# Financial Crisis and Spike in Commodity Prices Dampen Growth and Fuel Inflation

Economic Outlook for Austria from 2008 to 2010 (June 2008)

Gerhard Fenz, Martin Schneider<sup>1</sup>

# 1 Summary: Clouds on the Economic Horizon – Inflation at a Record High Since 1993

According to the June 2008 economic outlook of the Oesterreichische Nationalbank (OeNB), economic growth in Austria is projected to weaken compared with the economic boom years of 2006 and 2007 owing to the international financial crisis and the spike in commodity prices. Real GDP growth is projected to come to 2.2% in 2008 and then dip to a low of 1.7% in 2009 before climbing back to 2.4% in 2010. Compared with the OeNB December 2007 economic outlook, growth expectations for 2008 and 2009 were downgraded by 0.3 and 0.6 percentage points respectively. At 3.1%, inflation in 2008 is at a record high since 1993 but is projected to fall to 2.4% in 2009 and to 1.9% in 2010. Employment growth remains robust, with a further drop in unemployment to 4.2% anticipated for 2008.

The international financial crisis, the downturn in the U.S. economy and the spike in commodity prices are currently determining the global economic conditions. As for the euro area economy, it performed very well in the first quarter of 2008 owing to extremely strong growth in Germany. However, the slowdown in global economic growth will not leave the euro area unscathed and will induce a significant deceleration in economic momentum.

Austrian exports, which have been the engine of the country's GDP growth in recent years, will lose some steam owing to lower market growth and the higher external value of the euro. How-

Chart

#### Real GDP Growth (Seasonally and Working-Day Adjusted)



JEL classification: C5, E17 Keywords: forecast, Austria

Gerhard Fenz (gerhard.fenz@oenb.at), Martin Schneider (martin.schneider@oenb.at). With the collaboration of Leopold Diebalek, Ernest Gnan, Walpurga Köhler-Töglhofer, Peter Mooslechner, Doris Prammer, Christian Ragacs, Fabio Rumler, Alfred Stiglbauer and Walter Waschiczek.

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|---|--|---------------|--------------|------|-----------|
| OeNB June 2008 Outlook for Austria -  | Key Result                               | :s¹           |              |      |           |
|   | 2007                                     | 2008          | 2009         | 2010 |           |
| Economic activity   | Annual change                            | e in % (real) |              |      |           |
| Gross domestic product  | +3.3                                     | +2.2          | +1.7         |      | +2.4      |
| Private consumption   | +1.5                                     | +1.0          | +1.5         |      | +1.9      |
| Government consumption Gross fixed capital formation                                      | +2.6<br>+4.0                             | +3.0<br>+1.5  | +1.4<br>+1.4 |      | +1.5      |
| Exports of goods and services   | +8.6                                     | +6.4          | +4.3         |      | +6.2      |
| Imports of goods and services   | +6.2                                     | +5.2          | +4.4         |      | +6.1      |
| Contribution to real GDP growth   | Percentage po                            | oints of GDP  |              |      |           |
| Private consumption   | +0.8                                     | +0.6          | +0.8         |      | +1.0      |
| Government consumption Gross fixed capital formation                                      | +0.5<br>+0.8                             | +0.5<br>+0.3  | +0.2<br>+0.3 |      | +0.3 +0.5 |
| Domestic demand (excluding changes in inventories)  | +2.1                                     | +1.4          | +1.4         |      | +1.8      |
| Net exports   | +1.8                                     | +1.1          | +0.3         |      | +0.6      |
| Changes in inventories (including statistical discrepancy)                                | -0.6                                     | -0.3          | +0.0         |      | +0.0      |
| Prices  | Annual change                            |               | ı            |      |           |
| Harmonized Index of Consumer Prices (HICP) Private consumption expenditure (PCE) deflator | +2.2<br>+2.1                             | +3.1<br>+3.0  | +2.4<br>+2.3 |      | +1.9      |
| GDP deflator  | +2.3                                     | +2.8          | +2.3         |      | +2.1      |
| Unit labor costs in the total economy   | +1.2                                     | +2.2          | +1.9         |      | +1.0      |
| Compensation per employee (at current prices)   | +2.6<br>+1.4                             | +3.0<br>+0.8  | +3.0<br>+1.0 |      | +2.6      |
| Productivity (whole economy)  Compensation per employee (real)                            | +0.5                                     | +0.0          | +0.7         |      | +0.7      |
| Import prices   | +1.5                                     | +2.9          | +2.1         |      | +1.8      |
| Export prices   | +1.6                                     | +1.7          | +2.0         |      | +1.8      |
| Terms of trade  | +0.1                                     | -1.2          | +0.0         |      | -0.1      |
| Income and savings Real disposable household income                                       | +3.2                                     | +1.4          | +1.7         |      | +2.1      |
| ·   | % of nominal disposable household income |               |              |      |           |
| Saving ratio  | 11.3                                     | 11.5          | 11.6         |      | 11.8      |
| Labor market  | Annual change                            | e in %        |              |      |           |
| Payroll employment  | +2.1                                     | +1.7          | +0.8         |      | +0.9      |
|   | % of labor sup                           | ply           |              |      |           |
| Unemployment rate (Eurostat definition)   | 4.4                                      | 4.2           | 4.4          |      | 4.4       |
| Budget  | % of nominal (                           | GDP           |              |      |           |
| Budget balance (Maastricht definition)  | -0.5                                     | -0.6          | -0.5         |      | -0.5      |
| Government debt   | 59.1                                     | 57.5          | 56.5         |      | 55.6      |

Source: 2007: Eurostat, Statistics Austria; 2008 to 2010: OeNB June 2008 outlook.

ever, this decline will be modest given Austrian exporters' focus on Eastern Europe, the economy's diversified sectoral structure and the favorable trend in unit labor costs.

Domestic demand is currently marked by sluggish consumption growth and a flat investment cycle. Unexpectedly high inflation is triggering a slight decline in real wages in 2008. Slowing employment momentum is also dampening household income growth. Consumption growth will weaken to 1.0% in 2008 and is not expected to accelerate significantly in 2009 and 2010. Investment momentum

<sup>&</sup>lt;sup>1</sup> The outlook was drawn up on the basis of seasonally adjusted and working-day adjusted national accounts data. Therefore, the historical values for 2007 may deviate from the nonadjusted data released by Statistics Austria.

will slow considerably on the back of the cooling of the world economy. However, as the current investment cycle is very smooth compared with previous periods of economic expansion, investment is expected to continue to increase even during the downturn.

Inflation — fueled by the spike in commodity prices — has risen unexpectedly strongly. HICP inflation came to 3.4% in April 2008 and will fall only gradually. An inflation rate of 3.1% is projected for 2008 as a whole. At 2.4%, inflation is forecast to remain above the 2% mark in 2009 before dropping to 1.9% in 2010.

The Austrian labor market still looked to be in excellent health in the first half of 2008. Robust employment growth in 2008 is inducing a further drop in unemployment by 0.2 percentage points to 4.2%. In 2009 and 2010, unemployment is expected to rise slightly to 4.4%.

In 2008, the budget balance (Maastricht definition) will deteriorate slightly to -0.6% of GDP, to be followed by a modest improvement to -0.5% in 2009 and 2010.<sup>2</sup>

#### 2 Technical Assumptions

This forecast is the OeNB's contribution to the Eurosystem's June 2008 staff projections. The forecast horizon ranges from the second quarter of 2008 to the fourth quarter of 2010. May 14, 2008, was the cutoff date for the assumptions on global growth as well as interest rates, exchange rates and crude oil prices. The OeNB used its macroeconomic quarterly model to prepare the projections for Austria.

The key data source comprised seasonally and working day-adjusted national accounts data computed by the Austrian Institute for Economic Research (WIFO) which were fully available to the fourth quarter of 2007. The GDP flash estimate is available for the first quarter of 2008 but covers only part of the national accounts aggregates.

The underlying short-term interest rate is based on market expectations for the three-month EURIBOR. It is set at 4.9% (2008), 4.3% (2009) and 4.2% (2010) respectively. Long-term interest rates reflect market expectations for ten-year government bonds and are set at 4.4% (2008), 4.7% (2009) and 4.8% (2010) respectively. Corporate loan spreads widened by 60 basis points with the outbreak of the financial crisis owing to considerable uncertainty and mutual mistrust in the banking sector.<sup>3</sup> The current outlook is based on the assumption that this spread will remain over the forecast horizon as a whole. The USD/EUR exchange rate is assumed to remain at 1.54 USD/EUR. The projected trend in crude oil prices is based on futures prices. For 2008 to 2010, this outlook assumes oil prices of USD 113.3, USD 117.7 and USD 115.6 per barrel (Brent) in each successive year. This signifies a revision of USD +24.6 (2008) and USD +34.1 (2009), compared with the OeNB December 2007 economic outlook. The prices of commodities excluding energy are also based on futures prices over the forecast horizon. Market players assume that commodity prices will stabilize at their currently high level and do not

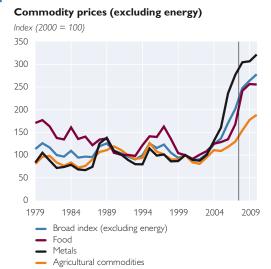
The budget forecast includes only those measures that had been agreed and suitably specified at the time that the current OeNB outlook was prepared. A possible tax reform in 2010 is therefore not included in this outlook.

The spread for corporate loans is defined as the difference between the average interest rate on corporate loans and the interest rate on ten-year government bonds.

Chart 2

#### **Oil and Commodity Price Developments**





Source: HWWA, IMF, OeNB

expect any further sharp price increases (chart 2). The budget forecast includes only those measures that had been agreed and suitably specified at the time that the current OeNB outlook was prepared. A possible tax reform in 2010 is therefore not included in this outlook.

#### 3 Financial Crisis, Weak U.S. Economy and Spike in Commodity Prices Overshadow the World Economy

The global economy is currently determined by three critical factors: The international financial crisis, the U.S. slowdown and the spike in commodity prices are seriously hampering global growth. Since the second half of 2007, the global economy has been in the throes of a financial crisis. What initially appeared as a problem limited to the U.S. real estate sector, gradually spilled over and adversely affected financial markets worldwide. Financial institutions had to write down U.S. asset-backed securities substantially. In

addition to U.S. financial institutions, European banks were particularly hit. The financial crisis has significantly increased the risk of a U.S. recession.

Strong demand from emerging economies and the long neglected development of production capacities triggered a steep rise in oil prices, which were then further boosted by speculation. At the same time, the prices of many other commodities also rose sharply. In particular, the dramatic jump in many food prices — exacerbated by crop failures and the production of agricultural fuels — poses a grave threat to the quality of life in many (primarily, poorer) countries.

# 3.1 Asian Emerging Economies Remain the Engine of Global Economic Growth

The *U.S. economy* stood on the brink of recession in early 2008. Problems in the U.S. real estate sector adversely affected both the financial sector (slump in the value of mortgages) and the real economy (asset losses and a decline in

residential construction investment). A loss in banking confidence resulted in refinancing problems, which the Federal Reserve System (Fed) countered with generous injections of liquidity and sharp cuts in interest rates. The weak labor market, the low saving ratio and rising energy prices are additional factors dampening private consumption. U.S. GDP growth fell sharply in the fourth quarter of 2007 and reached just 0.9% in the first quarter of 2008 (on the previous quarter, on an annualized basis). The recession in residential construction investment continued. Indeed, the decline gathered pace on the previous quarter. Although private consumption in nominal terms grew as strongly as in the fourth quarter of 2007, rising prices dampened real growth. The first quarter of 2008 saw a

slight drop in investment in plant and equipment. Net exports and changes in inventories had a positive impact on growth, however.

