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Strategies for Higher Growth and Employment in Austria

Economic growth is neither in Austria nor in the EU as a whole strong enough as to make substantial inroads into unemployment. Against this background, the European Council of March 2005 assigned the highest priority to the goals of growth and employment and invited each member state to elaborate a national strategy for higher growth. The Austrian government has asked WIFO to submit, for a government summit early last May, a set of proposals for growth-enhancing measures for Austria. Action in seven policy areas as outlined by WIFO should be able to accelerate economic growth and ought to be integrated into an overall strategy.

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Economic activity in Austria has recovered from the protracted weakness of the last few years and may achieve growth rates of close to 2 percent p.a. over the period 2004-2006, although for 2005 downward risks have recurred. Such rates are lower than those seen in earlier periods of recovery and will not suffice to put unemployment onto a firm downward path. The present analysis compares growth in Austria with that in other European countries and assesses the state of affairs with regard to a broader scope of socio-economic performance indicators (primarily the structural indicators developed by the European Commission to gauge progress of member states toward achieving the "Lisbon targets"). In the following, seven elements of a strategy for sustained higher growth will be identified, i.e., research and innovation, education, life-long learning, infrastructure, labour market promotion and incentive structures, establishment of firms, and environmental technology.

Raising the path of growth of an economy is a demanding endeavour requiring a long-term perspective. No single measure will in itself be able to boost the overall rate of growth significantly and in a sustained way which rather requires a strategy defined for an extended period of time and consequently adhered to, in which supply- and demand-oriented measures interplay. Action designed to enhance economic flexibility ought to be accompanied by measures fostering security and confidence.

A particular challenge consists in designing measures in such a way that they do not conflict with the long-term goal of consolidation of public finances, while at the same time giving positive incentives to growth and strengthening confidence and competitiveness. Measures exerting a drag on public finances over the long term will undermine confidence and lead to restraint in private consumption and investment. A strategy stimulating demand in the short run while at the same time raising the long-term growth potential and the competitiveness of the economy will yield a "double dividend".

The effectiveness of growth-enhancing measures will also depend on policy in neighbouring countries being geared towards the same objectives. Thus, cross-border infrastructure projects require implementation by all participating countries. The impact of demand-stimulating measures at the national level will be weakened

by import leakages. Also, psychological effects and growth pessimism will not be confined by national frontiers.

The fact that the European Union gives top priority to economic growth and calls for the elaboration of national action plans for the implementation of the "Lisbon agenda" raises the chances of success for a growth strategy. Austria is called to support this re-adjustment of EU policy towards higher growth. Indeed, this may prove all the more relevant with a view to Austria taking over the next Council presidency, and may warrant a compromise in the matter of the EU financial perspective.

Against this background, WIFO has submitted first proposals for growth-enhancing initiatives, which may lead to early policy measures or feed into the national reform programme implementing the European Growth Strategy adopted by the Luxembourg European Council¹. Largely emanating from earlier WIFO studies, these ideas should be further elaborated, amended and integrated into a comprehensive strategy including an assessment of costs and financing².

The European economy cannot draw sufficient benefit from the current global cyclical boom. Having expanded by 4.5 percent in 2004, world GDP is expected to grow by 4 percent in 2005. The slight deceleration will still imply a further increase in capacity utilisation. In the euro area, however, GDP grew by only 2 percent in volume in 2004 (EU 15 +2.3 percent, EU 25 +2.4 percent). For 2005, the Spring 2005 forecast of the European Commission projects growth for the euro area at 1.3 percent, and for the EU 25 at 1.5 percent (Table 1).

Business cycle and growth in Europe

Table 1: Comparative growth performance

	2000	2001	2002	2003	2004	2005	1970-1980	1980-1990	1990-1995	1995-2000	2000-2005	1995-2005
	Real GDP, year-to-year percentage change											
Austria	+ 3.4	+ 0.8	+ 1.0	+ 1.4	+ 2.4	+ 1.7	+ 3.6	+ 2.5	+ 2.2	+ 2.9	+ 1.5	+ 2.2
EU 15	+ 3.7	+ 1.7	+ 1.0	+ 1.0	+ 2.3	+ 1.4	+ 3.0	+ 2.4	+ 1.5	+ 2.8	+ 1.5	+ 2.1
EU 25	+ 3.7	+ 1.8	+ 1.1	+ 1.1	+ 2.4	+ 1.5	.	.	.	+ 2.8	+ 1.6	+ 2.2
Euro area	+ 3.7	+ 1.7	+ 0.9	+ 0.7	+ 2.1	+ 1.3	+ 3.2	+ 2.4	+ 1.6	+ 2.7	+ 1.3	+ 2.0
Germany	+ 3.2	+ 1.2	+ 0.1	- 0.2	+ 1.6	+ 1.0	+ 2.8	+ 2.3	+ 2.1	+ 2.0	+ 0.7	+ 1.4
Italy	+ 3.0	+ 1.8	+ 0.4	+ 0.3	+ 1.2	+ 1.2	+ 3.6	+ 2.3	+ 1.3	+ 1.9	+ 1.0	+ 1.4
USA	+ 3.7	+ 0.8	+ 1.6	+ 2.7	+ 4.2	+ 3.3	+ 3.2	+ 3.2	+ 2.5	+ 4.1	+ 2.5	+ 3.3

Source: WIFO-calculations on the basis of Eurostat (AMECO); European Commission Spring 2005 forecast; WIFO Economic Outlook, April 2005.

The lack of dynamism of the European economy is not a short-term, but rather a medium-term economic phenomenon. The average rate of growth for the last ten years (1995-2005) of 2.1 percent for the EU 15 was clearly below the 3.3 percent for the USA. The reasons for this discrepancy are the subject of a broad range of analyses with different conclusions. They probably lie in a higher growth potential of the US economy (due to its advantage in the areas of research and development, human capital and investment in information and communication technology) and a higher mobilisation of this potential due to a growth-oriented macro-economic policy stance, as well as in the greater flexibility of product and labour markets (Aiginger, 2005). These factors become more important in the process of globalisation and the occurrence of leaps in innovation (communication technologies, biotechnology, nanotechnology) and of repeated shocks (oil price hikes, exchange rate shifts) than in periods of gradual technological progress and stable cyclical patterns. Since the end of World War II, the European economy has for many years grown faster than the US economy; by the early 1990s, it had almost caught up with the US level of productivity. Part of the current growth problem of the EU is Germany, the largest European economy, where re-unification gave rise to huge annual budgetary trans-

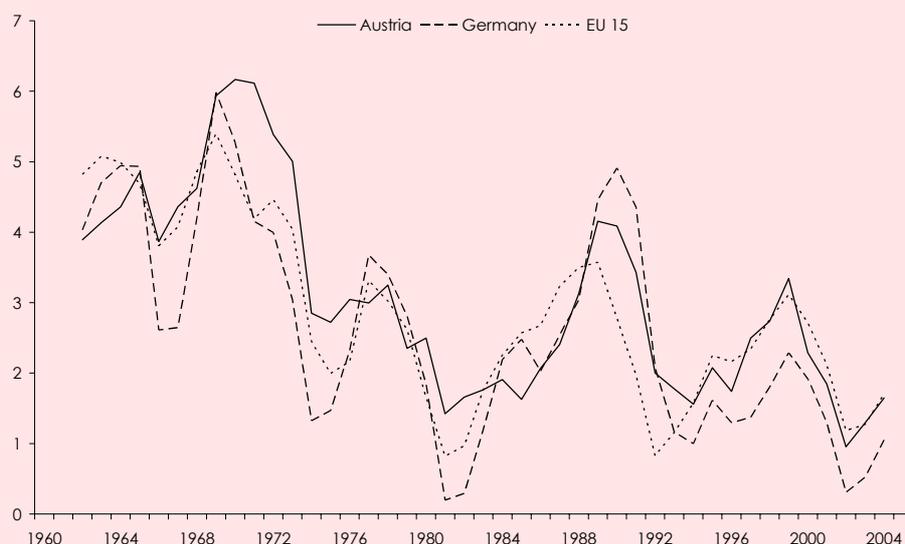
¹ Conclusions of the European Council of March 2005, http://ue.eu.int/cms3_fo/showPage.asp?lang=de&id=432&mode=g&name=.

