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## International Unit Labour Cost Position Slightly Improved in 2008

**In 2008 an hour of labour in Austrian manufacturing cost € 31.40, which was 12 percent more expensive than the average of hourly labour costs in the remaining EU-15 countries. Per-capita labour productivity rose by 2.0 percent in Austria, while EU trading partners saw a drop in productivity of 1.0 percent. At the same time, unit labour costs rose by 1.0 percent in Austria, compared to an average rise of 3.3 percent among the EU trading partners. In the economy as a whole, unit labour costs rose by 2.8 percent, falling within the average of the trading partners. In 2008 Austrian manufacturing and the overall Austrian economy were less strongly affected by the world economic crisis than the trading partners. However, a deterioration of relative unit labour costs can be expected in 2009.**

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As a small, open economy, Austria is closely enmeshed in the international trade flow of trade. Austria's traditionally strong domestic export sector has gained additional importance in recent decades, in which technological and economic-political changes have spurred on the internationalisation of markets around the world. In the long term, the share of exported goods in the gross domestic product has continually increased (Austria reported an export share of approximately 20 percent in 1978 compared to nearly 42 percent in 2008). The international demand for Austrian goods contributed significantly to economic growth, with exports frequently termed an "engine of growth". However, because of its export orientation, Austria's economy is particularly exposed to the global economic crisis.

The development of the export economy is largely determined by Austria's competitive position with respect to its trading partners. Despite the high level of automation within manufacturing companies, labour costs still carry great economic significance today as the price of the production factor "labour". They are the most important indicator for the price competitiveness of a country's industry. In light of the globalisation of production processes, they also have a significant influence on investment and location related decisions made by firms.

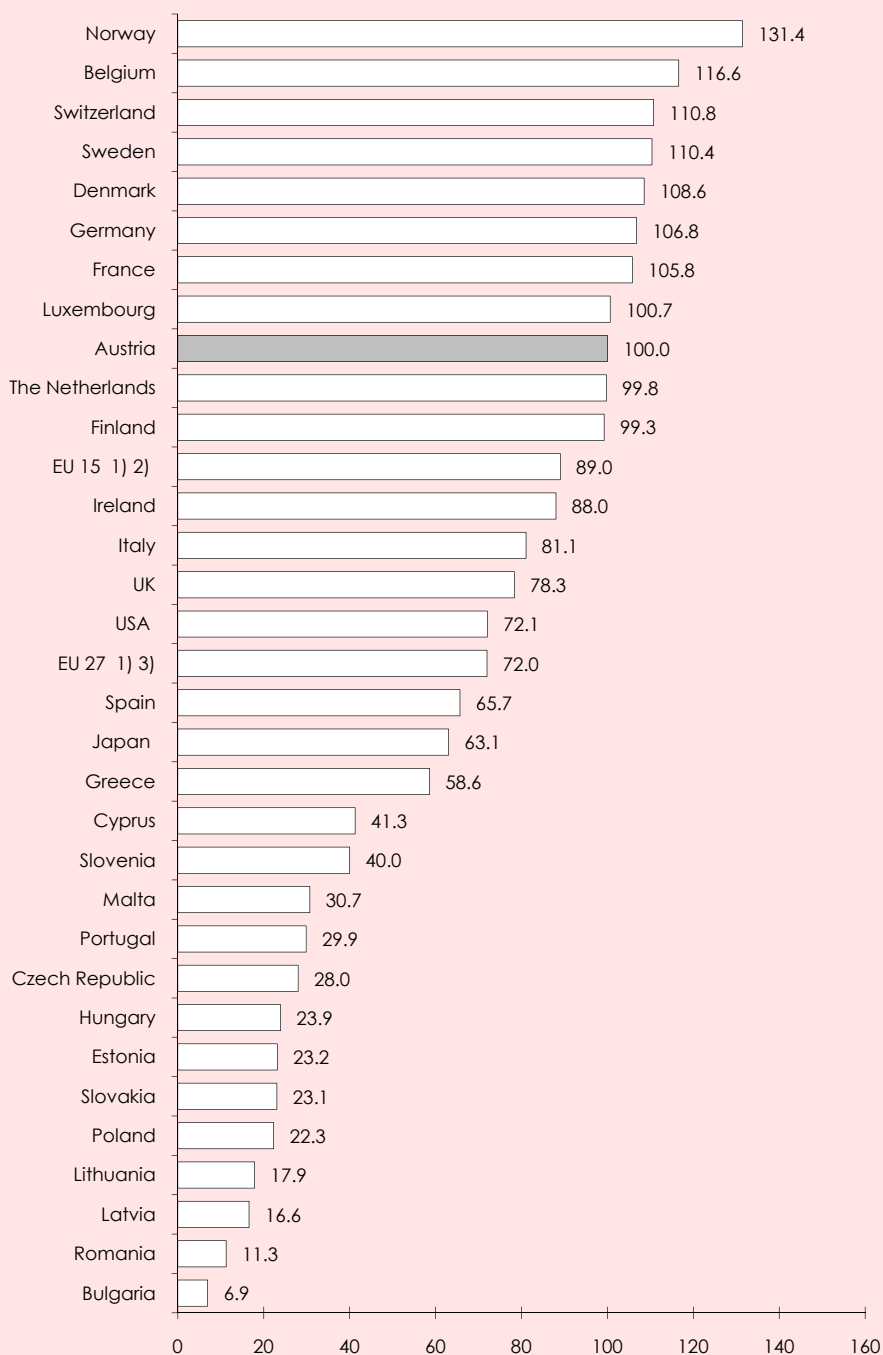
In the long term, the competitiveness of an economy depends on numerous factors, in particular on the innovation capabilities of individual firms, the qualifications of the labour force, labour relations as well as the tax structure and organisation of the welfare state. Economic policy can have an effect on labour costs and productivity through diverse transmission mechanisms. Short term changes in these two important indicators must be viewed within this context and cannot be converted directly into recommendations for economic policy.