Non-Japan Asia (NJA) remains the driving force of the global economy. Compared with 2007, growth in NJA should weaken only slightly. China and India's booming economies are the specific engines of growth in this region. Japan posted an unexpectedly positive performance with growth of 0.8% in the first quarter of 2008, benefiting from its exports to Asia's fast expanding regions. Private consumption was fueled by the sustained fall in the price level. Although growth will slacken somewhat in the next few quarters, it will remain robust. Surveys do not indicate a credit crisis in Japan where lending conditions are seen as loose.

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|-------------------------------|---------|
|                               | Table 2 |

| Underlying Global Economic Conditions <sup>1</sup>   |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|
| 2007 2008  |                       | 2009                  | 2010                  |
| Gross domestic product Annual change   | in % (rea             | ıl)                   |                       |
| World excluding the euro area +5.1   | +4.0<br>+1.0          | +4.0<br>+1.2          | +4.5<br>+2.6          |
| U.S.A. +2.2<br>Japan +2.0  | +1.0                  | +1.2                  | +2.6                  |
| Asia excluding Japan +9.0 Latin America +5.3   | +7.7<br>+4.3          | +7.5<br>+3.7          | +7.9<br>+4.0          |
| United Kingdom +3.0  | +1.8                  | +1.7                  | +2.8                  |
| New EU Member States +6.1 Switzerland +3.1   | +5.0<br>+1.8          | +4.8<br>+1.7          | +4.4<br>+2.2          |
| Euro area <sup>2</sup> +2.7 +1.5   | to +2.1               | +1.0 to +2.0          | ×                     |
| World trade (imports of goods and services)  |                       |                       |                       |
| World economy +6.4 Non-euro area countries +7.1  | +5.3<br>+5.9          | +5.7<br>+6.2          | +7.0<br>+7.7          |
| Real growth of euro area export markets +6.8 Real growth of Austrian export markets +5.7                             | +5.6<br>+5.2          | +5.8<br>+5.2          | +7.2<br>+6.3          |
| Prices   |                       |                       |                       |
| Oil price in USD/barrel (Brent) 72.7 Three-month interest rate in % 4.3  | 113.3                 | 117.7<br>4.3          | 115.6<br>4.2          |
| Long-term interest rate in % 4.3 USD/EUR exchange rate 1.37 Nominal effective exchange rate (euro area index) 107.69 | 4.4<br>1.54<br>114.57 | 4.7<br>1.54<br>115.08 | 4.8<br>1.54<br>115.08 |

#### Source: Furosystem.

Global economic growth in 2007 was revised down by 1 percentage points against the OeNB December 2007 outlook. However, 0.6 percentage points of this revision are attributable to new purchasing power parity weights.

<sup>&</sup>lt;sup>2</sup> Results of the Eurosystem's June 2008 projections. The ECB presents the result in ranges based upon average differences between actual outcomes and previous projections.

The economic prospects for the United Kingdom are determined primarily by the real estate and financial markets. Private consumption, which together with investment was the driving force of the UK's economy in 2007, will weaken owing to tighter lending conditions and to the downward correction of real estate prices. Exports are currently being fueled by the sharp devaluation of the pound sterling, which, however, represents a risk for price stability. GDP growth, which fell to 0.4% in the first quarter of 2008, is likely to further decline in the second quarter of 2008. This means growth in 2008 and 2009 will be significantly more sluggish than in 2007.

## 3.2 Euro Area Gets off to Good Start in 2008

Despite the factors curbing growth worldwide and the high external value of the euro, the euro area's economy got off to a good start in 2008, posting growth of 0.7% on a quarterly basis. Growth was driven primarily by *Germany*, which registered growth of 1.5 % (also on a quarterly basis). However, this is likely to have been owing to – at least, in part — weather-induced temporary effects, which means that a countertrend can be expected in the second quarter of 2008. In 2007, the German economy registered very vigorous growth of 2.6%, stoked by exports and, in particular, investment. In 2007, investment was fueled in connection with the corporate tax reform which came into force in early 2008 (discontinuation of accelerated depreciation). Private consumption, by contrast, declined owing to falling real wages. The VAT increase in early 2007 also weakened private consumption. The further development of private consumption very much depends on

the future trend in inflation. Overall, German GDP growth in 2008 and 2009 is likely to slow appreciably, with exports cooling and investment advancing at a slower pace.

In France, the economy was driven by robust domestic demand in 2007 as in previous years while exports grew at a moderate rate. The tax reform which took effect in 2007 led to an easing of households' tax burden, thereby strengthening their purchasing power. Exports are currently suffering from the appreciation of the euro and an unfavorable development in unit labor costs. Real estate prices, which had been sliding since early 2006, stabilized at the end of 2007, so that a soft landing for the real estate market can be anticipated.

In *Italy*, Austria's southern neighbor, the economy is not doing very well at all. In 2007, growth of 1.3% was fueled by both private consumption and investment while dampened by net exports. In the fourth quarter of 2007, the economy suffered a drop in output. Although this loss of performance was recouped in the first quarter of 2008, the prospects for 2008 do not look favorable on the whole, as growth is expected to decline to some 0.5%. Italy's growth gap with the rest of Europe will thus continue to widen over the next few years.

In *Ireland* and *Spain* the cyclical downturn — as in the UK and the Baltic countries — is being exacerbated by the end of the boom in the real estate market. In Ireland, construction investment is expected to plummet.

The Eurosystem anticipates a slow-down in GDP growth to 1.5 % to 2.1 % in 2008 and to 1.0 % to 2.0 % in 2009. This deceleration against 2007 is attributable to, above all, weaker export growth.

# 4 Weaker World Economy and Appreciation of the Euro Dampen Austrian Exports

Austrian exporters can look back to an extremely successful 2007. Despite deteriorating external economic conditions, exports of both goods and services were boosted by slightly more than 10% in nominal terms. Export momentum was still undiminished in the first quarter of 2008 and was fueled by temporary factors such as good snow conditions, which resulted in another record winter season for the Austrian tourism industry. The direct effects of the U.S. real estate crisis on Austrian exports are limited. Exports to the U.S.A. – Austria's third most important export market after Germany and Italy – are growing at a slower pace. Since they account for only 5 % of Austrian exports as a whole, their impact on total exports is modest. In addition, indirect effects via Austria's close external trade relations with Germany are not clearly evident – at least for the time being. On the contrary, Germany's demand for imports was unexpectedly buoyant in early 2008.

Source: 2007: Eurostat; 2008 to 2010: OeNB June 2008 outlook, Eurosystem.

The global economic headwind will not however spare Austrian exports in the next few months. Owing to the U.S. real estate crisis, global economic growth slowed significantly, as did demand in Austria's export markets. A further factor is the appreciation of the euro, which is currently adversely affecting the price competitiveness of Austrian exporters. As a result, exports will lose considerable steam in 2008. After reaching 8.6% in 2007, growth in real exports (national accounts definition) is expected to weaken to 6.4% in 2008 and to 4.3% in 2009. Real export growth is not expected to recover until 2010. Despite the decline, exports remain a key pillar of the economy over the forecast horizon as a whole.

Several factors are helping to prevent exports from slowing more rapidly. Exchange rate fluctuations no longer play a role within the euro area, and Austrian exporters are able to win market share thanks to the favorable development of unit labor costs. Outside the euro area, the loss of price competitiveness is currently resulting in Austrian exporters losing market share. How-

| Т | ab | le | 3 |
|---|----|----|---|
|   |    |    |   |

#### **Growth and Price Developments in Austria's External Trade** 2008 2009 2010 2007 Annual change in % +0.8 +0.7 +1.8 +1.3 Competitor prices in Austria's export markets +1.6 +1.7 +2.0 +1.8Export deflator -0.8 -1.0-0.3 -0.4Changes in price competitiveness +5.7 +5.2 +5.2 +6.3 Demand on Austria's export markets (real) +8.6 +6.4 +4.3+6.2 Austrian exports of goods and services (real) +2.9 -0.9-0.1**Imports** +1.0 +1.3 +1.8 +1.4 International competitors' prices in the Austrian market +1.5 +2.9 +2.1+1.8 Import deflator +5.2 +4.4 +6.1 Austrian imports of goods and services (real) +6.2 Terms of trade +0.1 -1.2 +0.0 -0.1Percentage points of real GDP Contribution of net exports to GDP growth

| 7 | $\Gamma_{2}$ | h | Δ |
|---|--------------|---|---|

|  |                     |                     |                     | 140.0               |
|--|---------------------|---------------------|---------------------|---------------------|
| Austria's Current Account  |                     |                     |                     |                     |
|  | 2007                | 2008                | 2009                | 2010                |
|  | % of nominal GD     | )P                  |                     |                     |
| Balance of trade<br>Goods<br>Services                                | 5.0<br>0.5<br>4.5   | 5.2<br>0.5<br>4.7   | 5.4<br>0.4<br>4.9   | 5.7<br>0.7<br>5.0   |
| Euro area<br>Non-euro area countries                                 | 0.0<br>5.0          | -0.4<br>5.5         | -0.2<br>5.6         | -0.3<br>6.0         |
| Balance on income<br>Balance on current transfers<br>Current account | -1.4<br>-0.4<br>3.2 | -1.2<br>-0.4<br>3.6 | -1.1<br>-0.3<br>4.0 | -1.0<br>-0.3<br>4.5 |

Source: 2007: OeNB; 2008 to 2010: OeNB June 2008 outlook.

ever, they are benefiting from sustained strong demand in Central and Southeastern European countries, oil-exporting countries such as Russia and emerging economies, all of which will expand much more rapidly than the global economy over the forecast horizon as a whole. Shifts in Austrian exports' sectoral structure to high technology are making domestic exporters less susceptible to exchange rate fluctuations. Last but not least, the average size of Austrian enterprises, which is small compared with their international counterparts, permits a high degree of strategic flexibility.

Vigorous export growth was primarily responsible for the sharp rise in the current account surplus in 2007, which is expected to further improve over the forecast horizon. Given the slower momentum of world economic growth, the goods balance will however remain almost unchanged in 2008 and 2009 and is expected to improve substantially only in 2010. The services balance – fueled by travel and businessrelated services - will increase somewhat more vigorously. The negative balance on income will shrink slightly over the forecast horizon whereas the balance on transfers will remain almost unchanged. Overall, the current account

will improve from 3.2% of GDP in 2007 to 4.5% in 2010.