² Part of the measures suggested, notably the increase in funds for research and infrastructure, as well as the extension of tax subsidies for research to include commissioned research projects, have meanwhile been adopted by the federal government (<http://www.bka.gv.at/DesktopDefault.aspx?TabID=4722&Alias=bka>).

fers and a number of still unresolved policy problems, and where policy gave high priority to price stability and less to a growth-oriented strategy. The medium-term projections are for a persistent gap between growth in the USA and the EU (Schulmeister, 2005). Thus, the Oxford model upon which WIFO bases its medium-term projections, yields a trend rate of growth of 2.2 percent p.a. for the EU 15, compared with 3.1 percent for the USA.

Figure 1: Trend of GDP growth in Austria, Germany and EU 15

Year-to-year percentage change, moving 3-year average



Source: WIFO calculations on the basis of Eurostat (AMECO).

For a long time, many economists considered the growth advantage of the USA to be a temporary phenomenon which, it was argued, could be explained by purely statistical differences (identification of software production, more extensive recourse to hedonic price indices), by an artificial "IT bubble", or by stronger population growth. Undoubtedly, the large imbalances in the US external account and in government finances as well as the low private saving ratio remain problems largely unaddressed, with possible repercussions on the path of economic growth not only in the USA, but for the world economy at large.

The fact that the European economy is lagging behind in the most recent global recovery and the world-wide boom has, however, given rise to concerns that growth of output, productivity and employment has ratcheted up to a sustained higher pace in the USA and also in many Asian countries compared with Europe, calling for a new European growth strategy in order to close the gap. The most recent amendments to the Stability and Growth Pact and the relaunch and re-focussing of the "Lisbon Strategy" are first steps towards a new European strategy.

Thanks to above-average rates of growth, in terms of GDP per capita at purchasing power parities, over the last decades, Austria has attained a top position in Europe: with € 27,100 per inhabitant in 2004, it ranked among the five leading economies in the EU 25. Austria's per-capita income was lower than in Luxembourg, Ireland³ and Denmark, but slightly higher than in the UK, the Netherlands and Belgium. In a global comparison, Austria holds rank 7 among the industrialised countries, according to OECD calculations (OECD, 2005).

³ In Ireland, GDP per capita is higher than in Austria, but net national product per head (which excludes net income transfers from abroad) is lower. Luxembourg also has a higher GDP per capita, but should rather be compared with similar urban agglomerations. While the positions in the annual income ranking are subject to change, Austria's place among the five countries with the highest per-capita income has been stable over a longer period.

The Austrian position

Table 2: Structural indicators of productivity, employment and innovation

	Macro-economic background				Employment				Innovation and research			
	1.		2.		3.		4.		5.		6.	
	GDP per capita (purchasing power standards)		Labour productivity (GDP per employee, purchasing power standards)		Employment ratio (age 15 to 64)		Employment ratio of older workers (age 55 to 64)		Young people (age 20 to 24) with higher secondary education or above completed		Expenditure on research and development	
	2004		2004		2003		2003		2004		2002	
EU 25 = 100	Rank	EU 25 = 100	Rank	As a per- centage of popu- lation	Rank	As a per- centage of popu- lation	Rank	Percent	Rank	As a per- centage of GDP	Rank	
Luxembourg	216.7	1	142.4	1	62.7	14	30.0	20	69.8	22	1.71	10
Ireland	134.3	2	127.7	3	65.4	9	49.0	8	85.3	7	1.09	14
Denmark	121.9	3	103.8	9	75.1	1	60.2	2	76.1	18	2.52	4
Austria	121.3	4	102.5	11	69.0	6	30.1	19	85.3	7	2.19	7
UK	119.9	5	109.2	6	71.8	4	55.5	3	76.4	17	1.87	9
The Netherlands	119.6	6	103.0	10	73.5	2	44.8	9	73.3	19	1.89	8
Belgium	118.0	7	128.2	2	59.6	19	28.1	22	82.1	12	2.24	6
Sweden	116.1	8	105.0	8	72.9	3	68.6	1	86.3	5	4.27	1
Finland	114.9	9	110.5	5	67.7	8	49.6	7	84.6	9	3.46	2
France	110.9	10	119.4	4	63.2	12	36.8	16	79.8	15	2.26	5
Germany	107.4	11	100.2	13	65.1	10	39.5	15	72.5	20	2.53	3
Italy	105.0	12	108.1	7	56.1	23	30.3	18	69.9	21	1.16	13
Spain	97.6	13	102.5	11	59.7	18	40.8	14	62.5	23	1.03	15
Greece	82.4	14	97.2	14	57.8	20	42.1	13	81.7	13	0.64	20
Cyprus	81.4	15	72.1	17	69.2	5	50.4	6	80.1	14	0.32	24
Slovenia	78.5	16	76.3	16	62.6	15	23.5	25	89.7	3	1.53	11
Portugal	73.3	17	66.8	19	68.1	7	51.6	5	49.0	24	0.80	17
Malta	72.0	18	84.3	15	54.2	24	32.5	17	47.9	25	.	.
Czech Republic	69.8	19	65.9	20	64.7	11	42.3	12	90.9	2	1.22	12
Hungary	61.7	20	69.5	18	57.0	22	28.9	21	83.4	10	1.02	16
Slovak Republic	53.9	21	61.4	21	57.7	21	24.6	24	91.3	1	0.58	22
Estonia	50.3	22	50.1	23	62.9	13	52.3	4	82.3	11	0.75	18
Lithuania	48.0	23	49.7	24	61.1	17	44.7	10	86.1	6	0.67	19
Poland	47.4	24	60.1	22	51.2	25	26.9	23	89.5	4	0.59	21
Latvia	43.7	25	43.6	25	61.8	16	44.1	11	76.9	16	0.42	23
EU 25	100.0		100.0		63.0		40.2		76.4		1.93	
EU 15	108.9		106.4		64.4		41.7		73.5		1.99	
Euro area	106.3		105.9		62.6		37.8		72.5		1.93	
USA	159.0		143.8		71.2		59.9		.		2.64	
Japan	118.9		101.1		68.4		62.1		.		3.12	

Source: Eurostat, WIFO calculations.

Table 3: Unemployment rate in Austria and in the EU 15

	Austria		EU 15	Germany	Italy
	Eurostat definition	National definition			
	Percent of labour force				
1994	3.8	6.5	10.4	8.3	10.6
1995	3.9	6.6	10.0	8.0	11.2
1996	4.4	7.0	10.1	8.5	11.2
1997	4.4	7.1	9.8	9.1	11.3
1998	4.5	7.2	9.3	8.8	11.3
1999	3.9	6.7	8.5	7.9	10.9
2000	3.7	5.8	7.6	7.2	10.1
2001	3.6	6.1	7.2	7.4	9.1
2002	4.2	6.9	7.6	8.2	8.6
2003	4.3	7.0	8.0	9.0	8.4
2004	4.8	7.1	8.1	9.5	8.0
Change 2000-2004, percentage points	+ 1.1	+ 1.3	+ 0.5	+ 2.3	- 2.1

Source: WIFO calculations on the basis of Eurostat (AMECO) and Austrian Labour Market Service.

Austria has attained its position through a growth advantage in real terms and the appreciation of its currency. Yet, the growth advantage has been largely lost during the last ten years: growth of real GDP between 1995 and 2005 was 0.1 percentage point higher than in the EU 15 and 0.2 percentage point higher than in the euro

area. In the last five years, growth of 1.4 percent p.a. exceeded the euro area average by 0.1 percentage point, but fell 0.2 percentage point short of the EU 15 rate. Projections for 2005 are for somewhat stronger growth compared with the European reference areas. Both in a short- and medium-term perspective, economic growth in Austria is stronger than in Germany and Italy, but weaker than in the new EU member states or in the northern European growth pole. A relative advantage vis-à-vis Austria's traditional key trading partners and a lag behind the northern and eastern European growth poles may also be identified for other macro-economic indicators.

