had a constitutional character were removed from the treaty, the euro is no longer mentioned as a symbol in the Treaty of Lisbon. While none of symbols of the EU has been enshrined in primary law of the EU, they all remain de facto symbols. A declaration of intent about the future use of EU symbols was annexed to the

Treaty of Lisbon as a declaration. This is an important commitment because the euro is an especially strong identity-building symbol for Europe. When asked about the EU, the majority of Austrians associate it with the euro (Fluch et al., 2007).

*The euro has consistently been enshrined in the Treaty in lieu of the ECU.* Banknotes and coins are now called euro banknotes and euro coins. While the euro has not been enshrined in primary law as a symbol, it is now explicitly mentioned as the official currency in the list of objectives laid down in Article 3, paragraph 4 of the TEU: “The Union shall establish an economic and monetary union whose currency is the euro.” Hence, the Treaty of Lisbon accounts for actual institutional developments in the EU that took place since the introduction of the euro.

*Green light for the euro in Cyrillic script.* A discussion about the spelling of euro in Cyrillic script arose during the Intergovernmental Conference. Bulgaria is the only Member State to use Cyrillic script; it spells the euro “EBPO,” which corresponds to “Evro” in Latin script. After arduous negotiations, Bulgaria’s request about the spelling of the word “euro” in Cyrillic was granted at the European Council meeting held on October 18–19, 2007.

## 5 The Process of Ratification: Wait and See

Following the signing of the Treaty of Lisbon on December 13, 2007, its ratification by all 27 Member States<sup>22</sup> will be a challenge. Amending treaties to the EU must be ratified by all EU Member States to enter into force

<sup>22</sup> *The Treaty of Lisbon will enter into force as soon as all instruments of ratification have been deposited, but not before January 1, 2009.*

(Hummer and Obwexer, 2001). The Treaty of Lisbon should enter into force in time, before the elections to the European Parliament in June 2009, so that both the elections to the parliament and the constitution of the new European Commission can be carried out in accordance with the new provisions set out in the Treaty of Lisbon. In the conclusions of the European Council of December 13–14, 2007, the swift conclusion of the ratification process by the Member States is called for.

The short Intergovernmental Conference and the resulting hard-to-read contractual basis for Europe might be a considerable threat to the successful conclusion of the ratification process. In various EU Member States, the ratification is regarded as extremely difficult. As a consequence, the European Commission, in collaboration with EU Member States, has envisaged communication measures to be implemented at a national level. The objective is to provide transparent information about the substance of EU politics as well as decision-making structures and processes in Brussels perceived as abstract by the people and their consequences on Member States (SPEECH/07/572, 2007). The European Parliament is planning to send delegations on consultative visits to those Member States that are planning on holding a referendum. For this purpose, closer cooperation between the European Parliament and national parliaments is planned to ensure coherent action. While most countries will attempt to have the new TEU ratified by their national parliament, other countries – e.g. the United Kingdom, the Netherlands, Poland and Denmark – are under pressure to hold a referendum. From today's perspective, it is

unclear which countries will eventually hold a referendum, with the exception of Ireland, where a referendum is constitutionally mandated. Austria has planned parliamentary ratification, arguing that all previous EU treaties have been ratified by parliament. In Austria, the Constitutional Treaty was ratified in mid-May 2005 with a parliamentary decision (181:1 votes in the lower chamber of parliament, the Nationalrat, and 59:3 votes in the upper chamber, the Bundesrat). The federal government is opposed to holding a referendum and is determined to ratify the Treaty of Lisbon as quickly as possible. For this purpose, the Austrian federal government is currently implementing a public relations campaign.

In terms of political, economic and social integration, the Treaty of Lisbon is, in many aspects, clearly superior to the Treaty of Nice. Its superiority resides in the fact that the institutional framework of the EU has been renewed, which will enable the Union to adapt its policies to ever-changing global conditions and thus to be prepared to meet today's global challenges, such as sustainable development, competitiveness, climate change, energy policy, terrorism, migration and poverty. From today's perspective, actual consequences of institutional changes to EMU introduced by the Treaty of Lisbon are difficult to foresee. Despite all previous difficulties, the fact that Member States formerly separated by the Iron Curtain have agreed on a single legal basis for Europe as a result of peaceful negotiations is a landmark event in the history of the European integration process. However, the Treaty of Lisbon is not the final step in the EU integration process, even though, for the first time ever, no "review clause"

has been included in the treaty, meaning that it is unlikely that other inter-governmental conferences will be held in the foreseeable future. What remains to be seen now is the positive conclusion of the ratification process, which will allow the EU to meet future challenges.