# 5 Food and Energy Prices Fuel Inflation

In Austria, HICP inflation rose markedly during the second half of 2007 (August: 1.7%; December: 3.5%). In early 2008, inflation fell somewhat (to 3.1% in January and February respectively) before climbing back up in March and April (to 3.5% and 3.4% respectively). Similarly high inflation rates were last seen in the early 1990s. Both food and energy saw huge price increases, fueled by rocketing commodity prices. In 2007, milk and wheat prices rose by more than 50% and crude oil prices reached new historical record highs. By contrast, the recent contributions to inflation by the services sector were below average. The OeNB projects currently high price growth to fall only gradually over the forecast horizon. Inflation will not drop below the 2% mark until 2010. Inflation of 3.1% – the highest level since 1993 – is anticipated for 2008 as a whole and is projected to decline to 2.4% in 2009 and to 1.9% in 2010.

The current inflation outlook is based on the assumption that commodity prices will track market expecta-

|  |                  |       |      | 145.05 |
|--|------------------|-------|------|--------|
| Selected Price Indicators for Aus                                | stria            |       |      |        |
|  | 2007             | 2008  | 2009 | 2010   |
|  | Annual change ir | 1%    |      |        |
| Harmonized Index of Consumer Prices (HICP)                       | +2.2             | +3.1  | +2.4 | +1.9   |
| HICP energy  | +4.0             | +12.6 | +5.5 | +1.0   |
| HICP excluding energy  | +2.0             | +2.2  | +2.1 | +2.0   |
| Private consumption expenditure (PCE) deflator                   | +2.1             | +3.0  | +2.3 | +1.9   |
| Investment deflator  | +1.7             | +2.3  | +2.2 | +2.0   |
| Import deflator  | +1.5             | +2.9  | +2.1 | +1.8   |
| Export deflator  | +1.6             | +1.7  | +2.0 | +1.8   |
| Terms of trade   | +0.1             | -1.2  | +0.0 | -0.1   |
| GDP deflator at factor cost                                      | +2.2             | +2.9  | +2.3 | +2.1   |
| Unit labor costs   | +1.2             | +2.2  | +1.9 | +1.0   |
| Compensation per employee  | +2.6             | +3.0  | +3.0 | +2.6   |
| Labor productivity   | +1.4             | +0.8  | +1.0 | +1.6   |
| Collectively agreed wage settlements Profit margins <sup>1</sup> | +2.5             | +3.1  | +3.0 | +2.6   |
|  | +1.0             | +0.7  | +0.4 | +1.1   |

Source: 2007: Eurostat, Statistics Austria; 2008 to 2010: OeNB June 2008 outlook

tions. Market participants expect crude oil prices to stabilize at their currently high level in line with current futures prices but do not anticipate further price increases. Although significant second-round effects generated by the spike in commodity prices are not assumed, the food and energy sectors will remain the key drivers of inflation in 2008 as a whole even if their contributions to inflation decrease over the course of the year. A reverse development is expected for the services subcomponent. Not least owing to higher wage settlements, this sector is likely to see an acceleration in inflation, which will counter a sharper drop in aggregate HICP inflation in the second half of 2008 and in 2009. The European football championship may generate a temporary rise in hotel and restaurant prices. On the basis of other countries' experience, however, this effect should amount to no more than 0.4 percentage points of the broad HICP index and be limited to June 2008 only.

Higher prices in international commodity markets suggest a significant deterioration in the terms of trade despite the euro's increased external value in 2008. As the spike in commodity prices eases, the next two years should not see any major change in the terms of trade.

The most important wage negotiations for 2008 were concluded before the current rise in inflation. Negotiated wages will climb by slightly more than 3%. This means that wage negotiations in 2009 will be subject to the impact of unexpectedly high inflation and recent healthy corporate profits, on the one hand, and a weak productivity performance (owing to robust employment growth) and the cloudier economic outlook, on the other. This forecast is based on the assumption that the path of wage moderation will be pursued. Wage settlements in 2009 are therefore expected to be slightly lower than those agreed in 2008. Lower productivity growth and higher wage settlements will make unit labor costs in 2008 and

<sup>&</sup>lt;sup>1</sup> GDP deflator divided by unit labor costs

2009 rise more sharply than they have recently. Accordingly, although profit margin growth will underperform in 2008 and 2009, it will nevertheless still be positive and result in a further moderate drop in the wage share of GDP.

# 6 Flat Investment Cycle and Sluggish Consumption

## 6.1 Stagnating Net Real Income Curbs Consumption

From the perspective of Austrian households, 2007 was marked by dynamic growth in disposable household income in both nominal and real terms. At +4.8%, the nominal compensation of employees (gross) generated the strongest growth since 1992, which was fueled by very healthy employment growth, in particular. Nominal gross wage and salary payments per full-time equivalent payroll employee increased by 2.7%. Real net wage and salary pay-

ments (less wage tax and social security contributions) rose by 0.3%. Since 2000, real net wage and salary payments per full-time equivalent payroll employee have increased by a total of 2.2%.

In 2007, mixed income and operating surpluses likewise grew unusually vigorously and at 10.3% posted the strongest growth since statistics (nonfinancial sector accounts) were introduced in 1995. Property income, however, grew more sluggishly than in previous years owing to equity market losses, which commenced as early as 2007. Total disposable household income (net, including received transfers) advanced by 5.4%—a record high since 2000.

Despite excellent income growth, private real consumption developed at a very modest pace in 2007 (+1.5%), however. This is attributable to two

Chart 3

## Weaker Economy and Unexpectedly High Inflation Dampen Real Income Growth in 2008

#### Growth in real disposable household income

# Contribution to growth in percentage points 5 4 3 2 1 0 -1 -2 -3

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

Payroll employment (full-time equivalents)

Gross wages and salaries (per full-time equivalent), real

Mixed income accruing to self-employed households and operating surpluses

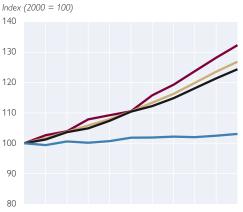
Net transfers less direct taxes
Property income

Statistical discrepanciesReal disposable household income

Source: Statistics Austria, OeNB.

<sup>1</sup> Inclusive employers' social security contributions.

#### Wages and salaries per full-time equivalent



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

 Gross wages and salaries (per full-time equivalent), nominal<sup>1</sup>

Taxes and social charges<sup>1</sup>

Net wages and salaries (per full-time equivalent), nominal

- Net wages and salaries (per full-time equivalent), real

#### **Determinants of Nominal Household Income in Austria**

Payroll employees Wages per employee Compensation of employees Mixed income accruing to self-employed households and operating surpluses (net)

Compensation of employees Investment income Mixed income accruing to self-employed households and operating surpluses (net) Net transfers less direct taxes<sup>1</sup> Disposable household income (nominal)

| 2007   | 2008    | 2009 | 2010 |  |
|--|---------|------|------|--|
| Annual chan  | ge in % |      |      |  |
| +2.1   | +1.7    | +0.8 | +0.9 |  |
| +2.6   | +3.0    | +3.0 | +2.6 |  |
| +4.8   | +4.8    | +3.8 | +3.6 |  |
| +3.3   | +0.4    | +4.0 | +5.0 |  |
| +10.3  | +6.0    | +5.5 | +6.0 |  |
| Contribution to disposable household income in percentage points |         |      |      |  |

+3.8 +3.8 +3.0 +2.8 +0.5 +0.1 +0.6 +0.7 +1.3 +2.0 +1.2 +1.2 -1.2 -0.7-0.8-0.7+4.4 +4.0 +4.1

Source: 2007: Eurostat; 2008 to 2010: OeNB June 2008 outlook.

Table 7

#### **Private Consumption in Austria**

|  | 2007           | 2008             | 2009       | 2010 |
|--|----------------|------------------|------------|------|
|  | Annual change  | in %             |            |      |
| Disposable household income (nominal)          | +5.4           | +4.4             | +4.0       | +4.1 |
| Private consumption expenditure (PCE) deflator | +2.1           | +3.0             | +2.3       | +1.9 |
| Disposable household income (real)             | +3.2           | +1.4             | +1.7       | +2.1 |
| Private consumption (real)                     | +1.5           | +1.0             | +1.5       | +1.9 |
|  | % of nominal d | isposable househ | old income |      |
| Saving ratio                                   | 11.3           | 11.5             | 11.6       | 11.8 |

Source: 2007: Eurostat; 2008 to 2010: OeNB June 2008 outlook

factors: near-stagnant levels of real wages – an income component with a strong propensity for consumption – and a change in the savings attitude arising from the pension reforms, which saw the saving ratio increase from 9.7% in 2006 to 11.3% in 2007. Such a steep increase in the saving ratio within the space of a mere year is unprecedented.

At +0.2% quarter on quarter, consumption growth continued to slow in the first quarter of 2008. The consumption forecast for the period from

2008 to 2010 is marked by decelerating employment momentum and thus considerably weaker growth in compensation of employees. Owing to the fall in stock prices, property income is not expected to make a notable contribution to growth in nominal household income in 2008.

At the same time, currently high inflation is dampening real disposable income. According to this forecast, consumption growth is expected to flag to 1.0% in 2008. In 2009 and 2010, real disposable household income

<sup>&</sup>lt;sup>1</sup> Negative values indicate an increase in (negative) net transfers minus direct taxes, positive values indicate a decrease

will grow more robustly as inflation eases. As a result, private consumption growth is projected to accelerate gradually to 1.5% (2009) and 1.9% (2010).

## 6.2 Current Investment Cycle - Unusually Smooth

In 2007, enterprises broadened their investments by 4.0% on a seasonally-adjusted basis (nonseasonally-adjusted: 5.2%). According to enterprises, investment was driven to an average extent by rationalization measures and replacement investment. The most important motive for most investment decisions was robust demand while expected or past profits, as well as technical factors, are likely to have played only a secondary role.

Compared with the previous two boom periods (1989 to 1991 and 1997 to 2000), the current investment cycle is unusually smooth. This phenomenon is primarily attributable to investment in plant and equipment, which accounts for only 40% of total investment, but – being the most cyclically-sensitive investment component – is usually critical to the investment cycle. Construction investment, the other key investment component accounting for a share of some 55%, is even more significant in quantitative terms although its cycle followed economic developments to a very limited extent in the past. In the two aforementioned periods, real investment in plant and equipment on an aggregated basis rose by 16% and 23% respectively. As a result, the share of investment in plant and equipment (as a percentage of GDP) also rose sharply in both these periods. In each case, the end of the boom was followed by a massive slump in investment activity. Three years after the end of each economic boom, corporate investment in plant and equipment remained 5 % and 2.5 %

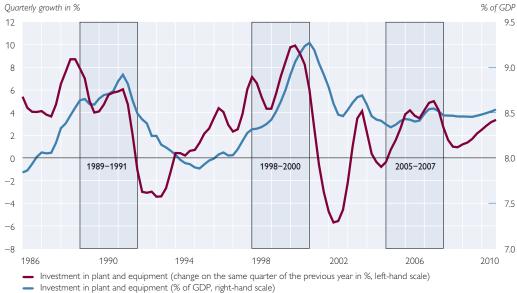
respectively, below the levels attained during each boom. A comparable development was not evident during the upturn of the last three years (2005 to 2007). At 9.8%, the cumulated increase in investment in plant and equipment was much smaller, with the share of investment in plant and equipment (as a percentage of GDP) up only slightly. From this perspective, a sharp downturn in investment activity cannot therefore be projected over the three years of the forecast horizon.

