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Austria's Position in the International Quest for Structural Adjustment

The New EU Structural Indicators

The EU structural indicators provide meaningful benchmarks for assessing progress towards meeting the Lisbon objectives. However, the ranking of countries according to such unweighted indicators makes little sense. While Austria fares relatively well at the level of most EU key indicators, its relative position vis-à-vis the other EU countries has weakened when looking at the trend performance since 1999.

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The European Commission received a mandate from the European Council to develop a set of structural indicators designed to assess progress towards achieving the Lisbon targets. From a long list of indicators that became ever more complex, the Commission has now, upon a recommendation from the European Council of Nice, selected a sub-set of 14 "key indicators". This restricted list, that certainly constitutes an improvement, is to be communicated to the public via the mass media as a means of documenting progress of structural reform in the EU. The long list of indicators still remains a tool for the Commission to analyse member states' policies.

The 14 key indicators represent in principle meaningful criteria (with the only exception of the relative price level) for measuring the achievement of economic policy goals in the EU. The major structural indicators focus on levels attained (e.g., GDP per capita), short-term cyclical variations like economic growth having appropriately been eliminated from the list of key indicators. The previous mix-up between structural and macro-economic indicators has thus been resolved.

The indicators by and large meet the requirements formulated by the Economic Policy Committee: they are policy-relevant, easy to comprehend and broadly comparable internationally. On the one hand their monitoring is straightforward[1], but on the other hand they carry the risk that governments lose sight of their economic policy goals by focusing only on "window dressing" with regard to the indicators. However, the same criticism could be advanced vis-à-vis the Maastricht criteria such as the government deficit. The indicators should therefore not be applied in a mechanical way, but rather be underpinned by a qualitative assessment in each case.

Criticism of a "beauty contest" approach

Unfortunately, the EU structural indicators are often misused for the purpose of an international "beauty contest", even if the European Council and the Commission have explicitly cautioned against the setting up of country rankings, i.e., a mechanical application of the indicators and their adding up to a total. The European Commission is thereby also distancing itself from the questionable beauty contest approaches of some business management institutes.

[1] See Burger, C., "Strukturindikatoren", Federal Ministry of Finance, Working Papers, 2001, (5).

Table 1: The 14 EU key structural indicators for the Spring Report 2004

General economic background
1. GDP per capita, at purchasing power standards
2. Labour productivity (GDP per employee), at purchasing power standards

Labour market
3. Employment rate, 15 to 64 years
4. Employment rate of older people

Education and innovation
5. Youth (aged 20 to 24 years) education attainment level: upper secondary education
6. Expenditure on R&D

Economic reform
7. Relative price level
8. Business investment

Social cohesion
9. At-risk-of-poverty rate
10. Dispersion of regional employment rates
11. Long-term unemployment rate (12 months and more)

Environment
12. Greenhouse gas emissions
13. Energy intensity
14. Volume of merchandise transport

An overall ranking of countries across all 14 structural indicators is not meaningful for several reasons:

- The indicators would thereby all be given the same weight, although for all countries GDP per capita and the employment rate represent far more important objectives than, say, the reduction in the relative price level. In an overall country ranking, widely heterogeneous indicators for different kind of objectives would be added up.
- A country's position in an international comparison may be influenced by the cyclical situation, institutional factors, country size or by geographical circumstances not determined by policy. Thus, the dispersion of regional employment rates is strongly influenced by a country's size and geography.
- Differences across countries may be minimal and depending on statistical random factors. Thus, ranks 5 to 10 may be so close together that the ranking order is purely accidental and subject to important annual variations. What may be inferred in general is just whether a country, on a certain indicator, holds a good, medium or low position. The difference between a rank 2 or 3 is, as a rule, statistically insignificant.
- Within the six major areas, the particular indicators partly exhibit widely different results across countries. The selection of 2 or 3 indicators for each major area may therefore give rise to distortions. For this reason it seems appropriate to use additional indicators for the different areas in order to have a firmer statistical base for the key messages.
- Using a new indicator may significantly alter a country's revealed relative performance. By way of criticism it should be noted that countries exert political pressure in favour of such indicators to be retained in the list on which their relative performance is particularly good. This is an example of the negative consequences of the indicators being seen as a beauty contest.

It is certainly meaningful to assess the relative performance among EU countries with regard to economic strength, employment, education, etc., having in mind all statistical caveats. This is common practice with all current international comparisons like for GDP growth or the rate of unemployment. However, adding up the ranks for widely heterogeneous indicators makes little sense.

Economic performance

The European Commission has selected two indicators in order to measure living standards or economic performance across countries:

- Gross domestic product per capita at purchasing power parities, as the commonly used yardstick for a country's living standard: The calculation at purchasing power parities abstracts from differences in price levels between countries, thereby enabling meaningful comparisons of GDP in real terms to be made.
- Labour productivity, as measured by GDP per employee at purchasing power parities: This indicator is taken to reflect a country's economic strength and its technical and organisational advance.

In terms of living standard or per-capita income, Austria belongs to the top group in Europe. GDP per capita is higher only in Luxembourg, Ireland and Denmark. Luxembourg, as a town-state and small tax haven, is an exceptional case. The high average GDP per capita in Ireland, for its part, is largely generated by profits of multinational companies, which are transferred to other countries. If one takes gross national product instead of GDP as the reference value, Ireland falls far behind in the international comparison. Thus, while Ireland's position as business and investment location is favourable, its living standards are less so.

Table 2: General economic background

	1. GDP per capita, at PPS 2003		2. Labour productivity (GDP per employee), at PPS 2003		Private consumption per capita, at PPS 2003	
	EU 15 = 100	Ranking	EU 15 = 100	Ranking	EU 15 = 100	Ranking
Luxembourg	186.5	1	129.7	1	138.1	1
Ireland	121.9	2	120.4	2	94.3	8
Denmark	112.6	3	98.3	7	93.0	9
Austria	110.9	4	97.9	8	109.4	3
The Netherlands	109.4	5	95.6	13	93.0	10
UK	108.6	6	96.9	9	117.2	2
Belgium	106.5	7	118.5	3	101.0	6
Sweden	104.4	8	96.2	10	84.4	13
France	103.5	9	113.6	4	96.7	7
Finland	101.0	10	100.1	6	90.3	11
Germany	99.4	11	95.7	11	102.7	5
Italy	98.4	12	106.0	5	106.6	4
Spain	87.3	13	95.7	12	85.2	12
Greece	73.5	14	91.8	14	77.7	14
Portugal	69.2	15	63.8	15	69.3	15
EU 15	100.0		100.0		100.0	

Source: Eurostat, WIFO calculations.

Austria is therefore one of the countries with the highest GDP per capita in the EU, together with Denmark, the Netherlands and Ireland, and has been so over the entire last decade. Germany has given up its good position following re-unification, as has Sweden after the massive currency devaluation in the early 1990s, while Finland, despite enjoying high rates of growth after the severe crisis in the 1990s, has still not joined the group of countries with the highest living standards. The cross-country comparison of GDP per capita may be distorted by the fact that private household work is not and "black" work only partly included. GDP of countries with a high share of activities not registered by the national accounts and non-market-oriented household work is biased downwards. Yet, a better summary indicator for economic achievement does not exist.

The European Commission's second key economic indicator for monitoring economic performance and efficiency is labour productivity (GDP per employee). Eurostat measures the latter, similar to GDP per capita, at purchasing power parities rather than at exchange rates. This is unusual, since labour productivity is looked at mostly for the discussion of issues dealing with competition and the quality of a business location. Labour productivity is known to always play a major role when com-

paring the USA and the European economy. Although for calculations of labour productivity the total of hours worked rather than the level of employment would be the appropriate variable, the existing time series for this indicator are not fully comparable internationally.

According to the Eurostat data available, labour productivity in Austria is but in the medium range of European countries and even lower by some 2 percent than the EU average[2]. However, this underestimates for sure the actual position. It can hardly be explained why output per employee should be higher in France and Belgium by 15 percent and 25 percent, respectively, and by almost 10 percent in Italy than in Austria. Other studies[3] convey a more favourable picture of labour productivity in Austria, notably for manufacturing for which the data are more reliable than for other sectors. The problems with comparisons of productivity mainly derive from the limited cross-country harmonisation of employment statistics. The latter are largely influenced by different shares of part-time and mini jobs as well as by other factors[4].