Table 4: Structural indicators of economic reform and social cohesion

	Economic reform						Social cohesion			
	7. Relative price level		8. Gross fixed investment of private sector		9. Ratio of poverty risk ¹		10. Disparity of regional employment ratios		11. Ratio of long-term unemployed (12 months and above)	
	2003		2004		2001		2003		2003	
	EU 25 = 100	Rank	As a percentage of GDP	Rank	Percent	Rank	Variation coefficient	Rank	Percent	Rank
Luxembourg	105.3	17	15.3	21	12	7	.	.	0.9	1
Ireland	127.0	24	20.7	8	21	21	.	.	1.5	8
Denmark	139.3	25	17.9	13	10	3	.	.	1.1	4
Austria	107.2	19	20.7	8	12	7	2.9	2	1.2	7
UK	103.2	15	15.1	22	19	16	6.0	8	1.1	4
The Netherlands	106.6	18	17.0	14	12	7	2.4	1	1.0	2
Belgium	103.9	16	17.0	14	13	10	7.7	13	3.7	15
Sweden	124.3	22	13.0	25	9	2	4.3	5	1.0	2
Finland	125.9	23	15.8	20	11	4	6.1	10	2.3	10
France	108.2	20	16.2	18	13	10	5.0	6	3.5	13
Germany	108.9	21	16.0	19	13	10	6.0	8	4.7	20
Italy	102.2	14	16.9	16	19	16	17.0	16	4.9	21
Spain	85.6	12	22.9	3	19	16	8.9	15	3.9	17
Greece	84.3	11	21.4	7	20	19	3.6	3	5.1	22
Cyprus	93.9	13	14.6	24	.	.	.	.	1.1	4
Slovenia	77.1	9	21.9	6	11	4	.	.	3.4	12
Portugal	79.5	10	19.3	11	20	19	3.9	4	2.2	9
Malta	72.8	8	16.4	17	.	.	.	.	3.5	13
Czech Republic	55.2	5	22.8	4	8	1	5.8	7	3.8	16
Hungary	58.0	6	19.4	10	11	4	8.5	14	2.4	11
Slovak Republic	49.8	1	22.2	5	.	.	7.6	12	11.1	25
Estonia	62.2	7	25.3	1	18	15	.	.	4.6	19
Lithuania	54.4	3	18.7	12	17	14	.	.	6.1	23
Poland	53.3	2	14.8	23	16	13	7.2	11	10.7	24
Latvia	55.1	4	23.9	2	.	.	.	.	4.3	18
EU 25	100.0		17.0		15		13.0		4.0	
EU 15	104.0		16.9		16		12.0		3.3	
Euro area	103.1		17.4		15		11.5		3.9	
USA	101.3		–		–		–		0.7	
Japan	137.1		–		–		–		1.7	

Source: Eurostat, WIFO calculations. – ¹ Share of people with disposable equivalence income below threshold of poverty risk (60 percent of disposable median equivalence income after social transfers).

At 69 percent in 2003, Austria has an above-average employment ratio (EU 15 64 percent, EU 25 63 percent; see Table 2). For overall employment, the intermediate "Lisbon target" of a 67 percent ratio by 2005 has thus been attained, and the final target ratio of 70 percent set for 2010 is within reach. Between 2000 and 2003, the employment ratio went up by 1.7 percentage points, compared with +1 percentage point for the EU 15. The female employment ratio stood at 62.1 percent in 2003; here too, the achievement of the "Lisbon target" may reasonably be expected. Nevertheless, due, i.a., to the recipients of child care benefits (actually out of work) being included statistically in the employed population, the Austrian figures are somewhat biased upwards in an international comparison.

Productivity per person employed in Austria is only slightly above the international average. Here, the somewhat exaggerated employment figures imply a downward statistical bias. Productivity growth follows an above-average pace, both for the overall economy and in particular for manufacturing industry.

Table 5: Structural indicators of sustainability

	12. Greenhouse gas emissions 2002		Environment 13. Energy intensity 2002		14. Road transport volumes 2003	
	1995 = 100	Rank	kg crude oil units per 1,000 € GDP	Rank	1995 = 100	Rank
Luxembourg	84.9	9	198.5	7	109.0	16
Ireland	128.9	22	164.2	3	141.7	23
Denmark	99.2	14	122.8	1	87.2	4
Austria	108.5	18	147.2	2	118.5	18
UK	85.1	10	214.5	10	85.4	3
The Netherlands	100.6	15	202.2	8	89.3	6
Belgium	102.1	16	214.3	9	95.2	12
Sweden	96.3	11	224.3	11	90.8	7
Finland	106.8	17	272.0	16	91.5	8
France	98.1	12	189.6	6	93.7	11
Germany	81.1	8	165.7	4	104.5	15
Italy	109.0	19	184.2	5	93.4	10
Spain	139.4	23	229.3	12	139.2	22
Greece	126.5	20	258.4	14	122.7	20
Cyprus	149.7	25	279.6	17	99.6	14
Slovenia	98.7	13	343.2	18	93.3	9
Portugal	141.0	24	255.0	13	118.3	17
Malta	128.5	21	268.2	15	.	.
Czech Republic	74.3	7	930.5	22	99.0	13
Hungary	69.0	5	574.2	19	87.2	4
Slovak Republic	71.8	6	964.8	23	48.6	1
Estonia	44.8	3	1,155.7	24	190.0	24
Lithuania	39.8	2	1,273.1	25	120.9	19
Poland	67.7	4	650.1	20	78.4	2
Latvia	36.9	1	749.3	21	133.1	21
EU 25	91.0		209.9		99.7	
EU 15	97.1		191.7		100.6	
Euro area			188.4		103.7	
USA	113.1		331.0		-	
Japan	107.6		119.0		-	

Source: Eurostat, WIFO calculations.

The Austrian unemployment rate of 4.8 percent in 2004 was below the international average, although the gap vis-à-vis the EU has narrowed. According to the EU method of calculation, unemployed with "mini-jobs" (as from 1 hour per week) as well as seasonally unemployed workers (not actively seeking work) are not included in the jobless statistics. The national Austrian definition (yielding an unemployment rate of 7.1 percent for 2004) also includes the seasonally out-of-work entitled to return to their previous job, but not people in job training offered by the labour market service. Following this definition, the unemployment rate in Austria was 5.8 percent in 2000, down from a peak 7.2 percent in 1998. A large part of the labour force of advanced age quits the labour market for reasons of early retirement or invalidity. While the number of early retirees has decreased recently, that of people claiming invalidity benefits has gone up. With an employment rate of older workers of only 30 percent in 2003, Austria holds rank 19 among the 25 EU countries (see Table 2).

Austria fares relatively well on the three indicators measuring social cohesion (Table 4). As regards exposure to the risk of poverty, Austria holds rank 7 among the 25 EU member states (12 percent of the population against 16 percent in the EU 15). The Austrian position is less favourable than one may expect from its income position; however, the relative poverty line rises with per-capita income. Regional differences in the employment ratio are relatively small in Austria (still smaller only in the Netherlands), the ratio of long-term unemployment is 1.2 percent, compared with 3.3 percent for the EU 15 and 4 percent for the EU 25.

On the environmental indicators which are defined in absolute levels, Austria holds a favourable position, e.g., as regards energy intensity (rank 2). By contrast, on the indicators measuring trends, such as the increase in greenhouse gas emissions or goods transport volumes, the Austrian position is rather bad (rank 18, respectively).

For the medium-term perspective (2003-2008), WIFO expects the Austrian economy to grow at an annual 2.3 percent, a rate slightly above the euro area and the EU 15 average and broadly in line with that for the EU 25. The assumed growth advantage derives from the above-average dynamism of the new EU member states and the countries in south-eastern Europe (as important Austrian trading partners), the high price competitiveness of domestically produced goods and services, the limited need for consolidation of government finances, and the improvement in Austria's attractiveness with regard to business and investment conditions. The projected rate of growth is lower, however, than what would be required for a decline in unemployment. While employment may rise by around 30,000 per year, labour supply will expand by a similar amount. According to WIFO calculations, the threshold beyond which unemployment may be expected to follow a clear downward trend lies close to an annual rate of GDP growth of 2.5 percent.