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# NOTES

## Abbreviations

ARTIS	Austrian Real Time Interbank Settlement (the Austrian real time gross settlement system)	IHS	Institut für Höhere Studien und Wissenschaftliche Forschung – Institute for Advanced Studies, Vienna
A-SIT	Secure Information Technology Center – Austria	IIF	Institute of International Finance
ASVG	Allgemeines Sozialversicherungsgesetz – General Social Security Act	IIP	international investment position
A-Trust	A-Trust Gesellschaft für Sicherheitssysteme im elektronischen Datenverkehr GmbH (accredited certification service provider)	IMF	International Monetary Fund
ATX	Austrian Traded Index	ISO	International Organization for Standardization
BCBS	Basel Committee on Banking Supervision (BIS)	IWI	Industriewissenschaftliches Institut – Austrian Institute for Industrial Research, Vienna
BIC	Bank Identifier Code	JVI	Joint Vienna Institute
BIS	Bank for International Settlements	LIBOR	London Interbank Offered Rate
BOP	balance of payments	M3	broad monetary aggregate M3
BSC	Banking Supervision Committee (ESCB)	MFI	monetary financial institution
CACs	collective action clauses	MRO	main refinancing operation
CEBS	Committee of European Banking Supervisors (EU)	MoU	memorandum of understanding
CEE	Central and Eastern Europe	NACE	Statistical Classification of Economic Activities in the European Community
CEEC(s)	Central and Eastern European country (countries)	NCB	national central bank
CESEE	Central, Eastern and Southeastern Europe	OeBS	Oesterreichische Banknoten- und Sicherheitsdruck GmbH (Austrian banknote and security printing works)
CESR	Committee of European Securities Regulators	OECD	Organisation for Economic Co-operation and Development
CIS	Commonwealth of Independent States	OeKB	Oesterreichische Kontrollbank (Austria's main financial and information service provider for the export industry and the capital market)
CPI	consumer price index	OeNB	Oesterreichische Nationalbank (Austria's central bank)
EBA	Euro Banking Association	OPEC	Organization of the Petroleum Exporting Countries
EBRD	European Bank for Reconstruction and Development	ÖBFA	Österreichische Bundesfinanzierungsagentur – Austrian Federal Financing Agency
EC	European Community	ÖNACE	Austrian Statistical Classification of Economic Activities
ECB	European Central Bank	POS	point of sale
Ecofin	Economic and Financial Affairs Council (EU)	PRGF	Poverty Reduction and Growth Facility (IMF)
EEA	European Economic Area	R&D	Research & Development
EFC	Economic and Financial Committee (EU)	RTGS	Real-Time Gross Settlement
EIB	European Investment Bank	SDR	Special Drawing Right (IMF)
EMS	European Monetary System	SDRM	Sovereign Debt Restructuring Mechanism (IMF)
EMU	Economic and Monetary Union	SEPA	Single Euro Payments Area
EONIA	Euro OverNight Index Average	SPF	Survey of Professional Forecasters
ERM II	exchange rate mechanism II (EU)	STEP2	Straight-Through Euro Processing system provided by the Euro Banking Association
ERP	European Recovery Program	STUZZA	Studiengesellschaft für Zusammenarbeit im Zahlungsverkehr G.m.b.H. – Austrian Society for Payment System Research and Cooperation
ESA	European System of Accounts	S.W.I.F.T.	Society for Worldwide Interbank Financial Telecommunication
ESAF	Enhanced Structural Adjustment Facility (IMF)	TARGET	Trans-European Automated Real-time Gross settlement Express Transfer
ESCB	European System of Central Banks	Treaty	Treaty establishing the European Community
ESRI	Economic and Social Research Institute, Dublin	UCIT(s)	undertaking(s) for collective investment in transferable securities
EU	European Union	ULC	unit labor cost
EURIBOR	Euro Interbank Offered Rate	UN	United Nations Organization
Eurostat	Statistical Office of the European Communities	UNCTAD	United Nations Conference on Trade and Development
FATF	Financial Action Task Force on Money Laundering	VaR	value at risk
FDI	foreign direct investment	WBI	Wiener Börse Index (all-share index of the Vienna stock exchange)
Fed	Federal Reserve System (U.S.A.)	WEF	World Economic Forum
FMA	Austrian Financial Market Authority	WIFO	Österreichisches Institut für Wirtschaftsforschung – Austrian Institute of Economic Research
FOMC	Federal Open Market Committee (U.S.A.)	wiiw	Wiener Institut für internationale Wirtschaftsvergleiche – The Vienna Institute for International Economic Studies
FSAP	Financial Sector Assessment Program (IMF/World Bank)	WKÖ	Wirtschaftskammer Österreich – Austrian Federal Economic Chamber
FWF	Fonds zur Förderung der wissenschaftlichen Forschung – Austrian Science Fund	WTO	World Trade Organization
GAB	General Arrangements to Borrow		
GATS	General Agreement on Trade in Services		
GDP	gross domestic product		
GNP	gross national product		
GSA	GELDSERVICE AUSTRIA Logistik für Wertgestionierung und Transportkoordination GmbH (Austrian cash logistics company)		
HICP	Harmonised Index of Consumer Prices		
HIPC	Heavily Indebted Poor Countries		
IBAN	International Bank Account Number		
IBRD	International Bank for Reconstruction and Development		
ICT	information and communication technology		
IDB	Inter-American Development Bank		
IFES	Institut für empirische Sozialforschung GesmbH – Institute for Empirical Social Research, Vienna		
ifo	ifo Institute for Economic Research, Munich		

## Legend

- x = No data can be indicated for technical reasons
- .. = Data not available at the reporting date
- 0 = The numerical value is zero or smaller than half of the unit indicated

Discrepancies may arise from rounding.