If one supplements the two key economic indicators selected by the European Commission by private consumption per capita in order to round up the picture of economic performance, the earlier impression is confirmed: measured by per-capita consumption, Austria is among the top countries in Europe, whereas Ireland is clearly falling behind, as has been argued with regard to Gross National Product[5].

When taking economic growth as additional indicator, one can see that in Austria it has been quite close to the EU average since 1995. In view of Austria's high GDP per capita, this should not be seen too negatively. In principle one should assume that EU countries with lower living standards will catch up, whereas countries with high GDP per capita will try to keep their relative advantage.

In sum, one may conclude that while Austria is in the EU top range in terms of its level of economic development, economic growth since 1995 has rather been close to the EU average. The GDP indicator shows clearly, how much a country's relative position depends on whether one takes the level or the medium-term trend as a yardstick. A mechanical ranking without qualitative judgement is therefore misplaced[6].

Labour market

The employment rate, as a percentage of the population between 15 and 64 years of age, represents the most comprehensive labour market indicator available. The European Council of Lisbon set the target of raising the employment rate in the EU to 70 percent by 2010, from currently 64 percent. The Austrian employment rate of 69 percent is above the EU average, but in the ranking of member states Austria finds itself only in the medium range, although its dual vocational training scheme raises the employment rate markedly vis-à-vis other countries. The roughly 120,000 apprentices are counted as employed, thereby boosting the employment rate by around 2½ percentage points. In most other EU countries, young people in that age group are going to school.

The relatively long periods of maternity leave also push the Austrian employment rate upwards in an international comparison. People temporarily out of work while

[2] Labour productivity per hour worked, according to estimates made by Eurostat, exceeds the EU average by about 2 percent, but is well below that for France, the Benelux countries or Ireland. These estimates also should be taken with great care, as the differences between countries cannot be explained in a plausible way.

[3] E.g., Aiginger, K., et al., Innovation and Productivity in European Manufacturing. Background Paper for the Report on Competitiveness of European Manufacturing, European Commission, DG Enterprise, Brussels, 2001, or Aiginger, K., "A Three Tier Strategy for Successful European Countries in the Nineties", WIFO Working Papers, 2003, (205), http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=1&pubid=24422&pub_language=-1&p_type=0.

[4] A relation may be established between the two key indicators of economic performance. GDP per capita may be split into two components, i.e., labour productivity (GDP per employee) and labour force participation (employment as a percentage of total population). The latter variable is clearly above the EU average in Austria, probably due to the strong immigration of labour.

[5] The level of private consumption per capita is also determined by the share of the public sector in GDP: in the Scandinavian countries, public consumption is high and private consumption thus relatively low, whereas the opposite is true for the UK.

[6] The trend of the various key indicators since the early 1990s will be presented in a separate section.

their job contract remains in force (such as after child birth) are included in the employment figures. The extension of maternity leave related to the introduction of the child care benefit (Kinderbetreuungsgeld) raised by itself the number of benefit recipients by 37,000. The female employment rate presented in the EU structural indicators was thereby pushed up by almost 2½ percentage points in 2002 to a level of 63 percent, although the labour market situation for women deteriorated markedly in that year, with 9,000 more women being unemployed. While in this way Austria's position in the "international ranking by the employment rate" has improved at face value, the underlying objective has not been achieved. This example clearly illustrates the problems associated with the rankings.

Table 3: Labour market

	3. Employment rate, 15 to 64 years 2002		4. Employment rate of older people[1] 2002		Unemployment rate 2003		Tax wedge on labour cost[2] 2002	
	Percent	Ranking	Percent	Ranking	Percent	Ranking	Percent	Ranking
Luxembourg	63.7	10	28.3	14	3.6	1	27.3	3
Ireland	65.3	8	48.1	5	4.6	4	16.6	1
Denmark	75.9	1	57.9	2	5.6	7	39.8	9
Austria	69.3	5	30.0	12	4.4	3	39.9	10
The Netherlands	74.4	2	42.3	7	3.7	2	37.2	7
UK	71.7	4	53.5	3	5.0	5	24.7	2
Belgium	59.9	12	26.6	15	7.9	9	48.9	15
Sweden	73.6	3	68.0	1	5.5	6	45.9	13
France	63.0	11	34.8	11	9.3	12	37.8	8
Finland	68.1	7	47.8	6	9.1	11	40.4	11
Germany	65.3	9	38.6	10	9.3	13	45.9	14
Italy	55.5	15	28.9	13	8.7	10	42.7	12
Spain	58.4	13	39.7	8	11.3	15	33.9	5
Greece	56.7	14	39.7	9	9.3	14	34.3	6
Portugal	68.2	6	50.9	4	6.4	8	29.5	4
EU 15	64.3		40.1		8.0		37.8	

Source: Eurostat, WIFO calculations. – [1] Employees aged 55 to 64 years. – [2] The sum of the income tax on gross earnings and the employee's and employer's social security contributions as a percentage of the total labour cost.

Part-time employment has a strong impact on a country's relative position. The high share of part-time employees in the Netherlands and in Scandinavia is raising employment rates there. The proportion of mini jobs (such as in trade or tourism) also has an influence on the international comparison. The number of such mini jobs is far from negligible, being well above 200,000 in Austria or almost 7 percent of total employment.

All these examples illustrate the limitations of the employment rate for purposes of international comparison, due to different institutional arrangements. Attempts for the calculation of labour volumes (the number of employed times working hours) or full-time employment equivalents have so far not produced results sufficiently reliable for all countries to ensure international comparability.

The second key labour market indicator used by the European Commission is the employment rate of older people that has become particularly significant with regard to the long-term financing problems of retirement systems. Even if labour supply should decline in the future for demographic reasons, people in early retirement can hardly be re-integrated into working life. The employment rate of older people has also been given political importance since the European Council of Stockholm has stated its increase to 50 percent as the target to be reached by 2010. In Austria, the old-age employment rate of around 30 percent is particularly low, among the lowest in Europe together with Belgium and Italy. If Austria were therefore to meet the EU target, the old-age employment rate would have to increase by 20 percentage points until 2010.

The European Council of Lisbon in March 2000 has agreed upon a further target: female employment in the EU should rise to 60 percent of the female working-age population until 2010, from 55.6 percent in 2002. Since 1995, the ratio has gained 6 percentage points, partly on account of the inclusion of mini-job holders. This Lisbon target for female employment is therefore clearly within reach, bearing in mind, however, that part-time and mini jobs are included.

The European Council of Stockholm in March 2001 added two intermediate targets: until 2005, the overall employment rate should rise to 67 percent, that for women to 57 percent. While the latter objective should be met (2002 55.6 percent), compliance with the former (2002 64.3 percent) is unlikely.

The rate of unemployment may serve as a further labour market indicator. It is well known to be comparatively low in Austria, although the main reason is the widespread recourse to early retirement which in turn depresses employment of older workers. Moreover, youth unemployment is held down by the dual apprenticeship scheme. In spite of its crucial political significance, the unemployment rate has deliberately not been retained among the list of key indicators, since the employment rate represents the more comprehensive labour market concept.

A high tax and contribution burden on labour cost for low-wage earners may act as an obstacle for taking up work and hold back employment or encourage grey work. In Austria, the tax (and contribution) ratio for low-wage earners is 40 percent, more than 2 percentage points above the EU average. While as from 2004, incomes up to about 14,500 € per year are exempt from wage tax, social security contributions and notably payroll taxes are higher in Austria than elsewhere. These charges fall on low wages at the same percentage as on average wages and, because of the income ceiling on social contributions, to a relatively lesser extent on the upper earnings brackets. In countries that finance social expenditure largely via income taxes, the distributional impact is more progressive.

We may sum up the situation in the labour market area as follows: on the labour market indicators, Austria only holds a medium-range position in the EU-wide comparison. The employment rate as the crucial indicator is close to the middle in a country ranking. In terms of international comparability, the level of employment is exaggerated, i.a., by people on parental leave being included. Although the unemployment rate is low in Austria, this is achieved at the cost of one of the lowest employment rates among the elderly in the EU.

Education and research

Education, innovation and research are pivotal elements in a growth strategy, which are given particular emphasis by modern growth theory. Economic historians also underline the role of science and technology for the secular upturn in Europe since the beginning of the industrial era.