In addition, the leading indicators available are not currently signaling an imminent slump in investment activity, at least not in the first half of 2008. Although capacity utilization has been on the decline for several months, it is still well above the long-term average. The order intake of enterprises from Austria and abroad are above-average although momentum has slowed compared with mid-2007. The internal financing power of enterprises remains excellent. In addition, special factors have played a role: the mild winter, for instance, particularly fueled construction investment in the first quarter of 2008. The dissipation of this temporary effect will however purely mechanically result in a slowdown in investment growth in the next quarter.

The projected cooling of investment activity in 2008 is being determined by external factors to a great extent. The current international financial market turmoil is a key factor, which, inter alia, is making Austrian exports lose steam. Although the latter historically remains at still fairly high levels, it is visibly slowing compared with previous years. Another factor is the loss in price competitiveness, from which Austrian companies are currently suffering owing to the appreciation of the euro. Furthermore, recent months have seen a marked increase in corporate financing







Source: Eurostat, OeNB.

costs. Owing to the considerable uncertainty induced by the financial turmoil, corporate loan spreads have widened by 60 basis points since the outbreak of the crisis in mid-2007.<sup>4</sup> The current OeNB outlook is based on the assumption that this spread will be sustained over the entire forecast horizon. Corporate investment will therefore be dampened by an additional 0.5 percentage points in both 2008 and 2009. The hardest hit investment component will be investment in plant and equipment.

An important domestic factor dampening corporate investment activ-

ity is unit labor costs, which will rise faster over the forecast horizon than they have recently. This increase in unit labor costs is attributable in equal measure to two factors: first, high employment growth, which is curbing productivity growth and, second, higher wage settlements.

As for construction investment, which is less cyclically sensitive, the healthy order book indicates stable growth over the forecast period. Planned infrastructure measures should provide additional impetus in the next few years.

<sup>&</sup>lt;sup>4</sup> The spread for corporate loans is defined as the difference between the average interest rate on corporate loans and the interest rate on ten-year government bonds.

|   |   |              |              | Table 0      |  |
|---|---|--------------|--------------|--------------|--|
| Investment Activity in Austria  |   |              |              |              |  |
|   | 2007  | 2008         | 2009         | 2010         |  |
|   | Annual change   | e in %       |              |              |  |
| Total gross fixed capital formation (real)  | +4.0  | +1.5         | +1.4         | +2.6         |  |
| of which: Investment in plant and equipment (real) Residential construction investment (real) Non-residential construction investment and other | +4.6<br>+1.4  | +1.5<br>+0.6 | +1.6<br>+1.2 | +3.0<br>+2.0 |  |
| investment  | +5.4  | +1.8         | +1.4         | +2.5         |  |
| Government investment (real) Private investment (real)  | +3.4<br>+4.0  | +2.3<br>+1.5 | +1.3<br>+1.4 | +2.3<br>+2.6 |  |
|   | Contribution to total gross fixed capital formation growth in percentage points |              |              |              |  |
| Investment in plant and equipment (real) Residential construction investment (real) Non-residential construction investment and other           | +1.8<br>+0.3  | +0.6<br>+0.1 | +0.6<br>+0.3 | +1.2<br>+0.4 |  |
| investment  | +2.1  | +0.7         | +0.5         | +1.0         |  |
| Government investment (real) Private investment (real)  | +0.2<br>+3.8  | +0.1<br>+1.4 | +0.1<br>+1.3 | +0.1<br>+2.5 |  |
|   | Contribution to real GDP growth in percentage points                            |              |              |              |  |
| Changes in inventories (real)   | -0.3  | -0.2         | -0.1         | +0.0         |  |
| Source: 2007: Eurostat; 2008 to 2010: OeNB June 2008 outlook.   |   |              |              |              |  |

Box 1

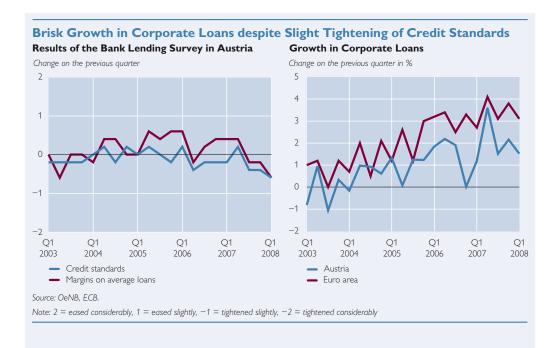
#### No Signs of a Credit Crunch in Austria<sup>1</sup>

The financial crisis in the U.S.A. has impaired the conditions for banks to raise funds in the international money and capital markets. Owing to a sharp deterioration in the risk rating of banks, interbank lending was either curtailed or loans were issued at higher interest rates only. The U.S. Fed, the ECB and other central banks have ensured liquidity via liquidity injections. The IMF nevertheless currently sees a high risk of the emergence of a global credit crunch.<sup>2</sup> A **credit crunch** occurs when banks severely tighten lending because of liquidity constraints and increase the cost of credit sharply, unleashing massive negative effects on the real economy as a rule.

So far no signs of a credit crunch have been visible in Austria. Monetary statistics for the first quarter of 2008 show that corporate lending growth continues strong and above-average by long-term standards. In corporate banking, however, the more unfavorable refinancing conditions of banks in the money and capital markets are reflected in higher lending rates and a slight tightening of credit standards (increase in credit margins). A comparison with corresponding corporate lending growth rates in the euro area reveals a qualitatively similar development in this region.

<sup>&</sup>lt;sup>1</sup> Authored by Christian Ragacs (christian.ragacs@oenb.at) and Walter Waschiczek (walter.waschiczek@oenb.at).

International Monetary Fund (2008). Global Financial Stability Report – Containing Systemic Risks and Restoring Financial Soundness. Washington D.C. April. 126.



Fears that special factors may have distorted the latest credit growth statistics upward cannot, it seems, be confirmed in Austria's case. The consolidated balance sheets of Austrian banks (which also include external business) show even stronger growth in corporate lending owing to their successful activities in Central and Eastern Europe. In addition, there are no signs that borrowing is currently being frontloaded because of an anticipated credit squeeze in the future.

Moreover, it is not possible to identify any capital constraints on banks that may lead to severe future lending restrictions. On the contrary, banking performance is very healthy (profitability stood at +14% towards end-2007, i.e. when the financial crisis was already in full swing, and the cost/income ratio was at a record high of 62%).

Last but by no means least, even the risk rating of borrowers saw an improvement. In 2007, the number of insolvencies fell by 6.1 % year on year. Allowance for loan losses was at its lowest level since 1997.

## 6.3 Jobless Rate at a Record Low in 2008

The boom years of 2006 and 2007 brought about a significant improvement in the Austrian labor market situation. Robust growth in payroll employment by a total of 126,000 in these two years led to a drop in the unemployment rate (Eurostat definition) from 5.2% in 2005 to 4.4% in 2007. This means that both 2006 and 2007 were marked by significantly more robust employment growth than was the previous period of expansion from 1998 to 2000 when average annual em-

ployment growth amounted to 42,000. In the first quarter of 2008, labor demand driven by the construction and tourism industries again soared on a year-on-year basis. This is remarkable insofar as employment growth was already robust in the first quarter of 2007 owing to the mild winter.

The gradually cooling economy will filter through to the employment situation with a time lag. Although the record levels of payroll employment seen in 2007 will not be attained in 2008, payroll employment numbers will nevertheless rise steeply this year (+1.7%).

| _ | _ |   |   | _ |
|---|---|---|---|---|
|   | а | h | P | 9 |

|  |                              |                              |                              | Table 9                      |  |  |
|--|------------------------------|------------------------------|------------------------------|------------------------------|--|--|
| Labor Market Developments in Austria   |                              |                              |                              |                              |  |  |
|  | 2007                         | 2008                         | 2009                         | 2010                         |  |  |
|  | Annual change                | in %                         |                              |                              |  |  |
| Total employment of which: Payroll employment Self-employment Public sector employment | +1.8<br>+2.1<br>+0.7<br>+0.3 | +1.5<br>+1.7<br>+0.3<br>+0.0 | +0.7<br>+0.8<br>+0.2<br>+0.1 | +0.8<br>+0.9<br>+0.1<br>+0.0 |  |  |
| Registered unemployment<br>Labor supply  | -20.9<br>+1.5                | -4.0<br>+1.2                 | +5.2<br>+0.8                 | +2.3<br>+0.8                 |  |  |
|  | % of labor supp              | oly                          |                              |                              |  |  |
| Unemployment rate (Eurostat definition)  | 4.4                          | 4.2                          | 4.4                          | 4.4                          |  |  |
|  |                              |                              |                              |                              |  |  |

Source: 2007: Eurostat; 2008 to 2010: OeNB June 2008 outlook.

In 2009 and 2010, payroll employment is expected to grow by a much more sluggish 0.8% and 0.9% respectively. The number of self-employed will grow only modestly over the forecast period owing to their steady decline in agriculture, which accounted for 57% of the total self-employed in 2007.

In addition to demographic factors, labor supply growth is being determined by the increase in foreign labor and by the effects of the pension reform enacted in 2003. The current OeNB outlook assumes that Austria's labor market will be fully opened to Central and Eastern European citizens as late as May 2011. Until then, only a gradual liberalization for shortage occupations can be expected. The pension reform of 2003 resulted in a sharp increase in the share of 55- to 64-year-old employees, which rose from 28.8% (2004) to 38.7% (2007). This effect will be sustained over the forecast period and boost labor supply by some 60,000 persons. The reform of child-care benefit (giving parents the opportunity to receive higher monthly benefits for a shorter period of time) will have a comparatively small impact on labor supply (a total of 12,500 persons) in the forecast period. Overall, labor supply is projected to grow by 132,000 persons

(+2.9%) in the period from 2008 to 2010, according to the current OeNB economic outlook.

The jobless rate (Eurostat definition) will fall by 0.2 percentage points to 4.2% in 2008. In 2009 and 2010, it is projected to edge up to 4.4%.

## 7 Upside Risks Predominate in the Inflation Outlook

The current OeNB outlook is subject to a large number of risks. Of the external assumptions, on which this outlook is based, the price of oil is subject to the greatest uncertainties. Although futures indicate by and large constant oil prices, they have always underestimated actual oil price developments in recent years. This is why there is a risk of higher oil prices in the forecast period. The euro exchange rate (both the bilateral rate relative to the U.S. dollar and the nominal effective rate) is assumed to remain constant over the forecast period. In the short term, the expected turn in interest rate policy poses an upside risk to the U.S. dollar. In the medium term, however, continued macroeconomic imbalances will represent an additional downside risk to the U.S. dollar.

The Austrian economy's buoyant growth in the first quarter of 2008 is

believed to be largely temporary. The outlook for the second quarter of 2008 is accordingly conservative (+0.3%). If the second quarter proves to be stronger, this will represent an upside risk to growth this year. The greatest domestic risk to the growth outlook is the tax reform planned for 2010, which is not included in this outlook. If the tax reform gives rise to tax relief to the tune of a currently rumored EUR 3 billion, the latter will pose an upside risk in 2010.

Whereas the risks to this growth outlook do not clearly point solely in one direction, most of the inflation risks are to the upside. The price of oil is by far the greatest risk factor. If, for instance, oil prices were permanently USD 33 higher in the long term (this would signify an oil price of USD 150 per barrel Brent in the second quarter of 2008), growth in 2008 (2009) would slow by 0.22 (0.14) percentage points.