To assess the international competitiveness of an economy, the indicators have to be adjusted for changes in exchange rates. Exchange rate fluctuations influence the immediate competitiveness of companies on foreign markets. From an Austrian perspective, they are largely exogenous and cannot be influenced. In recent years, exchange rate developments have exerted slight but constant pressure on the production costs of the Austrian export economy. After the price competitiveness of Austria's manufacturing improved in the second half of the 1990s, the euro began to strengthen noticeably from 2000 onward. The effective, i.e., foreign trade share-

weighted, exchange rate for Austrian manufacturing sank by nearly 12 percent between 1995 and 2000. Since then it has risen by 5.2 percent, with an increase of 0.6 percent in 2008.

Figure 1: Hourly labour costs in manufacturing in 2008

In a single currency, Austria = 100



Source: Eurostat, Institute of the German Economy, WIFO. – <sup>1)</sup> Weighted by the number of employees in industry (Eurostat), for Bulgaria, Slovenia, Poland and Sweden with the rate of change for the economy as a whole. – <sup>2)</sup> EU 15 without Austria. – <sup>3)</sup> Without Malta, Cyprus and Austria.

The short term development of productivity and labour costs needs to be interpreted within the context of the global economic crisis, which has affected economies at different speeds: the USA and Japan were massively affected in 2008, while in comparison Austrian exports only took a nosedive in 2009. The development of la-

bour productivity and Austria's international unit labour cost position in 2008 must be evaluated from this perspective.

The amount of total labour costs per hour worked serves as a basis for an estimation of labour costs within the international hierarchy<sup>1</sup>. This includes all labour-related costs: in addition to the compensation paid directly to employees, companies must include non-wage labour costs in their calculations (*Beirat für Wirtschafts- und Sozialfragen*, 1994). Only partly blurred data are available for an international comparison of the development of hourly labour costs, and these must therefore be interpreted with caution (see the box "Introductory Note").

### Manufacturing: labour costs higher in 2008

#### Introductory Note

The data on hourly labour costs are based on the labour cost surveys conducted by all EU countries every four years. Taking the most recent survey (2004), WIFO calculated the values for the following years using the Eurostat annual labour cost index. For non-European countries data from the Institute of the German Economy (Institute of the German Economy) and national data were used (*Huber – Pratscher*, 2007, *Schröder*, 2008).

However, not all countries use the same statistical concept to estimate the labour cost index, and this partially limits the possibilities for international comparison. For Austria the labour cost index for manufacturing (ÖNACE B to F) is calculated using data from the WIFO business cycle survey. The break in these data due to a change in survey dimensions in the year 2008 may have an effect on the estimation of hourly labour costs.

For earlier WIFO reports, data on gross compensation, productivity and unit labour costs in manufacturing were extracted from the macroeconomic database of the European Commission (Ameco). These data are based on the survey concept of national accounts and are not calculated per hour of worker, but rather per employee. Due to gaps in the available data, OECD data were used for the present report, in particular for the representation of gross compensation and productivity.

In line with Eurostat publications, WIFO attributes the development of relative labour and unit labour costs in manufacturing to the total number of employees, not just to blue collar workers. The differentiation between blue collar and white collar workers has less and less significance in the modern production process. As a result of this development, labour regulation differences have been largely eliminated, and the share of white collar workers in manufacturing has increased from about 25 percent to nearly 40 percent since the early 1970s.

In 2008 an hour of labour in Austrian manufacturing (industry and trade) cost € 31.40, which was about as much as an hour of labour in the Netherlands and Finland, and about 12 percent more than the EU-15 average excluding Austria. In the international labour cost hierarchy, Austria ranked in the upper middle field at 9th place – two ranks higher than in the previous year. Labour costs were highest – as has been the case since 2004 – in Norway (+31.4 percent compared to Austria) ahead of Belgium (+16.6 percent), Switzerland (+10.8 percent) and Sweden (+10.4 percent), followed by Denmark (+8.6 percent) and Germany (+6.8 percent). In France and Luxembourg hourly labour costs in manufacturing were also higher than in Austria. The relative position of Ireland, Italy and Spain remained largely unchanged. In the UK the strong devaluation of the pound left its mark in a decline of 10 percent in euro-based labour costs and a significant improvement of the UK's labour cost position. In the USA as well, where an hour of labour in manufacturing most recently cost 72 percent of the Austrian value, exchange rate fluctuations had a positive effect on the competitiveness of companies.