Unfortunately, what can usually be measured in the areas of education, innovation and research are only inputs rather than output that is thereby generated. One can assume that an increase in input takes almost a decade until economic output is raised. That is why the European Commission tries to avoid using input indicators wherever possible. In the area of innovation and education it is difficult, however, to find indicators gauging the results of research and education. At best, patents per head may indicate the efficiency of research, although the significance of this indicator is limited by differing practices in having patents registered.

The policy target area of innovation and research is represented in the EU key indicators by the level of educational attainment of the young (20 to 24 years of age) and the R&D ratio. The highest level of education attained is defined as the ratio of young people having at least completed upper secondary education. On this indicator, Austria holds a top position (rank 4) in the EU. 85 percent of the Austrian youth have completed upper secondary schooling, against 74 percent on average for the EU. Intermediate and higher schools, but also compulsory vocational schools for apprentices as well as polytechnical cycles are included here. The data are obtained from the regular labour force survey conducted by the European Commission.

However, one may well question whether such an indicator is of any relevance for the level of output when one realises that in the EU accession countries an average 88 percent of the young have completed secondary education, more than in Finland which holds the top rank among the EU countries.

Table 4: Education and innovation

	5. Youth (aged 20 to 24 years) education attainment level: upper secondary education		Lifelong learning[1]		Tertiary graduates in science and technology[2]		Spending on human resources[3]		6. Expenditure on R&D		ICT expenditure	
	2003		2003		2000		2000		2001		2003	
	Percent	Ranking	Percent	Ranking	Per thousand	Ranking	As a percentage of GDP	Ranking	As a percentage of GDP	Ranking	As a percentage of GDP	Ranking
Luxembourg	69.8	13	7.7	7	1.8	14	4.11 [4]	14	1.71 [5]	10	6.8	4
Ireland	85.7	2	9.7	6	23.2	1	4.36	13	1.17	11	4.6	15
Denmark	74.4	9	18.9	3	11.7	5	8.38	1	2.40	4	6.5	6
Austria	85.0	4	7.5	8	7.1	10	5.75	6	1.90	7	6.1	9
The Netherlands	73.3	10	16.5	5	5.8	12	4.87	8	1.89	8	7.1	3
UK	78.2	8	21.3	2	16.2	3	4.41	12	1.89	9	7.5	2
Belgium	81.1	6	6.5	10	9.7	8	6.12 [6]	3	2.17	6	6.5	7
Sweden	85.6	3	34.2	1	11.6	6	7.39	2	4.27	1	8.2	1
France	81.1	7	7.4	9	19.6	2	5.83	5	2.23	5	5.9	11
Finland	86.2	1	17.6	4	16.0	4	5.99	4	3.40	2	6.6	5
Germany	73.3	11	5.8	11	8.2	9	4.53	10	2.51	3	6.1	10
Italy	69.9	12	4.2	13	5.7	13	4.58	9	1.07 [7]	12	5.0	12
Spain	63.4	14	5.8	12	9.9	7	4.43	11	0.96	13	4.8	14
Greece	81.7	5	3.7	14		15	3.79	15	0.64	15	5.0	13
Portugal	47.2	15	3.6	15	6.3	11	5.74	7	0.84	14	6.3	8
EU 15	74.0		9.6				4.94		1.98		6.2	

Source: Eurostat, WIFO calculations. – [1] Persons aged 25 to 64 who answered they received education or training in the four weeks preceding the survey. – [2] Per 1,000 of population aged 20 to 29 years. – [3] Public expenditure on education. – [4] 1997. – [5] 2000. – [6] 2001.

As an additional indicator for human capital formation we may take public expenditure on education. For this purpose, Austria spends roughly 5.8 percent of GDP, distinctly more than the EU average (4.9 percent). Higher expenditure may be explained essentially by a higher number of pupils, a lower pupil-teacher ratio or higher teacher salaries. The Scandinavian countries spend 6 to 8 percent of their GDP on education, and their good economic performance, as well as their high scores in the PISA study are eye-catching.

As regards the successful completion of tertiary education in natural and technical sciences, Austria fares rather poorly: 0.7 percent of the population of 20 to 29 years of age have acquired such a degree, compared with 2.3 percent in Ireland, 2 percent in France, and 1.6 percent in the UK and in Finland.

As far as adult education is concerned, Austria is also clearly below the EU average. Some 7½ percent of the Austrian population between the age of 25 and 64 years[7] have participated in training and further education activities during the four weeks preceding the survey, against an average 9½ percent in the EU and more than twice as many in the three Scandinavian EU member states.

The R&D ratio is used as key indicator for research and innovation. It illustrates the research efforts undertaken, without, however, being able to assess their results. On this ratio, Austria finds itself in the medium range (rank 8) of the EU countries, slightly below the EU average. In 2002, 1.94 percent of GDP was spent on research and development in Austria, nearly 2 percent on average in the EU. Here again, the Scandinavian countries hold the top positions. It is the declared objective of the Austrian government to raise the R&D ratio to 2.5 percent of GDP until 2006 and to 3 percent by 2010. Already now, the public sector spends a good deal on research and de-

[7] The choice of these age limits is controversial since in the lower age group there are many people still in regular education.

velopment (as much as in Sweden), the corporate sector, however, relatively little. This is mainly due to the fact that Austria has relatively few firms in the IT and the biotechnology sector where R&D ratios are usually very high.

Expenditure on information and communication technology (ICT) is a relatively good proxy for the role of the "new economy". Here, too Austria holds a medium-range position, with ICT expenditure according to Eurostat data amounting to some 3 percent of GDP, close to the EU average. Networks for the ICT infrastructure are mostly built up upon the initiative of the public sector, such that policy has to assume its responsibility in this area.

We may therefore sum up: on the indicators of upper secondary school-leavers and educational expenditure Austria ranks in the upper tier among EU member states. However, lifelong learning is still underdeveloped in Austria, and the number of university graduates from natural sciences (and from short-cycle studies of 1 to 2 years) is low. Investment in education must be stepped up, if the high per-capita income is to be maintained.

As far as innovation is concerned, Austria is in the medium tier among EU member states. This is to a large part a consequence of Austria's supply-side structure and the lack of large domestic corporations. Large multi-national companies usually have their research activities concentrated in their headquarters. If Austria can attract such headquarters, its relative position will improve. A look at additional indicators confirms the evidence of a subdued investment climate in Austria. Spending on information and communication technology is somewhat below the EU average (even if data quality in this area leaves to be desired).

Economic reform

Structural reforms in goods, services and capital markets have been initiated in the EU, designed to enhance the efficiency of resource allocation. Appropriate indicators of reform intensity are therefore intended to gauge the openness, the degree of competition and existing market distortions in the EU countries.

Among the set of 14 key indicators are two that focus on economic reform: the relative price level of private consumption and the investment ratio of companies. The relative price level of private consumption is to indicate the degree of competition and of market integration that has been achieved through liberalisation and deregulation. However, this indicator depends on a country's level of development to such an extent that it actually does not measure what it pretends to do. National data show that the price level in the relatively less developed southern European countries is low because local, not internationally traded services are still cheaper there. Accordingly, in the highly developed Scandinavian countries, prices of such services are relatively high. Moreover, this indicator also mirrors differences in indirect tax rates. To infer from the relative price level of private consumption a higher degree of deregulation in the economically less developed southern European countries and a lag in liberalisation in the highly advanced countries, would be misleading.

The investment ratio of companies is undoubtedly a key economic indicator. A high level of business investment indicates that firms consider framework conditions to be favourable, encouraging them to increase productive capacities. However, the investment ratio of firms is determined not only by structural reforms, but also by many other factors, such as business cycle, the cycle of construction activity, capital productivity, etc. With a corporate investment ratio of 21 percent of GDP, Austria holds a top position (rank 3) within the EU, but capital productivity is relatively low. Moreover, Austria has an unfavourable mix between physical and immaterial investment. In Sweden and Finland, the investment ratio is low, but productivity of investment that is concentrated in the ICT sector is very high. Conversely, Portugal and Spain have very high investment ratios, but productivity of investment that is concentrated on construction activity is low.