In 2008 (2009), inflation would be 0.59 (0.16) percentage points higher than projected in this outlook. Furthermore, higher wage settlements cannot be ruled out as an inflation risk.

# 8 Downgrade in Growth Outlook against December 2007 and Upgrade in Inflation Outlook

External macroeconomic conditions have deteriorated sharply since the previous OeNB economic outlook (December 2007). The assumptions for the future development of oil prices were sharply corrected upward: by USD 25 for 2008 and by USD 34 for 2009. The euro has firmed not only against the U.S. dollar but also in nominal effective terms. Austrian export growth has clearly run out of steam. This more pessimistic assessment of the global economy was prompted primarily by the perception of weaker growth in the U.S.A. The financial crisis has

Table 10

## Change in the Underlying External Economic Conditions since the OeNB December 2007 Outlook

|  | June 20              | 800                  |                      | Decemb               | er 2007              | Difference           |                      |  |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--|
|  | 2008                 | 2009                 | 2010                 | 2008                 | 2009                 | 2008                 | 2009                 |  |
|  | Annual               | change ir            | 1 %                  |                      |                      |                      |                      |  |
| Growth of Austria's export markets<br>Competitor prices in Austria's export markets<br>Competitor prices in Austria's import markets | +5.2<br>+0.7<br>+1.3 | +5.2<br>+1.8<br>+1.8 | +6.3<br>+1.3<br>+1.4 | +6.3<br>+0.9<br>+0.9 | +6.6<br>+1.4<br>+1.4 | -1.1<br>-0.2<br>+0.4 | -1.4<br>+0.4<br>+0.4 |  |
|  | USD                  |                      |                      |                      |                      |                      |                      |  |
| Oil price per barrel (Brent)   | 113.3                | 117.7                | 115.6                | 88.6                 | 83.7                 | +24.7                | +34.0                |  |
|  | Annual               | change ir            | 1 %                  |                      |                      |                      |                      |  |
| Nominal effective exchange rate (exports)  Nominal effective exchange rate (imports)   | -1.0<br>-0.3         | -0.1<br>+0.0         | +0.0<br>+0.0         | -0.4<br>-0.2         | +0.0<br>+0.0         | -0.6<br>-0.1         | -0.1<br>+0.0         |  |
|  | %                    |                      |                      |                      |                      |                      |                      |  |
| Three-month interest rate Long-term interest rate  | 4.9<br>4.4           | 4.3<br>4.7           | 4.2<br>4.8           | 4.5<br>4.2           | 4.3<br>4.2           | +0.4<br>+0.2         | +0.0<br>+0.5         |  |
|  | Annual               | change ir            | 1 %                  |                      |                      |                      |                      |  |
| Real GDP, U.S.A.   | +1.0                 | +1.2                 | +2.6                 | +2.3                 | +2.6                 | -1.3                 | -1.4                 |  |
|  | USD/EU               | JR                   |                      |                      |                      |                      |                      |  |
| USD/EUR exchange rate  | 1.54                 | 1.54                 | 1.54                 | 1.46                 | 1.46                 | +0.08                | +0.08                |  |
| Source: Eurosystem.  |                      |                      |                      |                      |                      |                      |                      |  |

triggered both higher short-term and long-term interest rates. Retail bank interest rates also include a spread of some 50 to 60 basis points.

The effects of these new external assumptions were simulated using the OeNB's macroeconomic model. For both 2008 and 2009, there are strongly negative effects on GDP growth of -0.5 and -0.7 percentage points respectively. The assumption of lower Austrian export growth has the most dampening effect. Table 11 lists the reasons for revising this outlook in detail. In addition to the effects of these new external assumptions, this revision is explained by the effects of new data and by the item "Other". The influence of new data includes the effects of the revisions of both the historical data already available at the time of the previous OeNB economic outlook (i.e. data up to the third quarter of 2007) and the projection errors of the previous outlook for the periods now published for the first time (i.e. data for the fourth quarter of 2007 and for the first quarter of 2008). The item "Other" includes new expert assessments regarding the development of domestic variables such as government consumption or wage settlements, as well as any changes in the model.

The -0.3 percentage point revision of the outlook for 2008 is attributable to the far less benign international environment on the one hand and the fact that growth in early 2008 was much

stronger than projected on the other. The revision for 2009 was largely prompted by the international environment. The item "Other" of 0.2 percentage points is explained by a new assessment of domestic demand. Although domestic demand was revised down in view of the conservative assessment of domestic demand as early as December 2007, the downgrade is relatively modest in the current outlook.

The revision of the inflation fore-cast for 2008 was mainly due to inflation having accelerated to 3.5% in December 2007 and having remained at an average 3.2% in the first quarter of 2008, levels that had not been anticipated in the December 2007 outlook.

The revision for 2009 is explained almost exclusively by the less benign external assumptions.

A comparison of the latest forecasts for Austria (table 18) reveals an unexpectedly narrow distribution of forecast values given the currently high levels of uncertainty. Except for the IMF, every institution projects GDP growth in 2008 within a range of 2.1% to 2.3%. For 2009, the forecast values range between 1.7% and 2.2%. As for the inflation outlook, systematic differences between the current forecasts are not identifiable. The OeNB outlook differs from other forecasts primarily in terms of the composition of growth. In this respect, the OeNB expects net exports to make a larger contribution to growth than domestic demand.

#### **Breakdown of Forecast Revisions**

|  | GDP                  |                      | HICP                 |                      |
|--|----------------------|----------------------|----------------------|----------------------|
|  | 2008                 | 2009                 | 2008                 | 2009                 |
|  | Annual chang         | e in %               |                      |                      |
| June 2008 outlook<br>December 2007 outlook<br>Difference | +2.2<br>+2.5<br>-0.3 | +1.7<br>+2.3<br>-0.6 | +3.1<br>+2.4<br>+0.7 | +2.4<br>+1.8<br>+0.6 |
|  | Percentage po        | oints                |                      |                      |
| Due to:  |                      |                      |                      |                      |
| External assumptions                                     | -0.5                 | -0.7                 | +0.3                 | +0.5                 |
| New data   | +0.2                 | +0.0                 | +0.6                 | +0.1                 |
| of which: Revision of historical data up to Q3 07        | +0.0                 | X                    | +0.0                 | X                    |
| Projection errors for Q4 07 and Q1 08                    | +0.2                 | +0.0                 | +0.6                 | +0.1                 |
| Other <sup>1</sup>                                       | -0.1                 | +0.2                 | -0.2                 | +0.0                 |

Source: OeNB June 2008 and December 2007 outlooks.

<sup>&</sup>lt;sup>1</sup> Different assumptions about developments in domestic variables such as wages, government consumption, effects of tax measures, other changes in assessment or in the model.

Box 2

# Outlook for Central and Eastern European (CEE) Countries:<sup>1, 2</sup> Robust Economic Performance Expected to Continue but Growth Peak Has Passed Already

Economic growth in CEE countries will stay robust in the years to come; so far, the region has been relatively resilient to headwinds from financial market turbulences. Yet some economic slowdown is expected in the region (e.g. in the Czech Republic and Poland), but largely on the back of country-specific internal factors. Hungary's economic performance — which was exceptionally weak in 2007 compared with other countries of the region — is likely to remain anemic, but real GDP growth will at least gain some momentum after the strongest effects of the far-reaching fiscal stabilization program have phased out.

#### **Real GDP Growth in the Three CEE EU Member States**

|                   |  |       |          | Latest fo  | orecast    |   | Previous<br>forecast |          |
|-------------------|--|-------|----------|------------|------------|---|----------------------|----------|
|                   |  | 2006  | 2007     | 2008       | 2009       |   | 2008                 | 2009     |
|                   |  | Annuc | ıl chang | e in %     | '          |   |                      |          |
| Czech<br>Republic | OeNB<br>(March 2008)                                       | 6.4   | 6.5      | 5.2        | 5.4        | OeNB<br>(September 2007)  | 5.1                  | 4.8      |
|                   | European<br>Commission<br>(April 2008)<br>IMF (April 2008) |       |          | 4.7<br>4.2 | 5.0<br>4.6 | European<br>Commission<br>(November 2007)<br>IMF (October 2007) | 5.0<br>4.6           | 4.9<br>× |
|                   | wiiw (March 2008)  |       |          | 4.5        | 5.0        | wiiw (July 2007)  | 5.2                  | ×        |
|                   | Consensus<br>Forecasts<br>(April 2008)                     |       |          | 3.8-5.5    | 3.2-6.0    | Consensus<br>Forecasts<br>(September 2007)                      | 4.1-5.5              | ×        |
| Hungary           | OeNB<br>(March 2008)                                       | 3.9   | 1.3      | 1.8        | 2.8        | OeNB<br>(September 2007)  | 2.5                  | 3.3      |
|                   | European<br>Commission<br>(April 2008)                     |       |          | 1.9        | 3.2        | European<br>Commission<br>(November 2007)                       | 2.6                  | 3.4      |
|                   | IMF (April 2008)<br>wiiw (March 2008)                      |       |          | 1.8<br>2.5 | 2.5<br>4.1 | IMF (October 2007)<br>wiiw (July 2007)                          | 2.7<br>3.1           | ×        |
|                   | Consensus<br>Forecasts<br>(April 2008)                     |       |          | 1.5-2.7    |            | Consensus Forecasts (September 2007)                            | 2.5-3.5              | ×        |
| Poland            | OeNB<br>(March 2008)                                       | 6.2   | 6.5      | 5.6        | 4.9        | OeNB<br>(September 2007)  | 5.7                  | 5.0      |
|                   | European<br>Commission<br>(April 2008)                     |       |          | 5.3        | 5.0        | European<br>Commission<br>(November 2007)                       | 5.6                  | 5.2      |
|                   | IMF (April 2008)<br>wiiw (March 2008)                      |       |          | 4.9<br>5.5 | 4.5<br>5.3 | IMF (October 2007)<br>wiiw (July 2007)                          | 5.3<br>5.5           | ×        |
|                   | Consensus<br>Forecasts<br>(April 2008)                     |       |          | 4.7-5.8    | 4.1-5.5    | Consensus<br>Forecasts<br>(September 2007)                      | 4.8-5.8              | ×        |

Source: European Commission, Consensus Forecasts, IMF, OeNB, wiiw.

<sup>&</sup>lt;sup>1</sup> Compiled by Antje Hildebrandt (antje.hildebrandt@oenb.at).

<sup>&</sup>lt;sup>2</sup> The OeNB compiles semiannual forecasts of economic developments in the Czech Republic, Hungary, Poland, and Russia. In the case of Russia, the forecast is established in collaboration with Suomen Pankki, Finland's central bank. The forecasts are based on preliminary global growth projections and technical assumptions about euro area import growth, oil prices and USD/EUR exchange rates, which are prepared by the ECB for the Eurosystem in the context of broad macroeconomic projection exercises. Compared with 2007, import growth of the euro area is expected to moderate in 2008 but to accelerate thereafter. The price of oil will pick up in 2008 and is expected to stay at elevated levels in 2009. The EUR/USD exchange rate is assumed to remain unchanged at the average level recorded in the two-week period ending in mid-February 2008 over the entire projection horizon.