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Inflationary Pressures Worldwide despite Downturn in Growth  
Dampened Growth also Expected in the Euro Area  
*Wolfgang Pointner, Martin Schneider, Josef Schreiner*

Current Inflation Developments in Austria  
*Friedrich Fritzer, Ernest Gnan, Walpurga Köhler-Töglhofer, Fabio Rumler,  
Alfred Stiglbauer*

The Importance of Lease Financing for Austrian Municipalities  
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The Treaty of Lisbon  
Amendments to the EU Treaties and Their Consequences for EMU  
*Sylvia Gloggnitzer*

# Periodical Publications of the Oesterreichische Nationalbank

For further details see [www.oenb.at](http://www.oenb.at)

## **Monetary Policy & the Economy**

quarterly

This quarterly publication, issued both in German and English, offers analyses of current cyclical developments, medium-term macroeconomic forecasts and studies on central banking and economic policy topics. It also summarizes the findings of macroeconomic workshops and conferences organized by the OeNB.

## **Statistiken – Daten & Analysen**

quarterly

This publication contains brief reports and analyses focusing on Austrian financial institutions, cross-border transactions and positions as well as financial flows. The contributions are in German, with executive summaries of the analyses in English. The statistical part covers tables and explanatory notes on a wide range of macroeconomic and financial indicators. The tables and additional information and data are also available on the OeNB's website in both German and English. This series also includes special issues on selected statistics topics published at irregular intervals.

## **econ.newsletter**

quarterly

The quarterly English-language newsletter is published only on the Internet and informs an international readership about selected findings, research topics and activities of the OeNB's Economic Analysis and Research Department. This publication addresses colleagues from other central banks or international institutions, economic policy researchers, decision makers and anyone with an interest in macroeconomics. Furthermore, the newsletter offers information on current publications, studies or working papers as well as events (conferences, lectures and workshops).

For further details see [www.oenb.at/econ.newsletter](http://www.oenb.at/econ.newsletter)

## **Financial Stability Report**

semiannual

Issued both in German and English, the Financial Stability Report contains first, a regular analysis of Austrian and international developments with an impact on financial stability and second, studies designed to provide in-depth insights into specific topics related to financial market stability.

**Focus on European Economic Integration** semiannual

The English-language publication Focus on European Economic Integration is the successor publication to Focus on Transition (published up to issue 2/2003). Reflecting a strategic regional research priority of the OeNB, this publication is a channel for communicating our ongoing research on Central, Eastern and Southeastern European (CESEE) countries ranging from economic country studies to studies on central banking issues and related topics. One of the purposes of publishing theoretical and empirical studies in the Focus on European Economic Integration, which are subject to an external refereeing process, is to stimulate comments and suggestions prior to possible publication in academic journals.

**Workshops –  
Proceedings of OeNB Workshops** three to four issues a year

The Proceedings of OeNB Workshops were introduced in 2004 and typically comprise papers presented at OeNB workshops at which national and international experts, including economists, researchers, politicians and journalists, discuss monetary and economic policy issues. Workshop proceedings are generally available in English only.

**Working Papers** about ten papers a year

The OeNB's Working Paper series is designed to disseminate, and provide a platform for discussing, findings of OeNB economists or outside contributors on topics which are of special interest to the OeNB. To ensure the high quality of their content, the contributions are subjected to an international refereeing process.

**Economics Conference (Conference Proceedings)** annual

The Economics Conference hosted by the OeNB is an international platform for exchanging views and information on monetary and economic policy as well as financial market issues. It convenes central bank representatives, economic policymakers, financial market players, academics and researchers. The conference proceedings comprise all papers presented at the conference.

**Conference on European Economic Integration  
(Conference Proceedings)** annual

This series, published in English by a renowned international publishing house, reflects presentations made at the OeNB's annual conference on Central, Eastern and Southeastern European issues and the ongoing EU enlargement process (formerly East-West Conference).

For further details see *ceec.oenb.at*

## **Annual Report**

annual

The Annual Report of the OeNB provides a broad review of Austrian monetary policy, economic conditions, new developments in the financial markets in general and in financial market supervision in particular as well as of the OeNB's changing responsibilities and its role as an international partner in cooperation and dialogue. It also contains the OeNB's financial statements.

## **Intellectual Capital Report**

annual

The Intellectual Capital Report is a review of the OeNB's intellectual capital and its use in the OeNB's business processes and services. The report highlights the interaction between human, relational, structural and innovation capital within the OeNB and reveals the influence of underlying factors. The integrated view of this stock-taking exercise serves to assess the consistency of the OeNB's intellectual capital with its knowledge-based strategic orientation.

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