Despite a noticeable catching up process with respect to productivity and the level of wages, the gap between labour costs in eastern and western Europe remains quite large. The position of new EU countries in the labour cost hierarchy changed

<sup>1</sup> Hours which are used by employees to produce goods, that is, without failure periods such as holidays and sick leave.

only slightly in 2008. Labour costs in manufacturing were still highest in Slovenia at approximately –60 percent (compared to the Austrian level). The largest increase – mainly due to currency appreciation – could be found in the Czech Republic and Poland (28 percent and 22.3 percent of the Austrian level in 2008). Hungary, Estonia and Slovakia reached a similar level to Poland. In Lithuania and Latvia an hour of labour in a single currency cost less than a fifth of the Austrian value, while in Romania it cost about a tenth and in Bulgaria approximately 7 percent.

Table 1: Hourly labour costs in manufacturing

	2008 In €
Norway	41.3
Belgium	36.6
Switzerland	34.8
Sweden	34.7
Denmark	34.1
Germany	33.5
France	33.2
Luxembourg	31.6
Austria	31.4
The Netherlands	31.3
Finland	31.2
EU 15 <sup>1 2</sup>	28.0
Ireland	27.6
Italy	25.5
UK	24.6
USA	22.6
EU 27 <sup>1 3</sup>	22.6
Spain	20.6
Japan	19.8
Greece	18.4
Cyprus	13.0
Slovenia	12.6
Malta	9.7
Portugal	9.4
Czech Republic	8.8
Hungary	7.5
Estonia	7.3
Slovakia	7.2
Poland	7.0
Lithuania	5.6
Latvia	5.2
Romania	3.5
Bulgaria	2.2

Source: Eurostat, Institute of the German Economy, U.S. Bureau of Labour Statistics, WIFO. – <sup>1</sup> Weighted by the number of employees in industry (Eurostat), for Bulgaria, Slovenia, Poland and Sweden with the rate of change for the economy as a whole. – <sup>2</sup> Without Austria. – <sup>3</sup> Without Malta, Cyprus and Austria.

According to the labour cost index, in 2008 the cost of a real hour of labour increased by 5 percent in Austria compared to the previous year, thereby exceeding the average of the EU 15<sup>2</sup>. On the one hand, a clear rise in nominal wages and salaries was responsible for this increase: the good economic situation and the acceleration of inflation were reflected in autumn wage negotiations in 2007, resulting in an increase of 3.4 percent in the average minimum wage in industry. On the other hand, costs per hour of labour worked grew more than those per hour paid, which can be attributed to an increase in paid absence periods<sup>3</sup>.

In 2008 an hour of labour in Austria consisted of € 16.70 in wages and € 14.70 in non-wage labour costs. Compared to the previous year, non-wage labour costs dropped by about 0.3 percentage points, amounting to 88 percent of the wage for em-

<sup>2</sup> The validity of this figure is limited due to the previously mentioned blurriness of data, in particular as a result of the change in the sample dimensions of the WIFO business cycle survey in 2008.

<sup>3</sup> In 2008, illness-related absence periods increased by 3.5 percent in Austria compared to the previous year.

employees in manufacturing. This decline can be attributed to the lowering of legally required unemployment insurance payments for lower incomes in 2008. Non-wage labour costs mainly consisted of employer contributions to social security, voluntary social benefits, paid leave and special payments (for example, 13th and 14th salaries or severance packages). The wage refers to hourly earnings per paid hour of labour and therefore also includes payments for holidays and other absence periods, such as sick leave and nursing leave.

Table 2: Non-wage labour costs in relation to wages

Employees	2001	2006	2008
	As a percentage of wages		
France	94.0	102.5	102.1
Belgium	96.2	90.9	91.8
Austria	90.1	87.8	88.0
Greece	88.1	87.9	87.6
Spain	81.8	86.4	86.7
Hungary	93.5	86.9	86.4
Italy	89.3	85.4	85.8
Japan	76.2	79.9	79.4
Czech Republic	81.0	77.9	77.9
Sweden	77.5	76.9	77.3
The Netherlands	72.4	74.9	75.5
West Germany	73.7	75.0	74.1
Germany	72.6	73.8	72.9
Slovenia	74.5	74.4	70.9
Slovakia	74.3	73.8	70.9
Finland	68.1	71.9	70.4
Portugal	69.8	66.4	66.4
East Germany	57.5	59.4	58.5
Switzerland	56.1	55.7	58.2
Lithuania	53.7	56.7	57.9
UK	54.2	57.2	57.1
Estonia	55.3	53.7	55.2
Poland	62.5	55.3	55.2
Romania	70.5	56.0	53.6
Bulgaria	73.8	57.8	53.0
Norway	48.1	52.2	50.9
Luxembourg	49.8	50.8	49.5
USA	41.3	49.4	48.0
Latvia	44.5	44.0	44.7
Denmark	39.3	43.2	44.3
Ireland	39.1	36.8	36.8
Cyprus	39.8	38.1	36.2
Malta	28.2	26.7	26.6

Source: Statistics Austria, Institute of the German Economy, WIFO.

The level of non-wage labour costs mainly depends on the structure and financing of the social welfare state. If the social security system is mainly financed by employer and employee contributions, non-wage labour costs are high. This particularly applies to countries having a form of the Continental European welfare state model (extensive social welfare state, insurance-based financing principle)<sup>4</sup>. In Austria non-wage labour costs are particularly high due to the large weight of tax-advantaged special payments (13th and 14th salaries). If one were to view these special payments as fixed wage components, then non-wage labour costs in manufacturing would only amount to two-thirds of the wage.