The OeNB's projections are well in line with those of the other economic and financial institutions. Compared with the September 2007 projections, real GDP growth forecasts were slightly revised downward for Hungary and Poland, and upward for the Czech Republic, in line with the 2007 outcome and the less favorable euro area growth projections.

According to the ECB's projections of March 2008, economic growth in the euro area is expected to slow to 1.3% to 2.1% in 2008 and to accelerate only marginally in 2009, after real GDP growth of 2.6% year on year in 2007. The ECB's growth projections for the euro area were revised downward from December 2007, reflecting, among other things, the dampening impact of the financial market turmoil. Economic forecasts for the U.S.A. and for emerging economies other than the four countries under review in this contribution follow the same line: Compared with previous forecasts, real GDP growth projections were revised more or less strongly downward for 2008 and 2009, largely on the back of ongoing global financial turbulence.

Overall, the three CEE countries have been relatively resilient to the financial market turmoil, but are likely to be affected negatively by worsening financing conditions and monetary tightening in the medium term. Furthermore, the region will be impacted by the economic slowdown in industrialized countries because of declining exports of goods and services. The extent to which the CEE EU Member States depend on exports to the U.S. economy, however, is very small: Exports to the U.S.A. account for around 4% of total exports, whereas those to the euro area account for more than 50%. However, even before the beginning of the financial turbulence on world markets, most CEE countries already showed some signs of growth fatigue in 2007 partly on the back of country-specific internal factors.

For the **Czech Republic**, we expect real GDP growth to moderate in 2008 and 2009 compared with 2007. Private consumption growth will lose steam in both years due to the reform package that will likely entail an increase in VAT and excise taxes as well as lower social transfers. Furthermore, rising inflation and monetary tightening are anticipated to have a dampening effect on private consumption. On the external side, we expect export growth to slow down somewhat owing to weaker demand in the euro area in 2008, but to revive somewhat in 2009, largely in connection with the opening of the Hyundai plant and of economic growth picking up in the euro area. Import growth will moderate as well, as soon as Hyundai's investment has been completed. Net exports will contribute positively to real GDP growth in 2008 (0.5 percentage points) and in 2009 (1.1 percentage points). Compared with the September 2007 forecast, the projection was revised slightly upward, in particular in light of a higher-than-expected positive impact of employment growth and the release of a new car model by Škoda, which pushed up expectations on export growth. These positive effects even offset the slight downward revision of gross fixed capital formation (GFCF) growth that reflects a deterioration of confidence in industry, trade and construction, and weaker import demand of the country's main trading partners.

Following a slump in **Hungary's** growth performance in 2007, there seems to be room for real GDP growth to accelerate somewhat in 2008 and particularly in 2009. Private consumption growth will still be restrained in 2008 owing to ongoing labor market adjustment and inflation-induced moderation of real wage developments, but will pick up in 2009 backed by stronger growth in real income (lower tax burden) and some strengthening of employment. In 2009, the public sector can be expected to stimulate private consumption growth, e.g. in the form of higher public sector wages or an increase in selected transfers, given the upcoming elections to the European Parliament in 2009 and the Hungarian parliament in 2010. For 2008 and 2009, the OeNB's outlook for GFCF growth is fairly positive, supported by high capacity utilization levels in industry and, more recently, some strengthening of corporate credit activity. Furthermore, in 2009, the planned tax reform is likely to reduce the tax burden on companies. In light of the unfavorable economic outlook for Hungary's major export markets, export growth will slow down in 2008, as will import growth (export-import link), resulting in a slightly positive contribution of net exports to GDP growth. For 2009, we expect export growth to accelerate again and import growth to pick up even more owing to higher domestic demand, so that the contribution of external trade to GDP growth will be almost nil. The OeNB's latest growth projections were adjusted downward compared with September 2007, mainly due to worse economic prospects in the country's major trading partners. This assessment is supported by signs of lowering employment levels, accelerating inflation and deteriorating consumer and industry sentiment.

According to our projections, Poland will see further years of robust economic growth despite slowing down somewhat compared with 2007. Private consumption growth stands on a sound footing, supported by high employment growth and increasing disposable income (high nominal wage and credit growth, rising salaries for healthcare workers, changes in the tax benefit system) as well as by the envisaged tax reform scheduled to enter into force in 2009. However, higher inflation will prevent private consumption growth from accelerating strongly. After reaching a growth rate of around 20% year on year in 2007, GFCF growth will decline in 2008 and 2009, largely owing to lower profitability (reflecting rising unit labor costs - ULC) and some tightening of monetary policy. However, GFCF growth will continue to expand dynamically, given sustained private consumption growth and increasing labor-substituting investments. On the back of lower import growth of the euro area, export growth is expected to slow down in 2008 but to regain some speed in 2009. The acceleration, however, will not be substantial as ULC will rise in the tradable sector. Overall, the contribution of net exports to GDP growth will be negative in 2008 and 2009 at around 2 percentage points. Compared with the previous forecast, the deceleration of export growth is expected to be more pronounced, given the current strong level of the currency and the expected slowdown of euro area import growth. At the same time, import growth is anticipated to turn out weaker (also reflecting a strong currency) compared with the previous forecast.

The main **risks to the projections** refer to deviations from the underlying assumptions for external factors, in particular import growth rates of the main trading partners as well as the actual impact of the financial market turmoil on the region. Another source of risks is country-specific factors. In Hungary, the government's defeat in the March 2008 referendum on selected structural reforms (doctor's fee, hospital fee, tuition fee) implies some risk regarding the implementation of fiscal reforms ahead of the elections in 2009 and 2010. In the Czech Republic and Poland, some uncertainty remains about bottlenecks on the labor market that might be even greater than assumed in the forecast, which could lead to higher wages and inflation. In Poland, some uncertainty remains about the implementation of fiscal reforms (e.g. the tax reform envisaged to enter into force in 2009).

In Russia, the economic situation and prospects for 2008 and 2009 remain quite favorable, despite the impact of the recent turbulences on financial markets, which have affected the country by constraining domestic banks' and enterprises' access to refinancing on international markets and thus tightening liquidity. The good prospects are mainly based on the high oil price. Annual real growth of private consumption has remained high in recent years and is forecast to continue at a slightly weaker but still robust rate, due to decelerating wage growth and a somewhat more modest expansion of lending. The pressure to boost federal spending has grown in tandem with sizeable and increasing fiscal oil revenues. According to Russian budgetary plans, fiscal policy is set to loosen somewhat in the coming years, which will translate into more robust government consumption up to 2009. GFCF is predicted to continue growing at a brisk pace in the coming years; investment will flow to various sectors, but is primarily driven by large energy projects and increased public infrastructure investments. Rapidly expanding domestic demand and a further real appreciation of the Russian ruble will sustain high import growth, which is, however, expected to moderate over the forecast period, as the rise of both income and the real external value of the ruble will decelerate. These developments are expected to set in once the strong increase in oil prices experienced in recent years has leveled off. Moderation notwithstanding, Russia's imports are predicted to continue expanding faster than exports, with the result that the still sizeable current account surplus will shrink swiftly.

|        |  |       |          | Latest fo  | orecast    |  | Previous<br>forecast |      |
|--------|--|-------|----------|------------|------------|--|----------------------|------|
|        |  | 2006  | 2007     | 2008       | 2009       |  | 2008                 | 2009 |
|        |  | Annuc | ıl chang | e in %     | •          |  |                      |      |
| Russia | OeNB<br>(March 2008)                   | 7.3   | 8.1      | 7.6        | 6.8        | OeNB<br>(September 2007)                   | 6.2                  | 5.6  |
|        | European<br>Commission<br>(April 2008) |       |          | 7.7        | 7.3        | European<br>Commission<br>(November 2007)  | 7.0                  | 6.9  |
|        | IMF (April 2008)<br>wiiw (March 2008)  |       |          | 6.8<br>6.4 | 6.3<br>6.0 | IMF (October 2007)<br>wiiw (July 2007)     | 6.5<br>5.2           | ×    |
|        | Consensus<br>Forecasts<br>(April 2008) |       |          | 6.5-7.8    | 6.0-7.6    | Consensus<br>Forecasts<br>(September 2007) | 6.1-8.0              | ×    |

Oil price developments remain not only a major driving force, but also a **key risk to the projection** for Russian growth. If the oil price were to drop sharply, Russia's current account balance might run into the red already in 2009 and economic expansion could suffer. A deepening of the international financial crisis could also weaken the financial standing of some Russian banks, curb the current credit boom and dampen internal demand. Yet the authorities do have some generous fiscal buffers (Reserve Fund and National Wealth Fund) and monetary buffers (the third-largest international reserves of the world) at their disposal, which could cushion economic decline. Moreover, if inflows of energy proceeds and/or capital were to accelerate substantially, this would involve the risk of an excessively quick appreciation of the real exchange rate.

241,051 | 246,404 | 250,538 | 256,530 | +3.3 | +2.2 | +1.7 | +2.4

#### **Annex: Detailed Result Tables**

**Demand Components (Real Prices)** 

Table 12

| Chained volume data (reference year = 2000) |           |         |         |                    |      |      |      |      |
|---|-----------|---------|---------|--------------------|------|------|------|------|
|   | 2007      | 2008    | 2009    | 2010               | 2007 | 2008 | 2009 | 2010 |
|   | EUR milli | on      |         | Annual change in % |      |      |      |      |
| Private consumption                         | 131,629   | 133,005 | 135,064 | 137,677            | +1.5 | +1.0 | +1.5 | +1.9 |
| Government consumption                      | 42,602    | 43,880  | 44,490  | 45,140             | +2.6 | +3.0 | +1.4 | +1.5 |
| Gross fixed capital formation               | 51,221    | 52,005  | 52,738  | 54,109             | +4.0 | +1.5 | +1.4 | +2.6 |
| of which: Investment in plant and equipment | 20,540    | 20,858  | 21,191  | 21,819             | +4.6 | +1.5 | +1.6 | +3.0 |

+0.6 10,859 +1.4 Residential construction investment 10,454 10,512 10,643 +1.2 +2.0 20,279 20,641 20,927 21,459 +5.4 +1.8 +1.4 +2.5 Non-residential construction and other investment -3,155-3,202-3,232Changes in inventories (including statistical discrepancy) -2,318223,134 225,735 229,090 233,693 +1.6 +1.2 +1.5 +2.0 Domestic demand 147,515 | 157,000 | 163,773 | 173,883 +4.3 Exports of goods and services +8.6 +6.4 +6.2 129,598 136,331 142,326 151,046 +5.2 +4.4 Imports of goods and services +6.2 +6.1 Net exports 17,917 20,669 21,448 22,837 X X Χ X

Source: 2007: Eurostat; 2008 to 2010: OeNB June 2008 outlook.