The necessity to shift policy priorities back in favour of economic growth is being increasingly recognised at the national and international level. At the European level, this has been largely motivated by the fact that the "Lisbon goal" of boosting the competitiveness of the EU economy was unlikely to be achieved and that, on the contrary, the gap vis-à-vis productivity growth in the USA was widening. In Austria, special emphasis is given to the argument that only a higher rate of growth will allow unemployment and budget deficits to decline and secure the financial base of the social retirement and health care systems. Moreover, the problems related to an ageing society and to a stronger inflow of labour after EU eastern enlargement are easier to solve in a growing economy which offers greater job opportunities notably for the low-qualified.

Comparative analysis of different policy strategies shows that it is difficult to change the growth path through single measures or isolated national settings. Successful are countries which, in a neighbourhood of equally dynamic economies, take growth-enhancing action in several policy areas at the same time. In addition, the growth strategies must be pursued on a sustained basis and be perceived as consistent course of action by economic policymakers, the corporate sector and the population alike. They should be based upon long-term concepts (white papers, action plans, programmes) developed by experts and intensively discussed among policy actors. These concepts ought to be forward-looking, encouraging innovation and addressing future tasks. Defensive approaches to employment via redistribution of work towards a larger number of heads should be avoided, recourse to regulatory constraints and bans should be the exception. Strategies for liberalisation, greater flexibility and de-regulation do not lose sight of the purpose of the original regulation. The higher flexibility granted to firms is accompanied by offers to employees to acquire higher qualifications. Forward-looking investment will generate sufficient dynamism and lower the social costs of change.

Additional expenditure to stimulate economic growth must still respect the need for the consolidation of government households in the longer run. In view of the revenue shortfalls from the tax reform (including the new corporate tax regulation for holding companies with budgetary effects only as from 2006), the target of a "zero deficit" for Austria's general government by 2008 can only be reached through clear restraint on government expenditure, largely supported by public sector reform. While there is no immediate danger for the deficit to reach the Maastricht ceiling, government debt, at almost 64 percent of GDP in 2005, is relatively high. In addition, the burden of age-related expenditure for retirement benefits and health-care is higher in Austria than in other countries.

The growth-enhancing measures should therefore be financed partly by re-allocation of funds away from traditional expenditure; only such measures should be taken which promise a high macro-economic return in the medium run. If in this way economic growth can actually be brought onto a higher trend, expenditure to that end will turn out partly self-financing (to 20 to 40 percent according to estimates), even if never to full extent and never with absolute certainty. The psychological element, i.e., the reduction of uncertainty on the part of households and enterprises

Necessity of and scope for a growth-oriented policy strategy

as well as broad-based acceptance of the strategy, plays a decisive role. Some measures reach their maximum of effectiveness only after several years. Thus, outlays for research and professional training, while boosting demand already in the short term, have a relatively greater effect only in the long run⁴. Large-scale investment projects often require a certain time lag for their implementation. Business conditions, according to the current WIFO projections, are not as fragile as to warrant ad-hoc demand-stimulating action. Should the cyclical outlook weaken, it would be helpful to have a number of projects and measures "on stock" for early implementation. These should be geared to both the demand and the supply side (the latter by improving the regulatory framework and supporting forward-looking investment).

The different measures may also be implemented stepwise, according to scope for their financing becoming available (budgetary savings, revenues from privatisation) or if required by a cyclical reversal (additional investment to be carried out quickly). What is important is that the growth strategy, its necessity and effectiveness meets widespread recognition and acceptance among policy actors, enterprises, consumers and experts. A growth strategy designed for the long-term perspective must be adhered to also in periods when temporarily other priorities emerge (EU presidency, etc.). At each stage of implementation, an evaluation of the measures and their effects is also deemed appropriate.

The decision to give priority to the growth objective should not lead to efforts at ensuring social cohesion and sustainability being neglected. These latter objectives are both essential features of the "European model". If pushed to the background, higher costs will have to be incurred later to deal with the negative consequences, and an abrupt shift in strategy will give rise to uncertainty. Besides, Europe and Austria in particular would lose opportunities for exports and growth in the area of environmental technology.

Overall, a number of areas may be identified where the interplay of reform action could generate the desired growth-enhancing effects. The key elements of the comprehensive strategy are briefly characterised hereafter.

Innovation plays an important role for growth in the advanced industrial societies, not only as technical innovation, but also in the social and organisational domain. For Austria, increased efforts at research and innovation are all the more crucial, as for a country of such high level of income a relatively large share of technology has so far been imported. In the process of catching-up economically after World War II, Austria was an importer of technology and was frequently chosen as target location for production because of its low wage level (and also because of its potential of qualified workers). That role of "technology-taker" is now increasingly being taken over by the new EU member states. As a country with one of the highest per-capita income, Austria must become a supplier of technology of top quality. Such a role also corresponds to Austria's new geo-political situation at the centre of the enlarged European Union.

Reaching a ratio of 2.5 percent of GDP in 2006 for expenditure on research, and of 3 percent by 2010 is a quantitative benchmark (which ought to be accompanied by an increase in efficiency of such expenditure). Meeting the intermediate target would mark an important step illustrating the attractiveness of Austria as a business location. It would demonstrate the determination of policymakers and firms to upgrade Austria's innovative potential. Raising research expenditure to 3 percent of GDP will require a substantial increase in private and public spending: starting from a total € 5.3 billion in 2004, expenditure on research would have to expand by about 9 percent per year in order to reach the target level of € 8.8 billion in 2010. € 2.6 billion would have to be borne by the federal government, if its share of the total were to remain constant.

⁴ According to calculations by Falk – Leo (2004) a sustained increase in corporate spending on research and development by € 1 million (of which the government is assumed to finance 70 percent) induces the creation of 13 new jobs in the short term, 30 in the medium and around 50 in the long term.

Raising the quantity and quality of innovation

Figure 2: Research expenditure ratio

Expenditure on research and development as a percentage of GDP



Source: WIFO calculations on the basis of OECD (MSTI).

Apart from a firm commitment for the long-term financing required by the expenditure target⁵, a research strategy in support of economic growth may include the following items:

- elaboration of a binding and operational research strategy for Austria,
- definition of responsibilities and co-ordination of activities across ministries,
- transparency in allocation of financial resources⁶,

⁵ A declaration of intention (parliamentary resolution agreed by all parties) to prolong and step up the "special funding" after its expiry would be helpful, since the current uncertainty makes planning by firms and funds more difficult.

⁶ It is, for example, not possible to obtain a figure for expenditure on biotechnology in Austria.

- reduction in the number of promotion measures,
- association of Austrian technology policy to European programmes,
- speeding up of innovation in the service sector,
- evaluation of measures and strategies, strategic allocation of funds,
- extension of tax premium and tax allowance for research purposes to research projects commissioned externally (outsourced research is important notably for small and medium-sized enterprises),
- premium for sponsored research at universities (subject to a ceiling and time limit; for project co-operation between firms and universities, an additional bonus of 20 percent of external funds raised should be granted),
- increase in resources of the research foundation ("Forschungsstiftung" – e.g., from privatisation revenues, from the federal states, communities, private donors, foundations, heritages),
- combination with measures to support structural adjustment (acquisition of head-quarter activities, establishment of companies, venture capital),
- intensified use of EU research programmes (more co-financing and kick-off financing).

The quality of human capital influences not only an economy's competitiveness directly, but also its capacity to implement technical, social and operational innovation. In the area of higher education, the EU is lagging behind the USA which in terms of GDP spends about one-third more on its universities (*Sapir*, 2003).