These considerations may be summarised as follows: with regard to the investment ratio, Austria claims a high position, and for the relative price level a medium-tier po-

sition. However, these indicators are ill-suited for measuring the success of economic reforms. The relative price level, as currently defined, is a totally inadequate indicator, and the investment ratio of companies depends on many other, more important factors than economic reform. Indeed, both indicators are particularly favourable for, say Greece, Portugal and Spain, but highly negative for Sweden and Finland. An assessment of the actual success of economic reform would probably yield the inverse ranking order.

Table 5: Economic reform

	7. Relative price level[1] 2002		8. Business investment[2] 2002	
	EU 15 = 100	Ranking	As a percentage of GDP	Ranking
Luxembourg	99.7	6	17.9	7
Ireland	118.3	13	17.7	9
Denmark	130.7	15	18.9	5
Austria	101.5	8	20.9	3
The Netherlands	101.8	9	17.4	10
UK	107.5	11	15.0	14
Belgium	98.7	5	18.3	6
Sweden	117.3	12	13.5	15
France	99.7	7	16.4	12
Finland	122.7	14	16.0	13
Germany	104.0	10	16.9	11
Italy	94.5	4	17.8	8
Spain	82.4	3	21.8	1
Greece	79.7	2	20.1	4
Portugal	73.5	1	21.6	2
EU 15	100.0		17.2	

Source: Eurostat, IMF, WIFO calculations. – [1] Of private final consumption expenditure including indirect taxes. – [2] Gross fixed capital formation by the private sector.

Social cohesion

The European Council of Lisbon has defined social cohesion as major goal for Europe. Its importance has been further emphasised by the commitment of member states to draw up national action plans against poverty and social exclusion.

The risk of poverty after public redistribution is therefore the prime indicator selected by the Commission and the Council for measuring social cohesion. A person is deemed "poor" whose earned income is below 60 percent of the national median equivalised disposable income ("risk-of-poverty threshold"). With a share of 12 percent of the population, risk of poverty in Austria is below the EU average (15 percent). Compared with the other EU countries, Austria's position is no higher than in the upper medium range, but the differences are so small that a country ranking is hardly meaningful. The gap vis-à-vis the top is between 1 and 2 percentage points. While Austria has a highly developed social welfare system, there are still people not supported by the social safety net and suffering from social exclusion.

Regional cohesion is measured by the dispersion of employment rates[8]. Although in the international comparison regional dispersion is largely a function of size and geography of a country, in a perspective over time it can be modified by policy action. With regard to regional cohesion, Austria holds a top position among EU countries.

The distribution of income is a good mirror image of social cohesion. The degree of income inequality is defined as the ratio between the top quintile of equivalised disposable income to the lowest one. For the EU average, this ratio is 4.4, for Austria it is 3.5 according to Eurostat data. On the basis of the information available, Austria holds a very favourable position in this regard, with income inequality being still lower only in Denmark and Sweden. However, the data from the Mikrozensus used in

[8] This measure has been given preference over the dispersion of GDP or of unemployment rates.

this context tend to underestimate income inequality in Austria, with more reliable data for the manufacturing sector suggesting a higher degree of inequality.

Table 6: Social cohesion

	9. At-risk-of-poverty rate[1]		10. Dispersion of regional employment rates			11. Long-term unemployment rate (12 months and more)			Inequality of income distribution[2]	
	Before social transfers		After social transfers							
	2001		2002				2002		2001	
	Percent	Ranking	Percent	Ranking	Coefficient of variation	Ranking	Percent	Ranking	Relation	Ranking
Luxembourg	23	7	12	6	7.9 [3]	12	0.8	2	3.8	6
Ireland	30	15	21	15	7.0 [3]	10	1.3	7	4.5	10
Denmark	21	2	11	2	6.0 [3]	7	0.9	4	3.1	1
Austria	22	5	12	7	2.4	2	0.8	3	3.5	3
The Netherlands	21	3	11	3	2.2	1	0.7	1	3.8	7
UK	29	14	17	10	6.6	9	1.1	6	4.9	12
Belgium	23	8	13	8	8.0	13	3.5	11	4.0	8
Sweden	27	13	10	1	4.6	5	1.0	5	3.4	2
France	24	11	15	9	6.2	8	2.8	10	4.0	9
Finland	19	1	11	4	7.8	11	2.3	9	3.5	4
Germany	21	4	11	5	5.9	6	4.0	13	3.6	5
Italy	22	6	19	11	16.6	15	5.3	15	4.8	11
Spain	23	9	19	12	9.2	14	3.9	12	5.5	13
Greece	23	10	20	13	4.2	4	5.1	14	5.7	14
Portugal	24	12	20	14	3.9	3	1.8	8	6.5	15
EU 15	24		15		12.6		3.0		4.4	

Source: Eurostat, WIFO calculations. – [1] Share of persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 percent of the national median equivalised disposable income. – [2] Ratio of total income (equivalised disposable income) received by the 20 percent of the population with the highest income (top quintile) to that received by the 20 percent of the population with the lowest income (bottom quintile). – [3] 2001.

The rate of long-term unemployment is very low in Austria. On this indicator too, Austria fares very well, although the good result is largely achieved via widespread recourse to early retirement.

We may sum up: much like for its economic performance, Austria claims a leading position within the EU in the area of social cohesion. This goes for long-term unemployment, income distribution and the dispersion of regional employment rates. The poverty risk is below the EU average, though not the lowest among member states, despite the highly developed welfare system. The recently introduced child care benefit and the 2004-05 tax reform will contribute to a further drop in the poverty risk.

Environment

Ecologically sustainable growth is an important goal of economic policy. Yet, the inclusion of environmental concerns into the EU structural indicators is relatively recent and perhaps not yet fully developed. While in all other areas levels or ratios are being used as indicators, two out of the three environmental indicators that have been selected focus on the longer-term perspective.

The most important environmental indicator is the trend of total greenhouse gas emissions. As for the latter, the EU has agreed under the Kyoto protocol to their reduction by 8 percent until 2008-2012 (compared with the level of 1990). Emissions of different types of greenhouse gases are weighted in order to obtain total emissions in CO_2 equivalents, which are presented as index values (1990 = 100). In the so-called EU burden sharing agreement the planned overall reduction has been broken down for the individual member states. The target for Austria has been fixed rather high, providing for a reduction by 13 percent.

The emission of greenhouse gases in the EU has edged down by only 2 percent between 1990 and 2001, and a further reduction by 6 percent has been pledged until 2010. On the other hand, the US government is hardly addressing this problem. In the USA, CO_2 emissions have increased by 14 percent since 1990. Economic freedom

there is not supposed to be constrained by environmental or social considerations. Not much better is the situation in Japan.

Table 7: Environment

	12. Greenhouse gas emissions 2001		13. Energy intensity[1] 2001		14. Volume of merchandise transport[2] 2002	
	1990 = 100	Ranking	Kilogram oil equivalent per 1,000 €	Ranking	1995 = 100	Ranking
Luxembourg	56.0	1	191.1	7	110.0	10
Ireland	131.0	13	161.2	3	133.0	14
Denmark	100.0	5	124.9	1	84.7	1
Austria	110.0	11	146.5	2	119.9	11
The Netherlands	105.0	7	201.1	8	97.1	6
UK	88.0	3	224.8	9	86.2	2
Belgium	106.0	9	228.3	11	99.5	7
Sweden	97.0	4	228.9	12	90.2	3
France	100.0	6	189.5	6	95.6	5
Finland	105.0	8	262.7	15	94.7	4
Germany	82.0	2	168.3	4	102.4	8
Italy	107.0	10	187.8	5	102.6	9
Spain	133.0	14	227.5	10	137.4	15
Greece	126.0	12	261.2	14	126.7	13
Portugal	136.0	15	238.1	13	125.5	12
EU 15	98.0		194.2		102.4	

Source: Eurostat, WIFO calculations. – [1] Gross domestic consumption of energy (oil equivalent) relative to GDP (at 1995 prices). – [2] Merchandise transport relative to GDP (at 1995 prices).