Gross domestic product

Table 13

|   |   |   |   |   |                                   |                                   |                                   | Table 13                          |
|---|---|---|---|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Demand Components (Current Prices)  |   |   |   |   |                                   |                                   |                                   |                                   |
|   | 2007  | 2008  | 2009  | 2010  | 2007                              | 2008                              | 2009                              | 2010                              |
|   | EUR milli                                     | on  |   |   | Annual ch                         | nange in %                        |                                   |                                   |
| Private consumption Government consumption Gross fixed capital formation Changes in inventories (including statistical discrepancy) Domestic demand | 147,966<br>48,280<br>56,340<br>261<br>252,847 | 154,027<br>50,501<br>58,496<br>2,186<br>265,210 | 159,946<br>52,223<br>60,634<br>2,667<br>275,471 | 166,159<br>54,203<br>63,461<br>3,402<br>287,225 | +3.6<br>+4.1<br>+5.8<br>×<br>+4.0 | +4.1<br>+4.6<br>+3.8<br>×<br>+4.9 | +3.8<br>+3.4<br>+3.7<br>×<br>+3.9 | +3.9<br>+3.8<br>+4.7<br>×<br>+4.3 |
| Exports of goods and services<br>Imports of goods and services<br>Net exports   | 160,629<br>140,640<br>19,990                  | 173,920<br>152,305<br>21,615                    | 185,128<br>162,263<br>22,865                    | 200,057<br>175,372<br>24,686                    | +10.4<br>+7.8<br>×                | +8.3<br>+8.3<br>×                 | +6.4<br>+6.5<br>×                 | +8.1<br>+8.1<br>×                 |
| Gross domestic product  | 272,837                                       | 286,825   | 298,336   | 311,911   | +5.7                              | +5.1                              | +4.0                              | +4.6                              |

Source: 2007: Eurostat; 2008 to 2010: OeNB June 2008 outlook.

#### **Deflators of Demand Components**

|   | 2007                             | 2008                             | 2009                             | 2010                             | 2007                         | 2008                         | 2009                         | 2010                         |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
|   | 2000 = 1                         | 00                               |                                  |                                  | Annual ch                    | nange in %                   |                              |                              |
| Private consumption Government consumption Gross fixed capital formation Domestic demand (excluding changes in inventories) | 112.4<br>113.3<br>110.0<br>112.0 | 115.8<br>115.1<br>112.5<br>114.9 | 118.4<br>117.4<br>115.0<br>117.4 | 120.7<br>120.1<br>117.3<br>119.8 | +2.1<br>+1.4<br>+1.7<br>+1.9 | +3.0<br>+1.6<br>+2.3<br>+2.6 | +2.3<br>+2.0<br>+2.2<br>+2.2 | +1.9<br>+2.3<br>+2.0<br>+2.0 |
| Exports of goods and services Imports of goods and services Terms of trade Gross domestic product                           | 108.9<br>108.5<br>100.3          | 110.8<br>111.7<br>99.2           | 113.0<br>114.0<br>99.2           | 115.0<br>116.1<br>99.1           | +1.6<br>+1.5<br>+0.1<br>+2.3 | +1.7<br>+2.9<br>-1.2<br>+2.8 | +2.0<br>+2.1<br>-0.0<br>+2.3 | +1.8<br>+1.8<br>-0.1<br>+2.1 |

Source: 2007: Eurostat; 2008 to 2010: OeNB June 2008 outlook.

Table 15

| Labor | Market |
|-------|--------|
|       |        |

|   | 2007                           | 2008               | 2009               | 2010               | 2007         | 2008         | 2009         | 2010         |  |  |
|---|--------------------------------|--------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|--|--|
|   | Thousands                      |                    |                    |                    | Annual cha   | nge in %     |              |              |  |  |
| Total employment                                  | 4,320.9<br>3,834.3             | 4,383.8<br>3,897.3 | 4,413.0<br>3,926.1 | 4,446.7<br>3,959.8 | +1.8<br>+2.0 | +1.5<br>+1.6 | +0.7<br>+0.7 | +0.8<br>+0.9 |  |  |
| Payroll employment (national accounts definition) | 3,483.5                        | 3,543.6            | 3,571.1            | 3,604.2            | +2.0         | +1.7         | +0.7         | +0.9         |  |  |
|   | %                              |                    |                    |                    |              |              |              |              |  |  |
| Unemployment rate (Eurostat definition)           | 4.4                            | 4.2                | 4.4                | 4.4                | ×            | ×            | ×            | ×            |  |  |
|   | EUR per real output unit x 100 |                    |                    |                    |              |              |              |              |  |  |
| Unit labor costs (whole economy) <sup>1</sup>     | 67.5                           | 69.0               | 70.3               | 71.0               | +1.2         | +2.2         | +1.9         | +1.0         |  |  |
|   | EUR thousa                     | nd per empl        | oyee               |                    |              |              |              |              |  |  |
| Labor productivity (whole economy) <sup>2</sup>   | 55.8                           | 56.2               | 56.8               | 57.7               | +1.4         | +0.8         | +1.0         | +1.6         |  |  |
|   | EUR thousa                     | nd                 |                    |                    |              |              |              |              |  |  |
| Real compensation per employee <sup>3</sup>       | 33.5                           | 33.5               | 33.7               | 34.0               | +0.5         | +0.0         | +0.7         | +0.7         |  |  |
|   | At current p                   | rices, EUR th      | nousand            |                    |              |              |              |              |  |  |
| Gross compensation per employee                   | 37.6                           | 38.8               | 39.9               | 41.0               | +2.6         | +3.0         | +3.0         | +2.6         |  |  |
|   | At current p                   | rices, EUR m       | nillion            |                    |              |              |              |              |  |  |
| Total gross compensation of employees             | 131,153                        | 137,423            | 142,605            | 147,719            | +4.8         | +4.8         | +3.8         | +3.6         |  |  |

Source: 2007: Eurostat; 2008 to 2010: OeNB June 2008 outlook.

 $<sup>^{1}</sup>$  Gross wages divided by real GDP x 100.  $^{2}$  Real GDP divided by total employment.

<sup>&</sup>lt;sup>3</sup> Gross wages per employee divided by the private consumption expenditure (PCE) deflator.

| Current Account         |             |          |          |          |             |       |      |      |
|-------------------------|-------------|----------|----------|----------|-------------|-------|------|------|
|                         | 2007        | 2008     | 2009     | 2010     | 2007        | 2008  | 2009 | 2010 |
|                         | EUR million |          |          |          | % of nomina | I GDP |      |      |
| Balance of trade        | 13,597.8    | 14,838.4 | 16,007.4 | 17,808.5 | 5.0         | 5.2   | 5.4  | 5.7  |
| Balance on goods        | 1,324.1     | 1,498.5  | 1,334.7  | 2,332.9  | 0.5         | 0.5   | 0.4  | 0.7  |
| Balance on services     | 12,273.8    | 13,339.9 | 14,672.8 | 15,475.6 | 4.5         | 4.7   | 4.9  | 5.0  |
| Euro area               | -112.4      | -1,023.1 | -669.5   | -845.1   | 0.0         | -0.4  | -0.2 | -0.3 |
| Non-euro area countries | 13,710.2    | 15,861.6 | 16,676.9 | 18,653.7 | 5.0         | 5.5   | 5.6  | 6.0  |
| Balance on income       | -3,790.0    | -3,378.4 | -3,282.3 | -2,972.6 | -1.4        | -1.2  | -1.1 | -1.0 |
| Balance on transfers    | -1,044.7    | -1,276.9 | -826.2   | -783.6   | -0.4        | -0.4  | -0.3 | -0.3 |
| Current account         | 8,763.1     | 10,183.1 | 11,899.0 | 14,052.3 | 3.2         | 3.6   | 4.0  | 4.5  |

Source: 2007: OeNB; 2008 to 2010: OeNB June 2008 outlook.