In Austria, per-capita spending on education and training is relatively high and also, due to the dual vocational training scheme, the share of specialised workers and of workers with secondary education in the labour force. The deficit in tertiary education has been mitigated by the creation of technical colleges, but the share of employees with higher education completed remains low. Yet, the new EU member states compete with Austria in the very area where Austria has long held a comparative advantage, i.e., high-quality upper secondary education and specialised manual workforce. The dual vocational training system is in need of improvement in both organisation and content. Its strengths need to be adjusted to the new framework conditions; the development of new job profiles and contents for modern business-related services ought to be reinforced.

Technological change and the required re-positioning of Austria as business location in the enlarged EU will lead to a fall in demand for low-paid jobs. At the same time, labour supply is growing by some 30,000 per year overall, mainly among workers of poor qualification (many of which foreigners). By contrast, the rapidly growing economic activities have a strong need for qualified personnel.

A set of measures to support economic growth through higher quantity and quality of education and training could include the following items:

- reform of educational contents and of target competencies,
- reinforced evaluation of schools,
- reform of school organisation (deferred specialisation, special learning support at both ends of the quality spectrum, language courses),
- action plan for raising the qualification of people with migration background,
- excellence programmes for schools and universities,
- action plan for apprenticeships in the service sector,
- support for sabbatical periods for training purposes,
- ensuring minimum qualification standards for pupils through early childhood education and special support programmes,

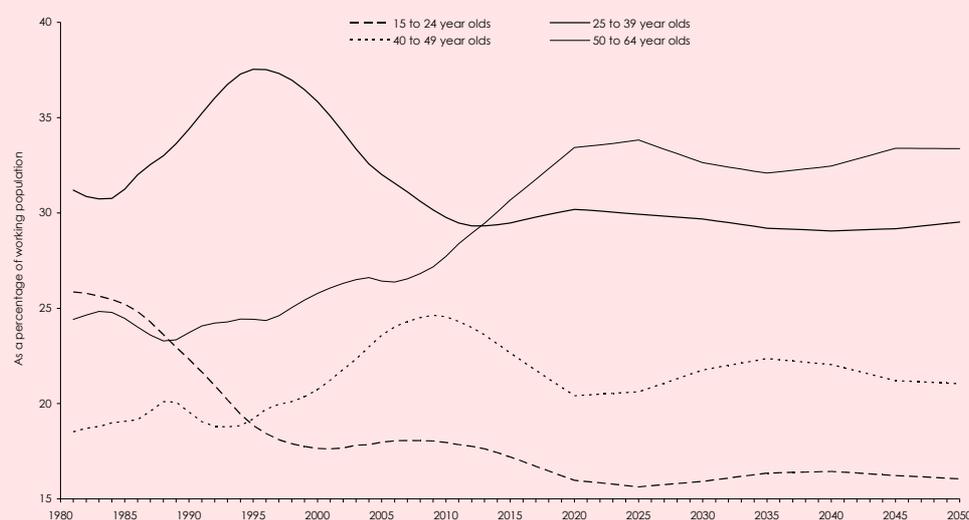
Boosting the quantity and quality of education and training

- increasing the labour force share of science and technical professions (e.g., through information on job, career and income prospects, or through differentiation in student fees).

Beyond the initial education offered to the young, job-related further education is becoming increasingly important for Austria's economic competitiveness. Technological know-how and job competencies required are changing rapidly. In addition, Austria's new economic situation and the process of structural adjustment make for changes in job profiles. Moreover, incentives for firms to offer in-service training may weaken as, with rising occupational mobility and with lifelong job tenure becoming less frequent, firms are less likely to receive the full return on their investment in further education and training. Demographic change and the financial constraints of social retirement insurance call for older workers staying longer active than so far. In about seven years, the age group of the 50 to 64 year olds will be the largest in the labour force, larger than the 25 to 39 year olds and about twice the size of the lowest age group (see Figure 3). Opportunities for further education in Austria are somewhat intransparent, badly co-ordinated, of uneven quality and not always employment-related.

Quantity and quality of further education

Figure 3: Working age population by age group



Source: Austrian Labour Market Service, Federation of Austrian Social Security Institutions.

Given the rising demand for services and the implicit employee qualification requirements, the number of jobs with standardised job profile and educational background is diminishing. Flexible specialisation (working time, job organisation) calls for training opportunities offered in module form.

Globalisation and technological change require higher levels of employee qualification. Thus, future demand will be less for particular qualifications, but rather for polyvalent skills such as acquired in formal education, on the job or in further training as well as social competencies. Such principles are currently being integrated into initial formal education, but need to be reinforced also in arrangements of further learning.

A set of measures to support economic growth through further education and training facilities could include the following items:

- facilitating the catching-up on formal educational attainment,
- institutional implementation of life-long learning on the personal, firm, sectoral and general social level,
- offering opportunities for further education in module form (system of sequential training units, each leading to the next higher level of qualification),

- certification of further education, accompanied by quality control and evaluation,
- internationalisation of further education (consistency of training modules and certification along international criteria),
- support for further education in the form of sabbaticals,
- use of accumulated overtime work, time bonuses and flexible working time arrangements for full-time further education periods,
- adjustment of in-service work organisation and careers with a view to rising employment of older workers (internal mobility).

Measures to increase investment in infrastructure have a double effect: first, they stimulate aggregate demand which is particularly welcome in a period of insufficient private investment; second, they improve the attractiveness of Austria for private investors and enhance the growth potential of the economy. Highly developed road, railroad and air connections reduce transport costs and thereby the cost of input and of overall production (given the vertical division of labour). Investment in the immaterial infrastructure facilitates the transition towards the production of goods and services of higher value added.

Nevertheless, also in this instance should the financial constraints of the government not be overlooked. Given the relatively large size of the construction sector in Austria, the additional cost of new projects should partly be recovered by cutting down on lower-priority spending (secondary road network, administrative personnel). Investment in infrastructure with a large impact on growth (broadband technology, etc.) or carrying a double dividend (training, environment, health, child-care) should move to the forefront.

An efficient and flexible system of transport facilities constitutes a major competitive element notably on the international scale. Particularly important is the easy access to the neighbouring markets and regions. This holds true for Austria's traditional markets in northern Italy, eastern Switzerland, southern Germany, and maybe even more for the new markets around Bratislava, Budapest, Brno, Prague, Maribor, Ljubljana and Zagreb. The competitive cost disadvantage of poor transport connections may lead to losses of sales and supply markets both domestic and abroad: thus, the regional economy of Vorarlberg is rather oriented towards south-western Germany than towards the other Austrian federal states, and for companies in Salzburg and Upper Austria the Bavarian market is more interesting than the regions of Styria and Carinthia.

The progressive development of transport connections circumventing Austria reduces the attractiveness of domestic industrial locations, jeopardising activities like logistics and inventory management, inter-regional distribution, assembling, packaging, finishing, financial services, ordering and accounting. Logistics centres are relatively labour-intensive, employing not only low-qualified but also highly specialised staff.

Investment in transport infrastructure, while creating domestic value added to a rather high degree, is becoming less labour-intensive over time. What ought to be borne in mind are relatively long implementation lags: in the past, counter-cyclical stimulation via investment in infrastructure has often become effective only by the time the construction industry had already overcome its recession.

The following projects, which are already under construction or in the planning stage ("Generalverkehrsplan Österreich 2002"), may be reviewed for possibly being carried forward or accelerated:

- High-level road network: extension of motorway West, north-south circular road Vienna, branch Kittsee, motorway North, highway Mühlviertel (Upper Austria); the stepping-up of road investment need not put an additional burden on public finances, as costs may be financed by road toll receipts.