In Austria also, CO_2 emissions have increased between 1990 and 2001, by 10 percent from a relatively low level, and the achievement of the Kyoto target (–21 percent as from 2001) is far off. With regard to the trend in greenhouse gas emissions, Austria holds the low rank 11 among 15 EU countries. One important reason is the expansion of merchandise transport. Since 1995, its volume as a percentage of GDP has increased by 20 percent in Austria, against only 2 percent in the EU. Thereby, Austria is in the last-but-four position of all EU countries. The introduction of a road toll for heavy vehicles, which may hold back somewhat the expansion of road traffic, has been postponed for many years. Transit traffic has moreover risen strongly, partly due to the opening of Eastern Europe. Yet, a reduction in transit traffic is limited by EU regulations themselves. From an environmental policy point of view, the trend of merchandise road traffic would be a better indicator than that of overall merchandise transport (including railways and pipelines).

A further environmental indicator selected by the Commission and the Council is energy intensity. In Austria, energy consumption as a percentage of GDP is low, indeed the lowest-but-one among the EU countries. Several factors are at work here: the energy intensity of an economy mainly depends on a country's economic structure. Austria has, for example, given up electrolytical processing for aluminium production in Ranshofen. The high proportion of hydro-power generation is also dampening energy consumption by electricity suppliers in Austria. Last but not least, policy in Austria has supported for many years the combined power and heat generation as well as the development of district heating.

How can it be reconciled that business representatives often criticise the strong environmental policy orientation, but that at the same time Austria fares poorly on the EU's structural indicators for environmental quality? The main reason is the fact that two such indicators do not measure the level of the environmental burden, but rather its trend. This is in contrast with the structural indicators for the other five target areas. Important indicators measuring the level, such as water and air quality, are missing. Austria fares particularly well as regards the clean water of its lakes, an achievement of the 1970s and 1980s. Also, environmental laws and regulations are usually stricter in Austria than on average in the EU.

Austria's relative position in the environmental domain may be characterised as follows: while the level of greenhouse gas emissions is relatively low in Austria, the trend is unfavourable. The deterioration is partly owed to the strong expansion of merchandise transport. In this way, Austria has lost its former status as "environmental benchmark country". The rising trend of CO_2 emissions and of merchandise transport constitutes a considerable challenge for environmental policy.

Progress with regard to the structural indicators

The diagrams further below illustrate the development of the EU structural indicators for Austria, for the EU average as well as for the three top and the three bottom EU countries in each case. The European Commission assesses countries by their level on the one hand, and by the trend in the structural indicators over the last years, on the other. The conclusion for Austria is that for most of the EU structural indicators, Austria is on a high level, but the trend over the last years is negative[9].

Economic performance

On the most important economic indicator, GDP per capita, Austria's relative position has weakened, most clearly between 2000 and 2002, as shown in the diagram. Between 1994 and 2000, Austrian GDP per capita exceeded the EU average by almost 15 percent, from 2001 to 2003 by only 11 percent. Thus, while living standards in Austria remain clearly higher than on average in the EU, the advantage has narrowed since the 1990s. This is also reflected by the country ranking: in the mid-1990s, Austria's living standard was the highest in the EU (apart from Luxembourg), but by 2001-02, Austria had descended to rank 5, overtaken by Ireland, Denmark and the Netherlands. In 2003 and 2004, according to preliminary calculations, the Netherlands may again fall behind Austria, due to the more severe economic recession. The UK, however, is set to overtake Austria 2005, if the forecast by the European Commission is confirmed. Yet, such small differences as between Austria, the Netherlands and the UK are not statistically significant. A precise ranking of countries therefore remains subject to statistical random factors and is far less meaningful than often asserted in the political debate.

Figure 1: General economic background

Source: Eurostat, WIFO calculations. 3 best-performing and 3 least-performing countries . . . per each single year.

According to the available EU data, labour productivity as measured by output per employee has progressed somewhat faster up to 2000 in Austria than the EU average, but somewhat more slowly since. As referred to above, the reported *level* of productivity for Austria (2 percent below the EU average) is clearly underestimated.

Labour market

The employment rate in Austria has remained fairly constant at 68 to 69 percent since 1994, whereas on average in the EU it has risen by 4 percentage points, from 60 percent to 64 percent. The statistical base for this diagnosis is the Labour Force Survey. Although the employment rate is still above the EU average, the labour market has developed less favourably in Austria than in the EU. Since 1999, the employment rate has remained quasi-constant in Austria, but has increased in most other

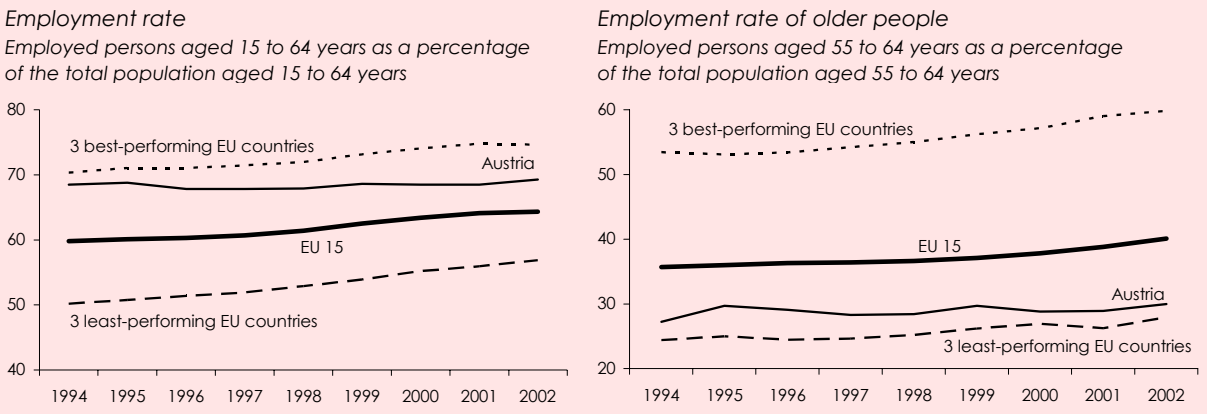
[9] The data used are from the Eurostat data bank on structural indicators, which may be accessed freely via the internet.

EU countries (see Figure 2). The nearly unchanged employment rate even includes a positive bias, since it fell for men from 78 percent in 1994 to less than 76 percent in 2002, while the ratio for women went up largely due to the rising number of women receiving child care benefits, a fact entirely unrelated to the labour market situation.

With the introduction of ESA95, holders of mini jobs were included into the labour market data of the national accounts. For most countries, this occurred gradually, since for the past appropriate data were hardly available. The inclusion of this group implied that since 1995 employment in the EU (according to the national accounts) rose relatively strongly – when compared with the USA, with past periods or with GDP growth – while labour productivity performed less well, accordingly. For both developments, many economic and labour market policy-related explanations have been offered; however, the reasons should not be sought in either of the two areas, but the two phenomena are simply the two sides of the same coin, i.e., the inclusion of mini-job holders into the statistics. To the extent that employment rose more than proportionally, productivity was lagging behind, with economic growth remaining unaffected by these statistical shifts.

The employment rate for the upper age-groups changed little over the last years in Austria, remaining at a very low level (slightly below 30 percent), while in the EU on average it rose by 5 percentage points to 40 percent. The rise in unemployment also confirms the subdued labour market development in Austria when compared with the other EU countries. Since the mid-1990s, the unemployment rate rose in Austria from almost 4 percent to nearly 4½ percent, while for the EU it fell from 10 percent to 8 percent. However, the latter decline is mainly accounted for by the fact that unemployment in the UK and in Spain was cut in half, partly by "defining unemployment away" from the statistics. In an international comparison, Austria's rate of unemployment of 4.4 percent is very low; however, Austria benefits from the way unemployment is defined in the international statistics, which de facto excludes seasonal unemployment. Seasonal unemployment in tourism and in the construction sector is extremely high in Austria. Most importantly, however, a large part of unemployment caused by sluggish employment growth was shifted into early retirement.

Figure 2: Labour market



Source: Eurostat, WIFO calculations. 3 best-performing and 3 least-performing countries . . . per each single year.

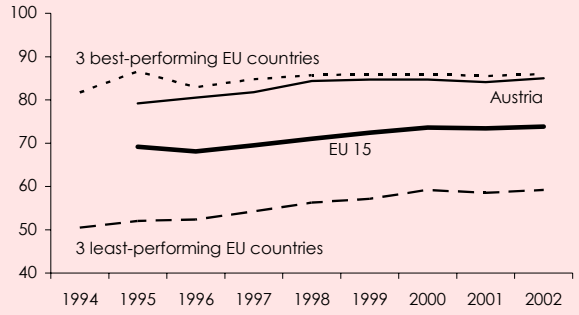
Other areas

- The educational attainment of young people has increased in Austria at a similar pace as in the EU. It is almost as high as in the three best-performing countries in this regard.
- Expenditure on R&D has converged towards the EU average over the last 10 years, while still remaining slightly below. The three "best" EU member states have moved far ahead with their R&D expenditure.
- The risk of poverty has slightly declined in Austria as well as in the EU over the last decade. Long-term unemployment has remained very low in Austria.