If tax-advantaged special payments are included in non-wage labour costs (as foreseen in most commonly used methods of calculation), then the burden of non-wage labour costs in 2008 is only higher in France (102 percent) and Belgium (92 percent) than it is in Austria (88 percent). Similar values to those in Austria can be found in Greece, Spain, Hungary and Italy. In Austria's neighbouring countries, the Czech Republic, Germany, Slovenia and Slovakia, the share of non-wage labour costs was

<sup>4</sup> An overview of social welfare state models and their characteristics can be found in Aiginger et al. (2007).

as much as 10 to 15 percentage points lower than in Austria. In English-speaking countries, the burden of non-wage labour costs was significantly smaller (57 percent in the UK, 48 percent in the USA, and only 36.8 percent in Ireland). This can be attributed to the comparatively lower level of public social expenditures in these countries. The significance of the type of financing of social expenditures for the calculation of non-wage labour costs can be seen in the Scandinavian countries, where the social system is financed through taxes and dues: in Sweden non-wage labour costs amounted to 77.3 percent of the wage in 2008, followed by Finland at 70.4 percent. The burden of non-wage labour costs was lower in Norway (50.9 percent) and Denmark (44.3 percent).

Our analysis of international labour cost development draws on data from the national accounts. It is based on the development of gross compensation per employee, in other words per capita hourly salary including social contributions of employers, as well as data on productivity and unit labour costs, which Eurostat publishes for all member countries and their most important trading partners<sup>5</sup>.

**Moderate increase in gross compensation per employee**

Table 3: Development of labour costs per capita of employees in manufacturing

In national currencies

	Ø 1998-2003	Ø 2003-2008	2006	2007	2008
	Year-to-year percentage change				
Austria	+ 2.7	+ 3.1	+ 3.5	+ 3.9	+ 3.0
Belgium	+ 2.9	+ 3.2	+ 3.9	+ 4.5	+ 3.2
Denmark	+ 4.0	+ 4.5	+ 4.9	+ 4.0	+ 4.2
Germany	+ 2.8	+ 2.1	+ 4.2	+ 1.6	+ 1.4
Greece	+ 4.0	+ 3.8	+ 4.3	+ 7.2	+ 6.9
Spain	+ 2.3	+ 4.1	+ 4.1	+ 4.6	+ 5.2
France	+ 2.2	+ 3.8	+ 4.2	+ 3.3	+ 3.4
Ireland	+ 5.6	+ 5.0	+ 2.6	+ 2.4	+ 5.5
Italy	+ 2.7	+ 3.0	+ 2.7	+ 2.6	+ 2.6
Luxembourg	+ 2.9	+ 3.0	+ 5.3	+ 0.7	+ 1.5
The Netherlands	+ 4.4	+ 3.0	+ 2.9	+ 3.2	+ 3.6
Portugal	+ 3.8	+ 3.6	+ 4.2	+ 3.3	+ 3.1
Finland	+ 3.4	+ 4.6	+ 3.9	+ 2.8	+ 7.9
Sweden	+ 4.1	+ 3.7	+ 1.5	+ 6.4	+ 1.5
UK	+ 5.0	+ 4.9	+ 6.9	+ 5.1	+ 2.2
Czech Republic	+ 6.8	+ 6.1	+ 6.7	+ 6.1	+ 6.2
Estonia	+ 10.4	+ 13.7	+ 19.8	+ 23.8	+ 7.3
Cyprus	+ 4.4		+ 1.4	+ 3.1	
Latvia	+ 3.3	+ 18.3	+ 17.0	+ 26.3	+ 11.9
Lithuania	+ 7.3	+ 14.5	+ 13.7	+ 12.7	+ 16.0
Hungary	+ 9.3	+ 8.5	+ 4.0	+ 6.8	+ 7.8
Poland	+ 2.6	+ 0.2	+ 3.0	- 10.9	+ 7.6
Slovenia	+ 9.9	+ 7.1	+ 6.0	+ 6.7	+ 8.5
Slovakia	+ 9.7	+ 8.3	+ 11.3	+ 8.6	+ 7.8
Japan	+ 0.1	+ 0.3	- 0.6	- 0.6	+ 0.5
Canada	+ 3.1	+ 4.1	+ 4.8	+ 4.1	+ 3.1
Norway	+ 4.8	+ 6.1	+ 6.7	+ 6.7	+ 5.6
USA	+ 5.3	+ 3.0	+ 5.3	+ 2.5	+ 3.3
EU trading partners <sup>1</sup>	+ 3.5	+ 3.2	+ 4.2	+ 2.7	+ 2.8
Austria					
All trading partners <sup>1</sup> = 100	- 0.8	± 0.0	- 0.6	+ 1.2	+ 0.2
EU trading partners <sup>1</sup> = 100	- 0.8	- 0.1	- 0.7	+ 1.1	+ 0.2
Germany = 100	- 0.1	+ 1.0	- 0.6	+ 2.2	+ 1.6

Source: AMECO, National Bank of Belgium, OECD, Statistics Austria, WIFO calculations. – <sup>1</sup> Without Austria, Malta, Cyprus, Romania, Bulgaria; weighted average of Austria's trading partners according to WIFO exchange rate indices.

<sup>5</sup> However, these international data are repeatedly subject to comprehensive revision, in some cases going back several years. In particular the most recent values of the indicators of competitiveness relative to the trading partners must therefore be considered preliminary.