Stepping up investment in infrastructure

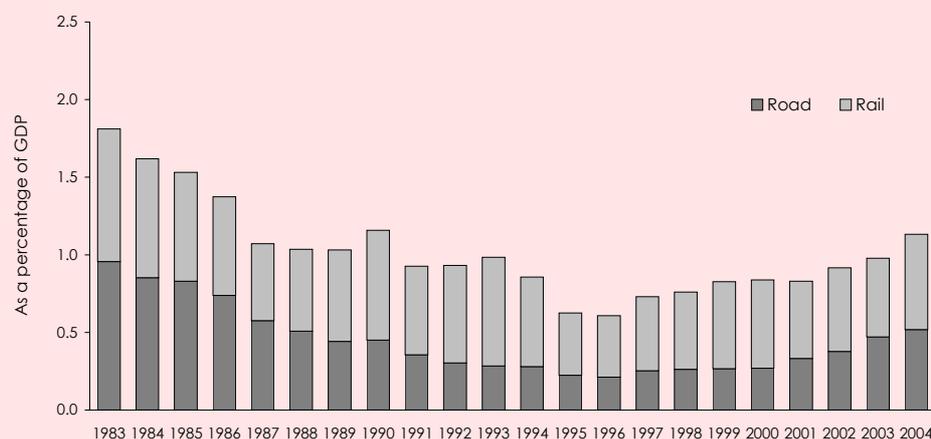
Transport infrastructure: national priorities

- Removal of bottlenecks in the railroad network and improvement of routes with "obstacles" (climbs, narrow bends, heavy local traffic): railway West, Pyhrn-Summerau railway, Semmering tunnel. The development of the railroad network can hardly be financed via infrastructure charges; no matter whether investment is financed by the Austrian Federal Railways (ÖBB) or via Public-Private Partnership (PPP) arrangements, the federal government will bear the financing costs. The tunnel under the Brenner pass is of minor interest from the domestic economic perspective, but of high environmental value by reducing road transit traffic. It would thus be warranted if Italy and Germany as the main beneficiaries and the EU would shoulder a substantial part of the financial burden involved.

In addition, combined transport modes of road and railroad could be encouraged through the development of efficient container transport and terminal facilities.

- Airport: the steady increase in the Vienna Airport's role as a hub for east-central Europe is crucial for international business connections and for Vienna as a centre for trade services and tourism. The construction of express road and railroad connections towards Bratislava should be given priority. Financing of this projects and its further links may be secured via airport charges and an air fuel tax for which, however, an EU regulation would be required.

Figure 4: Investment in federal road and railroad network



Source: Statistics Austria, ASFINAG, ÖBB, SCHIG.

Besides the extension of the transport infrastructure and of the trans-European networks, the following measures may support a growth-oriented strategy:

- The organisation of transport flows may be improved by recourse to telematics, information and communication systems and logistics concepts, with an important inherent potential for research and development.
- Greater use of PPP projects may be achieved through an improvement of the relevant legal framework, the establishment of an Austrian PPP Task Force, accompanied by research on key determinants for success and models of PPP projects.
- The decline in investment in physical infrastructure and the need for investment in immaterial infrastructure (broadband technology, further education, etc.) suggest taking into consideration special financing arrangements for infrastructure investment by the federal states and communities. Part of the funds of the housing subsidy scheme (notably from early loan redemption), from the capital market, from mortgage-backed security schemes or subsidies from the EIB (e.g., energy saving contracting) may be used for that purpose.

Financing of other infrastructure investment

- Acceleration of procedures for granting building permits, harmonisation of building regulations across the federal states, and revitalisation of inner cities and town centres would be appropriate.
- By means of a mandatory "energy pass" as from 2006 (in accordance with the EU standards for the thermal quality of building surfaces), housing subsidy schemes could be geared more towards energy-saving investments. Enhancing incentives in this regard via the subsidy instruments should be envisaged.
- A research programme for "ecological construction" should be elaborated.
- Application of new technologies in public sector construction (contracting models, use of geothermal energy, etc.) should serve as a benchmark.
- Finally, international research co-operation in the construction sector should be reinforced.

The development of the trans-European networks (TEN) was laid down in the EU Treaty of 1993 (Maastricht Treaty). According to the idea of Jacques Delors, this was to supplement the Internal Market Programme (IMP) and the European Monetary Union (EMU) as a kind of cushion against the restrictive economic effects the IMP and EMU would have for certain regions and population groups.

Already in 1994, the European Council of Essen identified 14 projects of high priority. In April 2004, by way of a revision of the TEN guidelines, 30 priority projects were adopted for implementation by 2020, at a total cost of € 225 billion, to be financed via the EU budget (earmarked TEN funds, cohesion fund, etc.) as well as from national public funds, EIB loans and private sector funds. The European Commission proposed an increase in the share of EU co-financing of the construction works from 10 percent to 30 percent (for the planning of projects the co-financing share has always been up to 50 percent), which was reduced by the Council to 20 percent. In early 2005, the Commission authorised € 620 million for the priority projects.

In its proposal for the financial perspectives 2007-2013, the Commission provides for a substantial increase in the TEN funds to a total € 20 billion. Austria is directly concerned by five projects:

- railway Munich–Kufstein–Innsbruck–Brenner pass tunnel (to be executed 2009-2015),
- railway Munich–Salzburg–Vienna–Bratislava (2010-2012),
- waterway Vienna–Bratislava (2015),
- railway Budapest–Vienna, Prague–Linz (2010-2016),
- motorway Vienna–Brno (2009).

Overall, the TEN projects bode well for a significant improvement in Europe's economic attractiveness. Austria would benefit on account of its geographical situation and, as a consequence, holds an over-proportional stake in the TEN projects planned. While the financing plans have been set up, the actual release of funds and the national co-financing provisions are missing in many member states. Domestic planning should be speeded up and Austrian co-financing should be ensured. Support for the Commission proposal for the financial perspectives 2007-2013, as well as for the original Commission proposal of an EU co-financing share of 30 percent would be helpful for a successful implementation of the TEN projects. Austria would benefit from both decisions to such effect, even if they would imply higher own contributions to the EU budget.

Measures to raise the growth potential through the accelerated implementation of TEN projects may include the following items:

- improving the co-financing rules for the new EU member states (the co-financing requirement is relatively high and national funds are limited, i.a., because of member states' efforts to meet the criteria for EMU entry),
- acceleration of national plans and ensuring Austrian co-financing,

Extension of the trans-European networks

- reinforcing co-operation with neighbouring countries with a view to speeding up the TEN projects,
- appointment of a national "TEN officer" (possibly linked with the "Lisbon co-ordinator"),
- submission of annual progress report (possibly in the context of the national reform programme for the Lisbon Strategy),
- incentives for accelerating the implementation of TEN projects (higher co-financing if started earlier),
- cross-border planning of business location between Austria and neighbouring countries,
- support for European Commission proposal for financial perspective 2007-2013,
- support for original European Commission proposal of 30 percent co-financing share.

The most important contribution towards a reduction in unemployment ought to come from an increase in the trend rate of economic growth. Measures targeted directly to the labour market may nevertheless help to improve the match between labour supply and demand, thereby also supporting economic growth. Among such measures are those aiming at better labour market administration (exchange services, training), greater flexibility and higher mobility of workers, support for re-insertion into the labour market, wage subsidies and opportunities for career interruption and further education.

WIFO has submitted comprehensive studies on the evaluation of active labour market policy (*Lutz et al., 2005*), labour market flexibility (*Kaniovski – Walterskirchen, 2004*), and on the impact of regulation (*Aiginger, 2004*). The key proposals in these areas are summarised herewith:

- support for labour market insertion designed for specific target groups (wage cost subsidies for long-term unemployed, young entrants and older workers, limited in time),
- increased emphasis on education for measures designed to encourage labour force participation,
- facilitating the access to education and training of recipients of social assistance able to work,
- reviewing the obligation to repay social assistance benefits when taking up work (it reduces the income and raises the marginal tax rate),
- Harmonisation and establishment of a legal base for eligibility criteria for social assistance benefits,
- strengthening of preventive labour market policy by supporting further education for high-risk groups,
- extending the rights and obligations of jobseekers ("fördern und fordern" – welfare/workfare),
- integration of active labour market policy into a strategy for the promotion of life-long learning,
- conversion of support measures for apprentices into regular and recognised training opportunities (preferably with the participation of firms),
- adjustment of apprenticeship schemes towards acquisition of key qualifications, facilitating the transition to other forms of education,
- promoting apprenticeships in modern service activities,
- improving child-care facilities (i.a., to boost employability of parents),

Structural reform on the labour market

- improving job opportunities for older workers (raising incentives in social security and retirement schemes, firms' design of workplace, National Action Plan for older workers as e.g., in Finland),,
- funding of labour market policy in a longer-term perspective, enabling organising institutions to enhance their competence and giving them greater stability in their planning,
- promotion of sabbaticals for further education purposes, definition of respective rights and obligations, while at the same time using sabbaticals for the adjustment of employment levels to cyclical and seasonal variations,
- using public services for re-integration of unemployed into quasi-market jobs (preferably with the participation of firms).