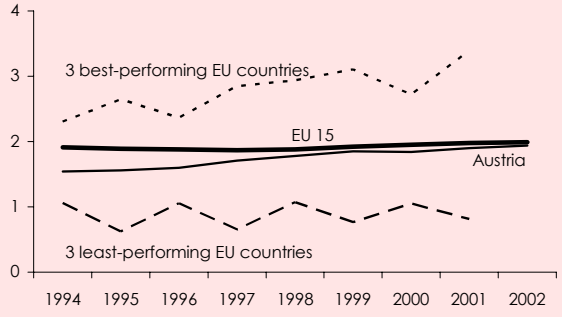
- The energy intensity of the economy has gone down somewhat until 2000, but has edged up since. Since 2000, the increase in greenhouse gas emissions and in merchandise transport volumes has clearly outpaced the EU average.

Figure 3: Education and innovation

Youth (aged 20 to 24) education attainment level
Upper secondary education; as a percentage of this age group



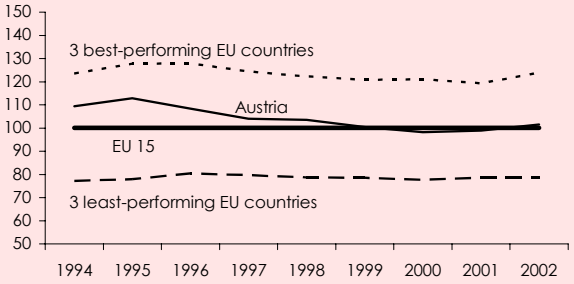
Expenditure on R&D
As a percentage of GDP



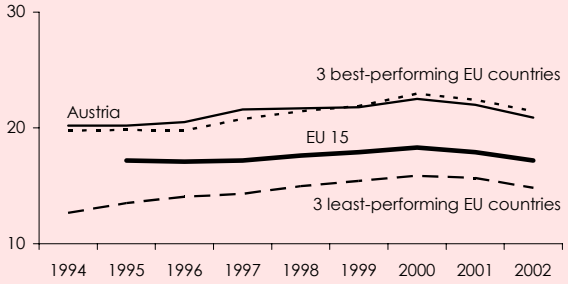
Source: Eurostat, WIFO calculations. 3 best-performing and 3 least-performing countries . . . per each single year.

Figure 4: Economic reform

Relative price level of private final consumption expenditure
EU 15 = 100



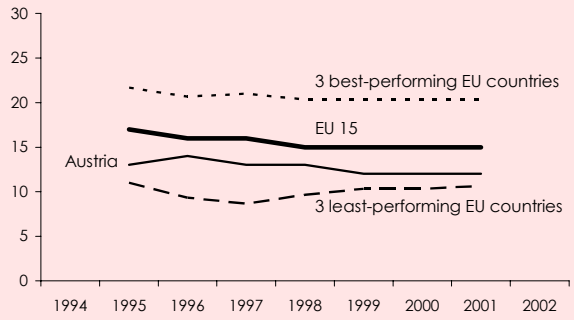
Business investment
Gross fixed capital formation by the private sector as a percentage of GDP



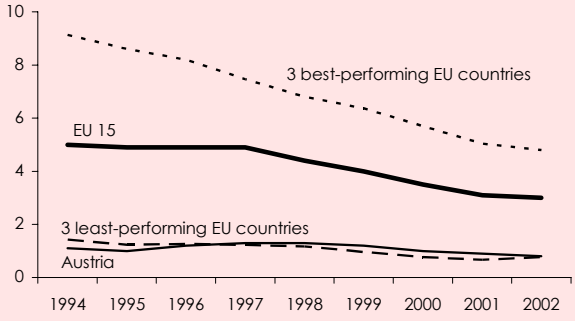
Source: Eurostat, WIFO calculations. 3 best-performing and 3 least-performing countries . . . per each single year.

Figure 5: Social cohesion

At-risk-of-poverty rate [1] (after social transfers)
Percent



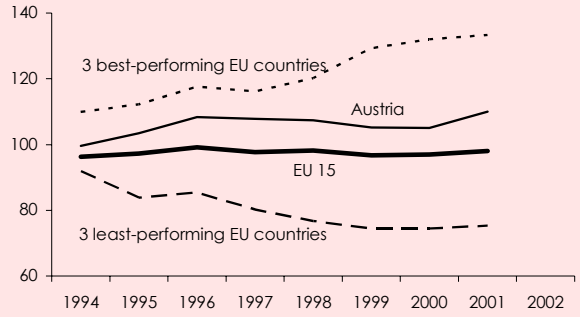
Long-term unemployment rate [2]
Percent



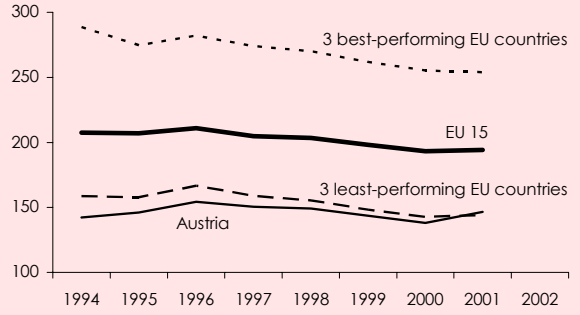
Source: Eurostat, WIFO calculations. 3 best-performing and 3 least-performing countries . . . per each single year. – [1] Share of persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 percent of the national median equivalised disposable income. – [2] Long-term unemployed (12 months and more) as a percentage of total active population.

Figure 6: Environment

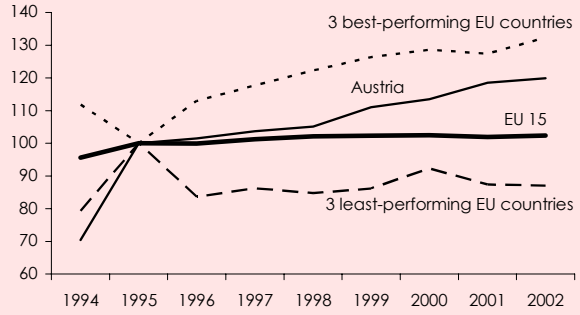
Greenhouse gas emissions
1990 = 100



Energy intensity (kilogram of oil equivalent per 1,000 €)
Gross domestic consumption of energy relative to GDP at 1995 prices



Volume of merchandise transport
Domestic transport relative to GDP at 1995 prices; 1995 = 100



Source: Eurostat, WIFO calculations. 3 best-performing and 3 least-performing countries . . . per each single year.

Inclusion of the new member states

In May 2004, the EU has enlarged to a total of 25 member states. The inclusion of the new member states into a country ranking renders the latter almost meaningless. For most indicators, these economically less developed countries hold the bottom ranks. For some indicators, however, they are at or close to the top, e.g., education or the relative price level. As far as formal education of the young is concerned (upper secondary education), Austria currently holds rank 4 within the EU 15, but it drops to 9 including the new member countries. Also in terms of economic growth, which is among the wider set of indicators, the new member states claim the top ranks, since countries of low GDP per capita usually catch up over time on their technological lag.

As far as the employment rate in the upper age groups is concerned, Austria moves further up from bottom rank after enlargement, since this ratio is still lower in Hun-

gary, Poland, Slovenia and Slovakia. Public expenditure on human capital (as a percentage of GDP), for its part, is higher in each of the Baltic states than in Austria. Also for expenditure on information and communication technology, Austria is overtaken by the Czech Republic, Estonia and Hungary. Moreover, Austria loses its leading position on the indicator of corporate investment. In Latvia, Slovakia, Slovenia, the Czech Republic and Estonia the investment-to-GDP ratio is higher than in Austria.