Between 2003 and 2008, labour costs in Austria rose by an average of 3.1 percent per year, only slightly less rapidly than the average of the EU trading partners (+3.2 percent). The rise in labour costs has slowed down significantly in recent years: while gross compensation in manufacturing increased by 3.9 percent per employee in Austria in 2007, it increased by only 3.0 percent in 2008. The average increase among Austria's trading partners amounted to only 2.7 percent (2007) and 2.8 percent (2008) in national currency, due to slower development in Germany, which carried a weight of over a third.

Among EU countries, the Baltic countries showed the highest growth. Latvia and Lithuania exhibited double-digit growth in 2008, however with a declining tendency due to the worldwide economic crisis. In Eastern and Central Europe the catching up process with respect to the EU-15 countries continued, with an increase in gross compensation in manufacturing of 8.5 percent in Slovenia, 7.8 percent in Hungary and Slovakia, 7.8 percent in Poland and 6.2 percent in the Czech Republic. In contrast, they only increased by 2.2 percent in the UK and 1.4 percent in Germany. In the USA labour costs in manufacturing increased in 2008 despite the world economic crisis (+3.3 percent in national currency), and in Japan they continued to increase slightly (+0.5 percent).

The strength of the euro resulted in a rise in the effective exchange rate, negatively influencing the relative cost position of Austrian manufacturing. In a single currency – under consideration of exchange rate fluctuations – gross compensation increased somewhat more slowly between 2003 and 2008 in Austria than it did in the weighted average of its trading partners. In 2008 costs in a single currency increased by 2.4 percent in the average of the trading partners and by 6.3 percent in Japan, while declining by 3.7 percent in the USA.

In order to assess the international competitiveness of economies one has also to take into account in addition to labour costs and exchange rate relations the productivity of labour. Labour productivity is defined as the real net output (gross value added) per employed person.

In recent years, Austria's industry achieved above average productivity growth rates. This is assumed to have resulted from a combination of relatively high capacity utilisation rates, together with a comparatively high rate of investment, and the greater opening up of new markets as well as an increasing internationalisation of production owing to European integration and EU enlargement to the East. The data for 2008 confirm that the Austrian economy has been less affected by the global economic crisis than its European trading partners. While the productivity growth rate of Austrian manufacturing (+2.0 percent) was slower than in previous years, it was significantly higher than the average productivity growth rate of the EU trading partners (–1.0 percent) and Germany (–1.2 percent). Productivity growth only rose significantly in Greece (+4.0 percent), Finland (+4.5 percent) and the Czech Republic (+3.8 percent). In the new EU countries the economic crisis resulted in the stagnation of productivity development and even caused a decline in the Baltic countries. The USA and Japan saw only a modest rise in productivity in 2008.

Austria's manufacturing productivity growth rate also appears to be developing positively in the long run. Between 2003 and 2008 it rose by 4.6 percent per year, over ½ percentage point more than the average of Austria's trading partners and at approximately the same rate as Germany.

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**World economic crisis  
has below average  
effect on Austria  
in 2008**

Table 4: Development of productivity in manufacturing

In national currencies

	Ø 1998-2003	Ø 2003-2008	2006	2007	2008
	Year-to-year percentage change				
Austria	+ 3.3	+ 4.6	+ 8.1	+ 5.6	+ 2.0
Belgium	+ 1.9	+ 2.7	+ 4.0	+ 3.6	- 1.0
Denmark	+ 2.0	+ 2.6	+ 4.4	+ 1.8	- 2.1
Germany	+ 3.0	+ 4.6	+ 8.5	+ 4.8	- 1.2
Greece	+ 1.4	+ 6.7	+ 4.0	+ 3.2	+ 4.0
Spain			+ 1.4	+ 3.3	+ 1.7
France	+ 2.9	+ 2.6	+ 3.0	+ 2.4	- 1.0
Ireland	+ 7.8	+ 4.2	+ 4.3	+ 9.4	- 0.8
Italy	+ 0.2	+ 0.4	+ 2.3	+ 0.9	- 3.5
Luxembourg	+ 1.9	- 1.0	- 5.8	+ 2.1	- 6.1
The Netherlands	+ 3.2	+ 3.3	+ 3.3	+ 3.0	- 0.7
Portugal	+ 2.1	+ 2.0	+ 3.0	+ 3.7	- 1.5
Finland	+ 6.4	+ 7.0	+ 10.4	+ 8.4	+ 4.5
Sweden	+ 6.1	+ 5.4	+ 8.7	+ 1.8	- 2.7
UK	+ 4.2	+ 4.1	+ 5.0	+ 2.3	+ 1.1
Czech Republic	+ 5.8	+ 9.7	+ 12.8	+ 8.8	+ 3.8
Estonia	+ 9.1	+ 7.2	+ 14.7	+ 11.1	- 6.7
Cyprus	+ 2.9		- 5.1	± 0.0	
Latvia	+ 6.5	+ 2.2	+ 0.5	+ 0.9	- 8.4
Lithuania	+ 9.8	+ 7.6	+ 10.2	+ 5.7	+ 2.4
Hungary	+ 6.4	+ 5.5	+ 6.7	+ 6.1	- 0.9
Poland	+ 6.2	+ 3.2	+ 12.5	- 8.2	+ 1.6
Slovenia	+ 6.4	+ 5.2	+ 9.2	+ 6.9	- 1.0
Slovakia	+ 8.4	+ 11.1	+ 11.9	+ 16.0	- 3.8
Japan	+ 3.5	+ 4.0	+ 2.7	+ 3.1	+ 0.3
Canada	+ 1.8	+ 1.6	+ 3.8	+ 0.6	- 0.6
Norway	+ 3.5	+ 2.1	- 2.7	+ 0.2	+ 0.5
USA	+ 5.4	+ 3.6	+ 5.7	+ 3.6	+ 0.4
EU trading partners <sup>1)</sup>	+ 3.2	+ 4.0	+ 6.7	+ 4.0	- 1.0
Austria					
All trading partners <sup>1) = 100</sup>	- 0.1	+ 0.7	+ 1.6	+ 1.7	+ 2.8
EU trading partners <sup>1) = 100</sup>	+ 0.1	+ 0.6	+ 1.3	+ 1.6	+ 3.0
Germany = 100	+ 0.2	± 0.0	- 0.4	+ 0.8	+ 3.2