A strategy for promotion of growth via raising the attractiveness of the domestic business environment should include measures facilitating the establishment of firms, the acquisition and extension of company headquarters, and measures improving corporate financing.

In order to encourage the establishment of firms, it would be appropriate to

- open a one-stop shop for all information and administrative requirements for founders of a company (not only as far as subsidies are concerned; in part already implemented by Federal Economic Chamber or regional initiatives),
- convey a positive image of entrepreneurship (through special awards, in schools, etc.), disseminate basic economic knowledge as part of general education in schools, colleges and universities.

In order to improve corporate financing and the functioning of capital markets, the following measures are deemed appropriate:

- execution of privatisation operations via the capital market,
- facilitating access to foreign capital at favourable terms (but not subsidised),
- strengthening of bond markets for corporate bonds,
- improving the conditions for the securitisation of claims (by lumping together individual transactions, new financial instruments may be created at attractive conditions possibly also for small and medium-sized enterprises),
- start-up financing in the high-tech sector,
- creating the conditions for the adoption of international "models" for venture capital and private equity (e.g., "limited partnership" like in the UK),
- government support particularly in the "seed" phase of high-tech companies,
- extension of networks for "business angels".

Against the background of profound changes in the European economic environment it would be important to encourage corporate headquarters and centres of competence to locate in Austria:

- marketing of Austria as a location for headquarters and for advanced technology,
- location benefit package with direct subsidy for three years,
- offer to companies to participate in designing training institutions and apprenticeship schemes.

According to the hypothesis formulated by Harvard economist Michael Porter, high domestic environmental standards offer an economy opportunities for exports and growth. With regard to some environmental technologies, Austria can claim a leading role, which should be used for stimulating overall growth.

**Establishment of firms,
corporate financing,
headquarter
marketing**

**Environmental
technology as a
vehicle for exports
and growth**

A pro-active environmental policy may contribute to stronger growth in the following ways:

- All three goals of the Lisbon Strategy, i.e., growth, social cohesion and environmental quality, need to be respected. Neglecting the dimension of sustainability or environmental standards bears the risk that a short-term growth advantage will be achieved at the expense of additional costs in the medium term (repair of environmental damage or climate deterioration).
- Environmental technology and targeted technology policy may make a decisive contribution towards growth that respects natural resources and the environment. This gives Austrian and European companies the opportunity to reap first-mover benefits internationally through innovations in resource-efficient technologies.
- The environmental technology-producing industry, in its planning, has to rely on the predictability of environmental policy goals and of the related policy settings and instruments. This influences, on the one hand, the development and supply of environmental technology, and demand and implementation of such technology, on the other.

Austria has so far not succeeded in breaking the rising trend of greenhouse gas emissions. This carries a potential burden for government budgets, if the Austrian Kyoto target is to be achieved. An innovative climate policy may give an impetus to creating forward-looking economic structures and provide incentives for technological innovation.

Also from the point of view of becoming less dependent from fossil energy sources, climate policy should focus on innovation for boosting international competitiveness. This requires the identification of activities with a high inherent innovative potential for Austrian companies, which can be implemented quickly.

Certain areas are of interest not only from the climate policy point of view, but also from an economic perspective, such as energy-saving investment in new buildings as well as in existing structures, or a more widespread use of combined heat and power.

For the next stage in the introduction of tradeable emission certificates in the EU, the improvement of the data base and of the administrative infrastructure should be given priority, in order to allow economic agents to take rational decisions.

The European economy draws only limited benefit from the current world-wide boom. While the global economy expanded by 4.5 percent in 2004 and by an estimated 4 percent this year, the projections for the euro area have been taken down to 1.3 percent. The EU, at the Luxembourg summit, reacted by relaxing the Stability and Growth Pact and by giving higher priority to the Lisbon Agenda in general and the objective of stronger growth in particular. The integration of the Lisbon Strategy into member states' economic policy shall be emphasised through the "National Reform Programmes".

The Austrian economy has grown by close to 2.4 percent in 2004 and is likely to keep that pace in 2005 (1.7 percent). Such momentum is lower than in previous episodes of cyclical recovery and not sufficient to allow unemployment to decline. Although GDP growth in Austria is higher than in Germany or Italy and in 2005 will also exceed the euro area average, the positive edge that has taken Austria into the top group in terms of per-capita income, has disappeared.

In a medium-term perspective, the expected trend growth is slightly above the euro area average, but lower than in the growth poles in northern and central Europe. Estimated at 2.3 percent p.a., such a pace will still not suffice to bring the unemployment rate down; a sustained decline would require an average growth rate of 2.5 percent. A strategy for higher growth in order to meet the Lisbon target is necessary also for a decline in unemployment, the consolidation of public finances in the medium term, and in order to meet the challenges posed by an ageing population.

Innovation in climate policy

Conclusion

An evaluation of progress in the implementation of the Lisbon Strategy by Austria confirms the need for action. While the employment ratio is already close to the Lisbon target for 2010 and rising further, the figure is biased upwards by including people (out of work) receiving child-care benefits; moreover, no difference is made between full- and part-time jobs. The rate of unemployment, in the EU definition, is higher than in 1995 and 2000; it would be still higher when allowing for people in labour market training, in early retirement, or when using the traditional national definition. For older workers, Austria's employment rate is one of the lowest.

On the indicators for social cohesion, Austria holds a favourable position, as it does with regard to energy intensity. On those indicators which gauge the change in environmental quality (emission of greenhouse gases, transport volumes), Austria fares rather poorly. In general, the indicators measuring progress draw a less favourable picture than those showing Austria's relative position vis-à-vis other countries.

Raising an economy's growth potential is a challenging and difficult task requiring sustained efforts over a longer period. No single measure can by itself be expected to bring this about. Only a strategy designed for the long haul and consequently adhered to, boosting demand in the short term and strengthening the productive potential and competitiveness of the economy in the long term, will succeed in changing the growth path.

A growth-enhancing strategy is more likely to be successful, notably for a small economy, if it is supported by similar efforts in neighbouring countries, given negative leakages and positive spill-overs and since many projects have to be planned and financed on a cross-border basis. The measures proposed by WIFO in its short study are in line with, or even derived from the Lisbon Agenda and may be taken up in the "National Reform Programme" to be submitted in autumn.

Additional expenditure to be incurred in order to stimulate economic growth should not draw the attention of policy away from the need to consolidate public finances over the longer term. Growth-enhancing measures should therefore be financed in part by re-allocation of available resources. The measures selected should promise a high macro-economic return in the medium run. The psychological element, i.e., reduction of private household and corporate uncertainty and widespread acceptance of the growth strategy, is crucial.

As the current WIFO projections illustrate, business conditions do not warrant immediate counter-cyclical action for the time being. Should conditions weaken, however, it would be advisable to have well-defined projects and measures ready for early implementation. They should be effective both on the demand and the supply side (raising domestic economic attractiveness and supporting forward-looking investment). Measures designed for raising the medium-term growth path should be sustained over the whole business cycle. From the perspective of the labour market and the existing gaps in infrastructure (particularly in the new EU member states), it would even seem justified to launch an early growth-enhancing strategy financed by one-off government revenues.

The heightened priority given to the growth objective in the EU and the obligation to set up National Reform Programmes for the implementation of the Lisbon Agenda improve the chances for success of a growth-oriented strategy. Austria should support this re-adjustment of policy in the EU towards promotion of economic growth. This should be possible and important especially when Austria holds the Council presidency in the first semester 2006 and would justify a compromise on the issue of contributions to the EU budget for the period 2007-2013.