| Quarterly Outlook Results                              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | 2008         | 2009         | 2010         | 2008         |              |              |              | 2009         |              |              |              | 2010         |              |              |              |
|  |              |              |              | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           | Q1           | Q2           | Q3           | Q4           |
| Prices, wages and costs                                | Annuc        | l chang      | e in %       |              |              |              |              |              |              |              |              |              |              |              |              |
| HICP HICP (excluding energy)                           | +3.1 +2.2    | +2.4<br>+2.1 | +1.9<br>+2.0 | +3.2<br>+2.3 | +3.4<br>+2.4 | +3.0<br>+2.0 | +2.7<br>+1.8 | +2.6<br>+1.9 | +2.4<br>+2.0 | +2.4<br>+2.1 | +2.4<br>+2.3 | +2.0<br>+2.1 | +1.9<br>+2.0 | +1.8<br>+2.0 | +1.8<br>+1.9 |
| Private consumption expenditure (PCE) deflator         | +3.0         | +2.3         | +1.9         | +2.9         | +3.2         | +3.3         | +2.6         | +2.6         | +2.3         | +2.2         | +2.0         | +2.0         | +2.0         | +2.0         | +1.7         |
| Gross fixed capital formation deflator<br>GDP deflator | +2.3<br>+2.8 | +2.2<br>+2.3 | +2.0<br>+2.1 | +1.7<br>+2.9 | +2.1<br>+2.9 | +2.5<br>+2.9 | +2.7<br>+2.7 | +2.7<br>+2.5 | +2.4<br>+2.3 | +2.0<br>+2.2 | +1.8<br>+2.2 | +1.8<br>+2.1 | +1.9<br>+2.1 | +2.1<br>+2.1 | +2.2<br>+2.1 |
| Unit labor costs                                       | +2.2         | +1.9         | +1.0         | +1.4         | +2.2         | +2.6         | +2.8         | +2.6         | +2.1         | +1.7         | +1.4         | +1.2         | +1.1         | +0.9         | +0.8         |
| Nominal wages per employee                             | +3.0         | +3.0         | +2.6         | +2.5         | +3.0         | +3.2         | +3.3         | +3.4         | +3.0         | +2.8         | +2.8         | +2.8         | +2.7         | +2.6         | +2.5         |
| Productivity   | +0.8         | +1.0         | +1.6         | +1.1         | +0.8         | +0.6         | +0.5         | +0.8         | +0.9         | +1.1         | +1.3         | +1.5         | +1.6         | +1.6         | +1.7         |
| Real wages per employee                                | +0.0         | +0.7         | +0.7         | -0.4         | -0.2<br>+3.2 | -0.1         | +0.6<br>+2.5 | +0.8         | +0.6<br>+2.0 | +0.6         | +0.7         | +0.7         | +0.7         | +0.6         | +0.8         |
| Import deflator Export deflator                        | +2.9<br>+1.7 | +2.1<br>+2.0 | +1.8<br>+1.8 | +3.1 +1.2    | +3.2         | +3.1 +2.0    | +2.5         | +1.9         | +2.0         | +2.1 +1.9    | +2.2         | +2.1 +1.8    | +1.9         | +1.7<br>+1.8 | +1.6<br>+1.8 |
| Terms of trade   | -1.2         | +0.0         | -0.1         | -1.8         | -1.6         |              | -0.2         | +0.4         | +0.1         | -0.2         | -0.4         | -0.3         | -0.1         | +0.0         | +0.2         |
| Economic activity                                      |              | l and/oi     |              |              |              |              |              | . 0.1        | . 0.1        | 0.2          | 0.1          | 0.5          | 0.1          | . 0.0        | . 0.2        |
| GDP  | +2.2         | +1.7         | +2.4         | +0.8         | +0.3         | +0.2         | +0.3         | +0.4         | +0.5         | +0.5         | +0.6         | +0.6         | +0.6         | +0.6         | +0.6         |
| Private consumption                                    | +1.0         | +1.5         | +1.9         | +0.2         | +0.3         | +0.3         | +0.3         | +0.4         | +0.4         | +0.5         | +0.5         | +0.4         | +0.5         | +0.6         | +0.6         |
| Government consumption                                 | +3.0         | +1.4         | +1.5         | -1.7         | +2.3         | +1.5         | +1.0         | -0.5         | -0.3         | +0.0         | +0.3         | +0.7         | +0.4         | +0.3         | +0.2         |
| Gross fixed capital formation                          | +1.5         | +1.4         | +2.6         | +0.3         | +0.2         | +0.2         | +0.2         | +0.4         | +0.4         | +0.5         | +0.6         | +0.7         | +0.7         | +0.7         | +0.7         |
| of which: Investment in plant and equipment            | +1.5         | +1.6         | +3.0         | +0.2         | +0.3         | +0.2         | +0.2         | +0.5         | +0.5         | +0.5         | +0.7         | +0.8         | +0.8         | +0.8         | +0.9         |
| Residential construction investment <sup>1</sup>       | +0.6         | +1.2         | +2.0         | +0.2         | +0.3         | +0.2         | +0.1         | +0.3         | +0.4         | +0.5         | +0.5         | +0.5         | +0.5         | +0.5         | +0.5         |
| Exports  | +6.4         | +4.3         | +6.2         | +2.0         | +1.4         | +0.4         | +0.5         | +1.2         | +1.4         | +1.5         | +1.5         | +1.5         | +1.5         | +1.6         | +1.6         |
| Imports  | +5.2         | +4.4         | +6.1         | +0.4         | +2.5         | +1.2         | +1.0         | +0.7         | +1.0         | +1.2         | +1.4         | +1.6         | +1.6         | +1.7         | +1.7         |
|  | Contri       | bution t     | o real C     | GDP gro      | wth in       | percent      | age poi      | nts          |              |              |              |              |              |              |              |
| Domestic demand  | +1.4         | +1.4         | +1.8         |              | +0.6         | +0.5         | +0.4         | +0.2         | +0.3         | +0.3         | +0.4         | +0.5         | +0.5         | +0.5         | +0.5         |
| Net exports  | +1.1         | +0.3         | +0.6         | +1.1         | -0.5         | -0.4         | -0.2         | +0.3         | +0.3         | +0.3         | +0.2         | +0.1         | +0.1         | +0.1         | +0.1         |
| Changes in inventories                                 | -0.3         | +0.0         | +0.0         | -0.2         | +0.2         | +0.2         | +0.1         | -0.1         | -0.1         | -0.1         | -0.1         | +0.0         | +0.0         | +0.0         | +0.0         |
| Labor market   | % of lo      | abor suţ     | ply          |              |              |              |              |              |              |              |              |              |              |              |              |
| Unemployment rate (Eurostat definition)                | 4.2          | 4.4          | 4.4          | 4.1          | 4.2          | 4.2          | 4.2          | 4.3          | 4.4          | 4.4          | 4.4          | 4.3          | 4.4          | 4.4          | 4.5          |
|  | Annuc        | ıl and/oı    | r quarte     | rly cha      | nges in      | %            |              |              |              |              |              |              |              |              |              |
| Total employment                                       | +1.5         | +0.7         | +0.8         | +0.8         | +0.1         | +0.1         | +0.2         | +0.2         | +0.2         | +0.2         | +0.2         | +0.2         | +0.2         | +0.2         | +0.2         |
| of which: Private sector employment                    | +1.6         | +0.7         | +0.9         | +0.9         | +0.1         | +0.1         | +0.2         | +0.2         | +0.2         | +0.2         | +0.2         | +0.2         | +0.2         | +0.3         | +0.2         |
| Payroll employment                                     | +1.7         | +0.8         | +0.9         | +0.9         | +0.0         | +0.1         | +0.2         | +0.3         | +0.2         | +0.2         | +0.2         | +0.2         | +0.2         | +0.3         | +0.2         |
| Additional variables                                   |              | ıl and/oı    |              | . ′          | 0            | , ,          |              |              |              |              |              |              |              |              |              |
| Disposable household income                            | +1.4         | +1.7         | +2.1         | +1.2         | +0.1         | +0.1         | -0.2         | +0.7         | +1.0         | +0.7         | +0.3         | +0.5         | +0.8         | +0.3         | +0.2         |
|  | % of r       | eal disp     | osable l     | househo      | old inco     | me (sav      | ing ratio    | o) and 9     | % of rec     | ıl GDP (     | output/      | gap)         |              |              |              |
| Household saving ratio                                 | 11.5         | 11.6         | 11.8         | 11.8         | 11.7         | 11.5         | 11.0         | 11.2         | 11.7         | 11.9         | 11.7         | 11.8         | 12.0         | 11.8         | 11.5         |
| Output gap   | 0.0          | -0.6         | -0.5         | 0.4          | 0.1          | -0.2         | -0.4         | -0.5         | -0.6         | -0.6         | -0.6         | -0.6         | -0.5         | -0.4         | -0.4         |

Source: OeNB June 2008 outlook. Quarterly values are seasonally adjusted.

 $<sup>^{\</sup>rm 1}$  Excluding non-residential construction and other investment.

| Comparison | ot | Current | Economic | <b>Forecasts</b> | tor A | Austria |  |
|------------|----|---------|----------|------------------|-------|---------|--|
| _          |    |         |          |                  |       |         |  |

| Indicator   | OeNB               | WIFO         |       | IHS        |      | OECD       |      | IMF       |       | European<br>Commission |      |            |      |
|---|--------------------|--------------|-------|------------|------|------------|------|-----------|-------|------------------------|------|------------|------|
|   | June 2008          |              |       | March 2008 |      | March 2008 |      | June 2008 |       | April 2008             |      | April 2008 |      |
|   | 2008               | 2009         | 2010  | 2008       | 2009 | 2008       | 2009 | 2008      | 2009  | 2008                   | 2009 | 2008       | 2009 |
| Key results                                       | Annual change in % |              |       |            |      |            |      |           |       |                        |      |            |      |
| GDP (real)  | +2.2               | +1.7         | +2.4  | +2.1       | +1.7 | +2.1       | +2.2 | +2.3      | +1.7  | +1.9                   | +1.7 | +2.2       | +1.8 |
| Private consumption (real)                        | +1.0               | +1.5         | +1.9  | +1.6       | +1.6 | +1.6       | +1.8 | +1.1      | +1.5  | ×                      | X    | +1.4       | +1.5 |
| Government consumption (real)                     | +3.0               | +1.4         | +1.5  | +2.5       | +1.0 | +3.0       | -0.5 | +2.6      | +2.9  | X                      | X    | +3.3       | +0.4 |
| Gross fixed capital formation (real) <sup>1</sup> | +1.5               | +1.4         | +2.6  | +2.2       | +1.8 | +2.7       | +2.6 | +2.0      | +1.8  | ×                      | ×    | +2.4       | +2.1 |
| Exports (real)                                    | +6.4               | +4.3         | +6.2  | +5.2       | +5.0 | +5.7       | +6.5 | +6.5      | +6.2  | ×                      | ×    | +6.0       | +5.7 |
| Imports (real)                                    | +5.2               | +4.4         | +6.1  | +5.3       | +5.2 | +6.1       | +5.9 | +4.8      | +7.1  | ×                      | X    | +5.9       | +5.5 |
| GDP per employee                                  | +0.8               | +1.0         | +1.6  | +1.0       | +1.2 | +0.9       | +1.4 | ×         | ×     | X                      | ×    | +1.9       | +1.5 |
| GDP deflator                                      | +2.8               | +2.3         | +2.1  | +2.6       | +2.1 | +2.2       | +1.9 | +2.4      | +1.7  | ×                      | ×    | +2.8       | +1.8 |
| CPI   | ×                  | ×            | ×     | +2.9       | +2.3 | +2.6       | +1.9 | X         | X     | +2.8                   | +1.9 | X          | ×    |
| HICP  | +3.1               | +2.4         | +1.9  | +2.9       | +2.3 | ×          | X    | +3.1      | +2.2  | X                      | ×    | +3.0       | +1.9 |
| Unit labor costs                                  | +2.2               | +1.9         | +1.0  | +2.5       | +1.8 | X          | X    | X         | X     | X                      | X    | -0.9       | -0.3 |
| Total employment                                  | +1.5               | +0.7         | +0.8  | +1.8       | +0.7 | +1.2       | +0.8 | X         | X     | X                      | X    | +0.9       | +0.5 |
|   | %                  |              |       |            |      |            |      |           |       |                        |      |            |      |
| Unemployment rate <sup>2</sup>                    | 4.2                | 4.4          | 4.4   | 4.2        | 4.3  | 4.3        | 4.4  | 4.8       | 4.8   | 4.4                    | 4.5  | 4.2        | 4.3  |
|   | % of nominal GDP   |              |       |            |      |            |      |           |       |                        |      |            |      |
| Current account                                   | 3.6                | 4.0          | 4.5   | 3.0        | 2.9  | ×          | X    | 3.5       | 3.2   | 2.9                    | 2.9  | 5.0        | 5.2  |
| Government surplus/deficit                        | -0.6               | -0.5         | -0.5  | -0.7       | -0.7 | -0.7       | -0.2 | -0.7      | -0.8  | X                      | X    | -0.7       | -0.6 |
| External assumptions                              |                    |              |       |            |      |            |      |           |       |                        |      |            |      |
| Oil price in USD/barrel (Brent)                   | 113.3              | 117.7        | 115.6 | 95.0       | 97.0 | 96.0       | 96.0 | 120.0     | 120.0 | 95.5                   |      | 101.2      |      |
| Short-term interest rate in %                     | 4.9                | 4.3          | 4.2   | 4.2        | 3.9  | 4.2        | 3.9  | 4.5       | 4.1   | 4.0                    | 3.6  | 4.3        | 3.8  |
| USD/EUR exchange rate                             | 1.54               | 1.54         | 1.54  | 1.60       | 1.60 | 1.48       | 1.43 | 1.56      | 1.56  | 1.47                   | 1.48 | 1.55       | 1.57 |
|   | Annual change in % |              |       |            |      |            |      |           |       |                        |      |            |      |
| Euro area GDP (real)                              | +1.5 to +2.1       | +1.0 to +2.0 | ×     | +1.6       | +1.3 | +1.8       | +2.0 | +1.7      | +1.4  | +1.4                   | +1.2 | +1.7       | +1.5 |
| U.S. GDP (real)                                   | +1.0               | +1.2         | +2.6  | +1.0       | +1.4 | +1.8       | +2.3 | +1.2      | +1.1  | +0.5                   | +0.6 | +0.9       | +0.7 |
| World GDP (real)                                  | +3.6               | +3.6         | +4.1  | +3.9       | +3.6 | X          | ×    | X         | ×     | +3.7                   | +3.8 | +3.8       | +3.6 |
| World trade                                       | +5.3               | +5.7         | +7.0  | +5.3       | +5.0 | +6.0       | +7.0 | +6.3      | +6.6  | +5.6                   | +5.8 | +6.0       | +5.6 |

Source: OeNB, WIFO, IHS, OECD, IMF, European Commission.

<sup>&</sup>lt;sup>1</sup> For IHS: Gross investment. <sup>2</sup> Eurostat definition; for OECD: OECD definition.