Source: AMECO, OECD, Statistics Austria, U.S. Bureau of Labor Statistics, WIFO calculations. – <sup>1)</sup> Without Austria, Malta, Cyprus, Romania, Bulgaria; weighted average of Austria's trading partners according to WIFO exchange rate indices.

Among the key, determining factors of price formation in industry, and therefore a significant indicator of an economy's price competitiveness, are labour costs per production unit (unit costs). These are defined as the ratio between labour costs per capita employee and labour productivity (output per person employed). The development of Austria's unit labour costs relative to its trading partners is a decisive factor for the competitiveness of Austria's export industry.

In the late 1990s and in early 2000, moderate labour cost growth, combined with relatively high productivity growth, had a dampening effect on unit labour costs (-0.3 percent per year between 1998 and 2003). Compared to the EU trading partners, this resulted in a slight improvement of Austria's unit labour cost position by 0.6 percent per year, and by 0.3 percent per year compared to Austria's main trading partner, Germany.

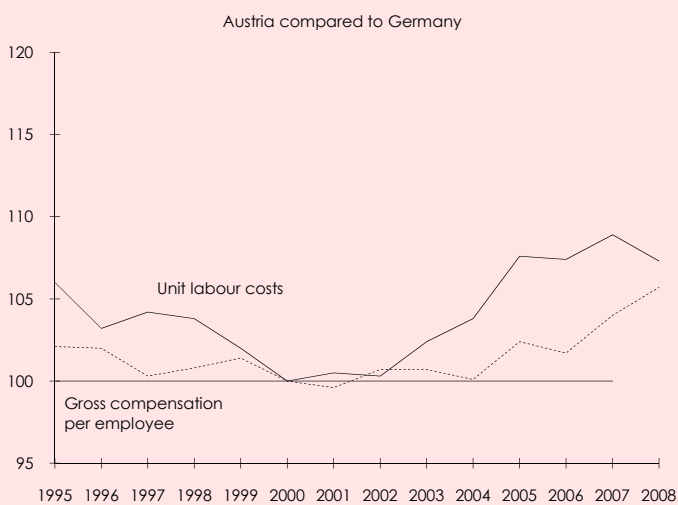
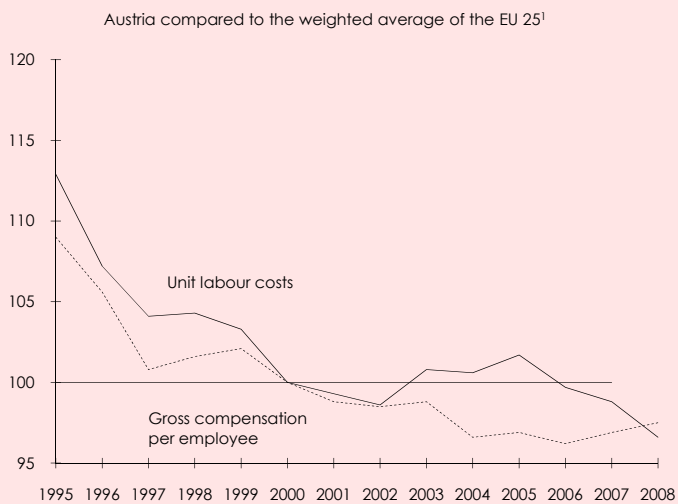
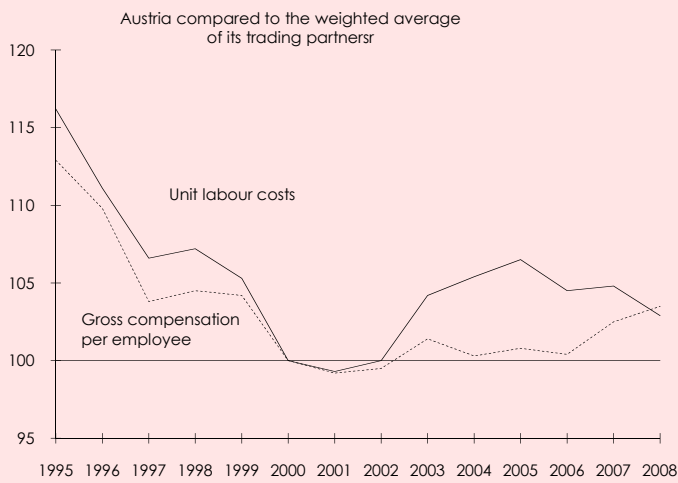
In the last five years the combination of a moderate rise in labour costs and a relatively high increase in productivity has had a positive effect on unit labour costs in Austrian manufacturing. Between 2003 and 2008 this indicator dropped by an average of 1.5 percent per year. By comparison, unit labour costs in Germany decreased by an average of 2.4 percent per year. A significant decline in unit labour costs in manufacturing could also be found in Greece (-2.7 percent p.a.) and Finland (-2.2 percent p.a.). In the last five years Austria has improved its unit labour