Table 8: Structural indicators for the EU 25

	General economic background				Labour market				Innovation and research			
	1. GDP per capita at PPS		2. Labour at productivity (GDP per employee) at PPS		3. Employment rate, 15 to 64 years		4. Employment rate of older people		5. Youth (aged 20 to 24 years) education attainment level: upper secondary education		6. Expenditure on R&D	
	2003		2003		2002		2002		2003		2001	
	EU 15 = 100	Ranking	EU 15 = 100	Ranking	Percent	Ranking	Percent	Ranking	Percent	Ranking	As a percentage of GDP	Ranking
Luxembourg	186.5	1	129.7	1	63.7	12	28.3	20	69.8	22	1.71	10
Ireland	121.9	2	120.4	2	65.3	11	48.1	7	85.7	6	1.17	13
Denmark	112.6	3	98.3	7	75.9	1	57.9	2	74.4	17	2.40	4
Austria	110.9	4	97.9	8	69.3	5	30.0	18	85.0	9	1.90	7
The Netherlands	109.4	5	95.6	13	74.4	2	42.3	9	73.3	20	1.89	8
UK	108.6	6	96.9	9	71.7	4	53.5	3	78.2	16	1.89	9
Belgium	106.5	7	118.5	3	59.9	17	26.6	21	81.1	15	2.17	6
Sweden	104.4	8	96.2	10	73.6	3	68.0	1	85.6	7	4.27	1
France	103.5	9	113.6	4	63.0	14	34.8	16	81.1	14	2.23	5
Finland	101.0	10	100.1	6	68.1	8	47.8	8	86.2	5	3.40	2
Germany	99.4	11	95.7	11	65.3	10	38.6	15	73.3	19	2.51	3
Italy	98.4	12	106.0	5	55.5	23	28.9	19	69.9	21	1.07	14
Spain	87.3	13	95.7	12	58.4	19	39.7	13	63.4	23	0.96	15
Cyprus	77.2	14	79.6	16	68.6	6	49.4	6	82.2	10	0.26	24
Greece	73.5	15	91.8	14	56.7	21	39.7	14	81.7	12	0.64	22
Slovenia	69.7	16	69.4	17	63.4	13	24.5	24	90.7	3	1.57	11
Portugal	69.2	17	63.8	19	68.2	7	50.9	5	47.2	24	0.84	17
Malta	69.2	18	90.1	15	54.5	24	30.3	17	42.8	25	–	–
Czech Republic	62.6	19	54.7	21	65.4	9	40.8	12	92.0	2	1.30	12
Hungary	55.2	20	64.2	18	56.6	22	26.6	22	85.0	8	0.95	16
Slovakia	49.0	21	57.5	20	56.8	20	22.8	25	94.1	1	0.64	21
Poland	42.4	22	48.8	22	51.5	25	26.1	23	88.8	4	0.68	20
Estonia	42.2	23	43.5	23	62.0	15	51.6	4	81.4	13	0.78	18
Lithuania	41.4	24	43.5	24	59.9	18	41.6	11	82.1	11	0.69	19
Latvia	36.6	25	38.7	25	60.4	16	41.7	10	74.0	18	0.44	23
EU 15	100.0		100.0		64.3		40.1		74.0		1.98	
Euro area	98.0		100.8		62.4		36.4		72.9		1.91	
New member states	48.4		52.8		55.9		30.4		88.3		0.83	
USA	138.5		120.1								2.74	
Japan	102.3		89.4								3.06	

Source: Eurostat, WIFO calculations.

Still more outstanding is the situation with regard to the relative price level which in all 10 new member states is lower than in Austria. In the comparison across the EU, Austria thereby drops from rank 8 to 18. Strangely enough, the poverty risk according to the Eurostat data is also lower in the Czech Republic and Hungary than in Austria, since it is measured by the poverty threshold defined as 60 percent of the median income. In the same vein, the inequality of income distribution is reported to be smaller in the Czech Republic and Hungary than in Austria.

As far as the environmental situation is concerned, the huge problems facing the new member states are well-known. This is confirmed by the very high energy intensity prevailing in these countries. Since, however, the emission of greenhouse gases is measured not by the level, but by its trend over time, the new member states hold top positions in this respect: in eight of the new members, the increase in CO_2 emissions is smaller than in Austria. In the international "league table" – inspiring those looking at policy from a sports fan point of view – Austria is thereby relegated from rank 11 to 19. It suffers almost the same drop on the scoreboard (from 11 to 18) for

merchandise transport, the third key environmental indicator, which increases more slowly in seven new member states than in Austria.

These examples may suffice to demonstrate that the international "beauty contest" on the basis of the EU structural indicators is running into insurmountable problems after EU enlargement.

Table 8/continued: Structural indicators for the EU 25

	Economic reform				Social cohesion					
	7. Relative price level		8. Business investment		9. At-risk-of-poverty rate after social transfers		10. Dispersion of regional employment rates		11. Long-term unemployment rate (12 months and more)	
	2002		2001		2001		2002		2002	
	EU 15 = 100	Ranking	As a percentage of GDP	Ranking	Percent	Ranking	Coefficient of variation	Ranking	Percent	Ranking
Luxembourg	99.7	16	18.7	13	12	9	7.9	15	0.8	2
Ireland	118.3	23	19.0	12	21	20	7.0	11	1.3	8
Denmark	130.7	25	18.4	16	11	7	6.0	8	0.9	5
Austria	101.5	18	22.0	8	12	8	2.4	2	0.8	4
The Netherlands	101.8	19	18.4	15	11	4	2.2	1	0.7	1
UK	107.5	21	15.6	22	17	13	6.6	10	1.1	7
Belgium	98.7	15	19.4	11	13	10	8.0	16	3.5	15
Sweden	117.3	22	14.4	23	10	3	4.6	5	1.0	6
France	99.7	17	17.0	21	15	11	6.2	9	2.8	12
Finland	122.7	24	17.8	18	11	6	7.8	14	2.3	10
Germany	104.0	20	18.6	14	11	5	5.9	7	4.0	18
Italy	94.5	14	17.3	20	19	16	16.6	19	5.3	21
Spain	82.4	12	22.2	7	19	17	9.2	17	3.9	17
Cyprus	83.1	13	–	–	–	–	–	–	0.8	3
Greece	79.7	11	19.9	10	20	18	4.2	4	5.1	20
Slovenia	72.6	9	23.3	3	–	–	–	–	3.3	14
Portugal	73.5	10	23.1	4	20	19	3.9	3	1.8	9
Malta	71.9	8	–	–	–	–	–	–	3.2	13
Czech Republic	53.1	4	23.1	5	8	1	5.7	6	3.7	16
Hungary	54.9	5	19.9	9	10	2	9.5	18	2.4	11
Slovakia	43.5	1	25.7	1	–	–	7.3	13	12.1	25
Poland	57.4	7	17.4	19	15	12	7.3	12	10.9	24
Estonia	56.1	6	22.4	6	18	15	–	–	4.8	19
Lithuania	51.1	3	18.4	17	17	14	–	–	7.0	23
Latvia	50.4	2	24.2	2	–	–	–	–	5.8	22
EU 15	100.0		17.9		15		12.6		3.0	
Euro area	97.2		18.6		15				3.5	
New member states	56.1		14.2		13		11.7		8.1	
USA	113.4									
Japan	152.3									

Source: Eurostat, WIFO calculations.

Table 8/continued: Structural indicators for the EU 25

	Environment					
	12. Greenhouse gas emissions		13. Energy intensity		14. Volume of merchandise transport	
	2001		2001		2002	
	Basis = 100	Ranking	Kilogram oil equivalent per 1,000 €	Ranking	1995 = 100	Ranking
Luxembourg	56.0	4	191.1	7	110.0	16
Ireland	131.0	22	161.2	3	133.0	22
Denmark	100.0	12	124.9	1	84.7	3
Austria	110.0	19	146.5	2	119.9	18
The Netherlands	105.0	15	201.1	8	97.1	11
UK	88.0	9	224.8	9	86.2	4
Belgium	106.0	16	228.3	11	99.5	12
Sweden	97.0	10	228.9	12	90.2	5
France	100.0	13	189.5	6	95.6	10
Finland	105.0	14	262.7	15	94.7	9
Germany	82.0	8	168.3	4	102.4	14
Italy	107.0	17	187.8	5	102.6	15
Spain	133.0	23	227.5	10	137.4	23
Cyprus	150.0	25	282.1	17	93.0	8
Greece	126.0	20	261.2	14	126.7	21
Slovenia	108.0	18	341.2	18	92.1	7
Portugal	136.0	24	238.1	13	125.5	20
Malta	129.0	21	268.6	16	–	–
Czech Republic	77.0	7	939.6	22	99.7	13
Hungary	97.0	11	583.8	19	91.4	6
Slovakia	69.0	6	1,017.3	23	61.6	1
Poland	68.0	5	642.7	20	69.8	2
Estonia	45.0	2	1,360.8	25	177.0	24
Lithuania	46.0	3	1,321.0	24	118.6	17
Latvia	36.0	1	901.1	21	123.3	19
EU15	98.0		194.2		102.4	
Euro area			189.6		105.8	
New member states					83.0	
USA	114.0		330.1		91.3	
Japan	111.0		119.4		97.4	

Source: Eurostat, WIFO calculations.