**Unit labour costs in manufacturing up 1 percent in 2008**



cost position with respect to its EU trading partners, while its position with respect to Germany has worsened (+0.9 percent per year).

Figure 2: Development of relative labour and unit labour costs in manufacturing  
In a single currency, 2000 = 100



Source: DG ECFIN, WIFO calculations. – <sup>1</sup> Without Austria, Malta and Cyprus.

Table 5: Development of unit labour costs in manufacturing and the economy as a whole

In a single currency

	Ø 1998-2003	Ø 2003-2008	2006	2007	2008
	Year-to-year percentage change				
<i>Manufacturing</i>					
Austria	- 0.3	- 1.5	- 4.2	- 1.7	+ 1.0
Belgium	+ 1.1	+ 0.2	- 0.1	+ 0.9	+ 2.7
Denmark	+ 2.2	+ 1.8	+ 0.4	+ 2.3	+ 6.3
Germany	- 0.1	- 2.4	- 4.0	- 3.0	+ 2.6
Greece	+ 2.0	- 2.7	+ 0.3	+ 3.9	+ 2.8
Spain	+ 1.9	+ 3.2	+ 2.6	+ 1.3	+ 7.7
France	- 0.5	+ 0.8	+ 1.2	+ 1.1	+ 2.4
Ireland	- 2.1	+ 0.6	- 1.6	- 6.4	+ 5.0
Italy	+ 2.7	+ 2.5	+ 0.4	+ 1.7	+ 6.3
Luxembourg	+ 1.2	+ 4.0	+ 11.7	- 1.4	+ 8.1
The Netherlands	+ 1.3	- 0.3	- 0.4	+ 0.2	+ 4.2
Portugal	+ 1.8	+ 0.7	+ 1.2	- 2.5	+ 2.4
Finland	- 2.7	- 2.2	- 6.0	- 5.2	+ 3.2
Sweden	- 2.4	- 2.6	- 6.3	+ 4.6	+ 0.3
UK	+ 0.3	- 1.4	+ 2.2	+ 2.5	- 10.8
Czech Republic	+ 3.5	+ 1.6	- 0.6	- 0.4	+ 13.8
Estonia	+ 1.3	+ 6.1	+ 4.4	+ 11.4	+ 15.0
Cyprus	+ 1.4		+ 7.1	+ 1.9	
Latvia	- 2.4	+ 13.6	+ 16.4	+ 24.5	+ 21.7
Lithuania	+ 3.0	+ 6.4	+ 3.2	+ 6.6	+ 13.2
Hungary	+ 1.7	+ 2.7	- 8.5	+ 5.8	+ 7.2
Poland	- 5.6	+ 0.4	- 5.5	+ 0.0	+ 7.7
Slovenia	- 1.3	+ 1.3	- 2.9	- 0.2	+ 9.7
Slovakia	+ 0.2	+ 3.2	+ 3.1	+ 3.1	+ 21.0
Japan	- 1.1	- 5.5	- 9.3	- 12.7	+ 11.1
Canada	+ 2.3	+ 2.1	+ 7.5	- 1.3	- 2.4
Norway	+ 2.5	+ 3.4	+ 9.2	+ 6.9	+ 2.5
USA	- 0.3	- 5.8	- 1.3	- 9.4	- 4.7
EU trading partners <sup>1</sup>	+ 0.4	- 0.6	- 2.2	- 0.8	+ 3.3
<i>Austria</i>					
All trading partners <sup>1</sup> = 100	- 0.6	- 0.3	- 1.9	+ 0.3	- 1.8
EU trading partners <sup>1</sup> = 100	- 0.7	- 0.8	- 2.0	- 0.9	- 2.2
Germany = 100	- 0.3	+ 0.9	- 0.2	+ 1.4	- 1.5
<i>Whole economy</i>					
Austria	+ 0.8	+ 1.1	+ 1.0	+ 1.1	+ 2.8
EU trading partners <sup>1</sup>	+ 2.0	+ 1.4	+ 0.4	+ 1.9	+ 2.8
All trading partners <sup>1</sup>	+ 2.0	+ 0.9	+ 0.4	+ 0.7	+ 2.0
<i>Austria</i>					
All trading partners <sup>1</sup> = 100	- 1.1	+ 0.2	+ 0.6	+ 0.4	+ 0.7
EU trading partners <sup>1</sup> = 100	- 1.2	- 0.3	+ 0.6	- 0.7	+ 0.1
Germany = 100	- 0.1	+ 1.0	+ 2.2	+ 0.7	+ 0.7

Source: AMECO, OECD, Statistics Austria, WIFO calculations. – <sup>1</sup> Without Austria, Malta, Cyprus, Romania, Bulgaria; weighted average of Austria's trading partners according to WIFO exchange rate indices. Unit labour costs: compensation per employee of directly employees persons relative to real gross value added, or to real GDP per employee in the economy as a whole.