Conclusions

The European Council of Lisbon in 2000 has formulated the ambitious goal of transforming the European Union into the most competitive knowledge-based economy of the world. Economic growth in the EU was to be raised and made more sustainable and accompanied by higher job creation and greater social cohesion. The EU structural indicators represent a meaningful first approach of gauging progress towards achieving these high-aiming objectives. The 14 new EU key indicators appropriately focus on levels achieved (e.g., GDP per capita), avoiding the previous mix-up with cyclical macro-economic indicators. An overall ranking of countries according to such a heterogeneous, non-weighted set of indicators would nevertheless be misplaced, as has been warned against also by the European Council and the Commission.

Austria's competitive position in structural terms within the EU may be assessed by supplementing the 14 key indicators of the EU for the target areas economic performance, labour market, innovation, economic reforms, social cohesion and environment by further indicators and more qualitative elements of evaluation. The relative position of Austria in the international quest for structural adjustment may be characterised as follows for the six policy target areas:

- Austria's economic level as measured by GDP per capita is among the highest in the EU. This also holds for private consumption per head and the ratio of investment to GDP. Labour productivity in Austria is under-estimated by Eurostat data, due to the limited international comparability of employment statistics. A coun-

try's relative economic position depends highly from whether it is measured by the level (GDP per capita) or the medium-term trend (economic growth). While GDP per capita is rather high, Austria claims only a medium-range position for its average economic growth since 1995.

- The labour market situation in Austria should be seen as but mediocre. The employment rate as the major indicator is within the medium range of EU member states, although being upward biased for several reasons, notably by including non-active recipients of child-care benefits. While Austria's rate of unemployment is low, this is secured by one of the lowest employment rates of older workers within the EU. One should note critically that the indicators abstract from the unemployment rate, taking only the number of jobs even if part of them are precarious. Long-term unemployment, however, is retained as a measure of social cohesion.

Table 9: Austria's ranking within the EU 15

	1999	2000	1999-2000	2001	2000-01	2002	2001-02	1999-2002
General economic background								
1. GDP per capita, at PPS	3	4	–	5	–	5	=	–
2. Labour productivity (GDP per employee), at PPS	8	8	=	8	=	7	+	+
Labour market								
3. Employment rate, 15 to 64 years	5	5	=	6	–	5	+	=
4. Employment rate of older people	11	12	–	12	=	12	=	–
Education and innovation								
5. Youth (aged 20 to 24 years) education attainment level: upper secondary education	3	3	=	4	–	3	+	=
6. Expenditure on R&D	8	8	=	7	+	7	=	+
Economic reform								
7. Relative price level	6	6	=	5	+	8	–	–
8. Business investment	2	2	=	3	–	3	=	–
Social cohesion								
9. At-risk-of-poverty rate (after social transfers)	6	6	=	7	–	7	=	–
10. Dispersion of regional employment rates	1	2	–	2	=	2	=	–
11. Long-term unemployment rate (12 months and more)	3	4	–	4	=	3	+	=
Environment								
12. Greenhouse gas emissions	9	9	=	11	–	11	=	–
13. Energy intensity	2	2	=	2	=	2	=	=
14. Volume of domestic transport	11	11	=	11	=	11	=	=
Total ranking (average 1. to 14.)	2	1	+	4	–	4	=	–

Source: WIFO calculations. + . . . improvement, – . . . deterioration, = . . . no change.

- On the educational indicators, i.e., graduates from secondary education and public expenditure on human resources, Austria is in the upper tier of EU countries. However, lifelong learning is poorly developed in Austria and the number of natural scientists leaves to be desired. Greater efforts at human capital formation are necessary if the high per-capita income position is to be maintained. Still, measuring educational standards by the successful completion of upper secondary schooling is problematic, as this indicator shows, for example, most EU accession countries in a top position ahead of Sweden and Finland[10].
- In the area of innovation, Austria only holds a medium-range position in the EU. This probably mirrors its specific economic structure with the lack of large-scale domestic corporations and the dominance of low- and medium-tech firms, whereas high-tech enterprises in the information and communication (ICT) or the biotechnology sectors with often very high R&D intensity are relatively scarce.

[10] For Austria, vocational schools and the polytechnics cycle are included.

The indicator of ICT expenditure also confirms the subdued innovation activity in Austria, where the relatively low R&D and ICT expenditures of the corporate sector should be seen as inter-related. The government sector in Austria is rather generous with spending on research and development, with the GDP ratio being on a par with that for Sweden. So far, though, it did not suffice in order to meet the objectives.

- The EU structural indicators, which are meant to gauge progress with economic reform, actually do not really lend themselves to that purpose. Thus, a country's relative price level is of little significance as it is primarily a function of the level of economic development (services prices) and not of economic reforms. Also the investment ratio of companies is of limited use since it depends not only on economic reforms, but on many other important factors. Of how little value these indicators are for measuring economic reform is revealed by the fact that the top ranks are held by the economically less developed countries of southern and eastern Europe.
- In a similar way as for its level of economic development, Austria ranks close to the top within the EU for its degree of social cohesion. This holds for the indicators of long-term unemployment and the dispersion of regional employment rates, as well as for the distribution of income according to the available data. Likewise, the poverty risk is relatively low in Austria, although here the ranking means little because of the tiny and statistically insignificant differences.
- Finally, Austria fares poorly on the EU environmental indicators, as the latter mainly use the development over time and not the level as a yardstick. In an international comparison, Austria's environmental standard is relatively high, but strains on environmental quality are rising at an above-average rate. Austria's earlier position as "environmental pioneer" has been lost. Greenhouse gas emissions are relatively low, but the trend since 1990 has been significantly worse than the EU average. Compliance with the Kyoto agreement is far off. Also, commercial road traffic has expanded above average in Austria and has largely contributed to the rapid increase in greenhouse gas emissions. While the energy intensity is comparatively low, electricity consumption has outpaced GDP growth over the last years.

The trend in the EU structural indicators since 1999 reveals a few noteworthy tendencies:

- Austria's relative economic position, as measured by per-capita GDP, has weakened in the last years. The advantage vis-à-vis the EU average has narrowed from 14 percent to 11 percent. In terms of relative living standards, Austria fell back from rank 2 to 4 and 5, respectively.
- Labour market performance in Austria lagged behind that in the EU as a whole. The employment rate has remained broadly flat in Austria since 1999, while rising on average in the EU. The trend has been similar for the unemployment rate which kept nearly constant in Austria, but declined on EU average.
- Expenditure on R&D has slowly converged towards the EU average in the last years, while still remaining slightly below.

Against this background, the European Commission has labelled "disappointing" the trend in structural indicators in Austria since 1999.

With the inclusion of the new member states, a ranking by countries becomes more than questionable. While on most indicators, these economically less advanced countries rank near the bottom end, they are close to the top on a few ones like educational attainment or the relative price level, thereby casting doubt on the meaning of these indicators for economic performance. As regards the education of the young, Austria holds rank 4 in the "old" EU, but moving down to 9 as from May 2004. The relative price level being lower in all 10 accession countries than in Austria, the latter falls back from 8th into 18th place. These examples illustrate that the international "beauty contest" on the basis of the EU structural indicators, as currently cited even in budget speeches or programmatic government statements, runs into

insurmountable problems with the enlargement of the EU. It is therefore indispensable to focus on the implementation of guidelines and a more qualitative assessment in the different target areas, rather than applying the indicators mechanically in ranking orders.