However, the available data paint a positive picture for the development of the price competitiveness of Austrian manufacturing in the year 2008: Austria's unit labour cost position improved both with respect to its EU trading partners (-2.2 percent) and with respect to Germany (-1.5 percent), although unit labour costs rose by 1.0 percent. In 2008 the largest unit labour cost increase when measured in a common currency took place in Latvia (+22 percent), Estonia (+15.2 percent) and Lithuania (+13.2 percent), followed by Slovenia (+9.7 percent), Luxembourg (+8.1 percent), Spain (7.7 percent) and Hungary (+7.2 percent), while the lowest – apart from Austria (+1.0 percent) – took place in Poland (+0.4 percent), the USA (+1.9 percent) and the Czech Republic (+2.3 percent).

In Austria, unit labour costs fluctuated less in the economy as a whole than they did in manufacturing. Between 1998 and 2003, unit labour costs in the economy as a whole rose by 0.8 percent per year, and between 2003 and 2008 by 1.1 percent per

year. At the same time, the labour cost indicator improved with respect to the EU trading partners (−0.3 percent), while it worsened with respect to Germany (+1.0 percent). In contrast to the relative unit labour cost development in manufacturing, the relative unit labour costs in the economy as a whole showed a slight upward trend. However, the international competitiveness of the economy is primarily determined by the development of the unit labour cost indicator for manufacturing, as goods exports in Austria make up 70 percent of Austria's total export volume.

In 2008 an hour of labour in Austrian manufacturing cost € 31.40, which was 12 percent more expensive than the average of the other countries in the EU 15. This amount was comprised of a wage of € 16.70 and non-wage labour costs of € 14.70. The non-wage labour cost share (88 percent) was somewhat lower than in the previous year.

In 2008 Austria ranked ninth in the international labour cost hierarchy. Labour was most expensive in Norway, which exhibited +31.4 percent higher hourly labour costs than Austria, followed by Belgium, Switzerland and Sweden.

After a weaker development at the beginning of the decade, Austrian manufacturing again achieved above average productivity growth rates. In 2008 the per capita productivity of employees increased by 2.0 percent, while the EU trading partners showed a decline in productivity of 1.0 percent and Germany experienced a decrease of 1.2 percent. Like the Austrian economy as a whole, Austrian manufacturing was therefore less affected by the global economic crisis than manufacturing in Austria's trading partners.

The positive trend in productivity was accompanied by a moderate increase in unit labour costs in Austrian manufacturing (+1.0 percent in 2008, +2.8 percent in its EU trading partners). At the same time, Austria's relative unit labour cost position in 2008 improved significantly compared to the weighted average of the EU trading partners (−2.2 percent) as well as to Germany (−1.5 percent). On average, in the five-year period between 2003 and 2008, Austria's manufacturing improved slightly

## Conclusion

### *International Unit Labour Cost Position Slightly Improved in 2008 – Summary*

In 2008 a working hour cost Austrian manufacturers € 31.40, 12.0 percent more than the average of the other EU-15 countries. This sum is made up of a wage share of € 16.70 plus € 14.70 in non-wage labour costs. At 88 percent, the incidental costs were slightly lower than in the previous year.

In 2008 Austria ranked 9th in the international labour cost hierarchy. Labour was most expensive in Norway (one working hour in manufacturing was 31.4 percent over the rate in Austria), Belgium, Switzerland and Sweden.

Until quite recently, Austrian manufacturers achieved an above-average productivity increase. In 2008 productivity (production output per head of wage and salary earners) rose by 2.0 percent, compared to a fall by 1.0 percent in the EU trading partners and by 1.2 percent in Germany. This development shows that Austrian manufacturers as well as the Austrian economy are less burdened by the global crisis than their competitors.

This development led to a moderate increase of unit labour costs. In Austrian manufacturing these costs grew by 1.0 percent in 2008, while the unit labour costs of its EU trading partners rose by 2.8 percent. The relative position of unit labour costs in Austrian manufacturing improved vis-à-vis the weighted average of EU trading partners (−2.2 percent) but also vis-à-vis Germany (−1.5 percent). Between 2003 and 2008 Austria's relative unit labour cost position changed by −0.8 percent compared to the weighted EU average, while costs increased by 0.9 percent compared to Germany.

In terms of overall economic unit labour costs there has been little impact on the competitive position for Austrian business over the past years, even if a rise of 2.8 percent was recorded for unit labour costs in 2008. However, this increase was in line with increases in unit labour costs of Austria's trading partners. Between 2003 and 2008 unit labour costs for the whole economy grew by 0.2 percent per year.

compared to the EU trading partners (-0.8 percent), but worsened compared to Germany (0.9 percent). Since early 2009, Austria has also been significantly affected by the economic crisis. Austria's labour productivity and international unit labour cost position are therefore expected to decline this year.

Based on total economic unit labour costs, the competitiveness of the Austrian economy has changed little in recent years. While unit labour costs increased by 2.8 percent in 2008, those of Austria's trading partners increased by a similar amount. On average, between the years 2003 and 2008, the relative unit labour costs of the Austrian economy increased by 0.2 percent per year.

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