The determination to give top priority to the growth objective should not be understood in the sense that efforts at social cohesion and sustainability may be neglected. Both goals are essential features of the "European model". If they are pushed to the backstage, it will lead to higher social costs in the medium term and the erratic change in political strategy will give rise to uncertainty. Besides, Europe and especially Austria will lose export and growth opportunities in the area of environmental technology.

The WIFO study cites seven domains where action should be taken in order to raise the medium-growth trend:

- research and innovation,
- formal education,
- further education and training,
- infrastructure,
- labour market support and incentive structures,
- establishment of firms,
- environmental technology.

The measures proposed by WIFO do not represent a comprehensive strategy, but derive from special studies in which the Institute explores strengths and weaknesses and puts forward policy suggestions.

In the area of research and innovation, reaching the intermediate expenditure target of 2.5 percent of GDP in 2006 is feasible, but not ensured. The WIFO proposal includes supplementary measures for promoting research in small and medium-sized enterprises (premium for research projects commissioned externally), for intensifying the co-operation between the corporate sector and universities (bonus for external funds acquired) and a binding commitment to an increase in earmarked research funds after the expiry of the current programme (e.g., by a parliamentary initiative supported by all parties), in order to facilitate the planning of research activities beyond the legislation period. Further proposals are for raising the efficiency and for the strategic targeting of the funds granted. The long-term impact of research expenditure (i.a., on employment) is significantly greater than the short-term effect.

In the area of education and training, the crucial importance of human capital for economic growth is extensively illustrated. The fact that in ten years' time older workers will constitute the largest group on the labour market underlines the role of further education for Austria's competitiveness, requiring profound changes in the readiness for life-long learning, in corporate strategies as well as in institutional provisions for further education. Concrete proposals refer to a campaign for apprenticeships in modern service activities, the possibility to pursue advanced education after an apprenticeship successfully completed, catching-up programmes for people without formal educational attainment, a campaign for qualification of people with migration background, the support for training sabbaticals, and the need to combine occupational flexibility with contingent periods for further education. Measures to organise educational activities in module form, and such concerning certification and internationalisation of further education are important in a long-term perspective and should be integrated into an overall concept.

In the area of infrastructure, priority is given to the improvement of Austria's economic attractiveness against the backdrop of EU eastern enlargement and the change in Austria's geo-political situation. Besides railway (removal of bottlenecks on the railway West, Pyhrn-Summerau railway, Semmering tunnel) and road infrastructure (i.a., extension of the motorway West, north-south circular road Vienna, branch Kittsee, motorway North, Mühviertel highway), this also implies investment in logistics, in freight terminals and renovation of railway stations. In the area of immaterial infrastructure, the focus should be set on broadband technology. Reference is made to the financing of communal investment, the use of guidelines for residential construction for the implementation of energy-saving investment, for environmental-friendly construction and for the creation of telecommunications infrastructure, as well as to measures to encourage PPP models (legal background, task force, model analysis). Austria is concerned by an over-proportional share of cross-border TEN projects (railway Munich–Brenner pass, Munich–Bratislava, Budapest–Vienna, waterway Vienna–Bratislava, motorway Vienna–Brno). Financing arrangements should be improved both at the European and national level, difficulties of organisation could be overcome by appointing a "TEN officer" (possibly in combination with the Lisbon coordinator). If the EU were ready to facilitate an early start of the projects by taking

over a larger financial share, this may persuade member states to give up their wait-and-see attitude.

In the labour market domain, the proposals are for measures by the labour market service to encourage labour force participation, measures for the upgrading of qualifications of jobseekers and for the re-insertion of specific problem groups into the labour market. All schemes envisaged should be reviewed from the point of view of their costs and of possible substitution effects with existing jobs. Further proposals are for upgrading the qualifications of recipients of social assistance able to work, and for strengthening the incentives of the unemployed to take up work. An increase of the employee tax credit in conjunction with being actively employed would also provide an incentive to take up or return to work.

In order to encourage the establishment of firms and stimulate their growth, a number of measures are proposed for the creation and financing of companies as well as for the acquisition of headquarter locations.

The environmental technology sector carries substantial growth opportunities for Austria. A sectoral strategy and a subsidy scheme should be elaborated. A climate strategy should be implemented in a comprehensive and cost-efficient way. Dependency from fossil energy sources is to be reduced; synergies between environmental policy and residential building need to be exploited to a higher degree.

Aiginger, K., "Labour Market Reforms and Economic Growth. The European Experience in the Nineties", WIFO Working Papers, 2004, (232), http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=25275.

Aiginger, K., "Towards a New European Model of the Reformed Welfare State: An Alternative to the United States Model", United Nations, Economic Survey of Europe, 2005, (1), pp. 105-114.

Aiginger, K., Kramer, H., Wirtschaftspolitik zur Steigerung des Wirtschaftswachstums, WIFO, Vienna, 2003, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=24548.

Biffi, G., Targeted Wage Cost Reduction in the Netherlands: A Comment from Austria, Vienna, 2005 (mimeo).

Breuss, F., Kaniowski, S., Lehner, G., "Makroökonomische Evaluierung der Fiskalpolitik 2000 bis 2002", WIFO-Monatsberichte, 2004, 77(7), pp. 557-571, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=25156.

Breuss, F., Kaniowski, S., Schratzenstaller, M., "The Tax Reform 2004-05 – Measures and Macroeconomic Effects", Austrian Economic Quarterly, 2004, 9(3), pp. 127-142, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=25235.

Falk, M., Leo, H., Die Innovationsaktivitäten der österreichischen Unternehmen. Empirische Analysen auf Basis der Europäischen Innovationserhebung 1996 und 2000, WIFO, Vienna, 2004, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=25249.

Falk, R., Leo, H., Ziegler, E., Dinges, M., Gassler, H., Polt, W., The Role of Special Funds in Catching-up R&D-Strategies, Study of WIFO and Joanneum Research commissioned by the Austrian Council for Research and Technology Development, Vienna, 2004.

Gierlinger, B., Müller, E., "Steuer-Check 2004/2005", SWK-Sonderheft, 2005.

Kaniowski, S., Kratena, K., Marterbauer, M., Auswirkungen öffentlicher Konjunkturimpulse auf Wachstum und Beschäftigung, WIFO, Vienna, 2003, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=24614.

Kaniowski, S., Schratzenstaller, M., Selbstfinanzierung der Steuerreform 2004/05, WIFO, Vienna, 2004, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=25033.

Kaniowski, S., Walterskirchen, E., Flexibilisierung der Arbeitszeit, Study of WIFO commissioned by the Federal Ministry for Economic Affairs and Labour, Vienna, 2004.

Kramer, H., "Überlegungen zu den Verteilungswirkungen der österreichischen Budgetpolitik", WIFO-Monatsberichte, 2001, 74(1), pp. 27-39, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=19590.

Lehner, G., "Überblick über die Maßnahmen der Steuerreform 2000", WIFO-Monatsberichte, 1999, 72(7), pp. 515-522, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=8201.

Lutz, H., et al., "Halbzeitbewertung", in Lutz, H., Mahringer, H., Evaluierung Europäischer Sozialfonds 2000-2006: Ziel 3 – Österreich, WIFO, Vienna, 2005, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=25462.

OECD, New GDP Comparisons Based on Purchasing Power Parities for the Year 2002, Paris, 2005.

References

Sapir, A., *An Agenda for a Growing Europe. Making the EU Economic System Deliver*, report of an independent high-level study group established on the initiative of the President of the European Commission, Paris, 2003.

Schatzenstaller, M., Falk, M., Kramer, H., Marterbauer, M., Schwarz, G., Walterskirchen, E., "Erste Evaluierung der Konjunkturbelebungsmaßnahmen seit 2001", *WIFO-Monatsberichte*, 2003, 76(10), pp. 755-768, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=24622.

Schulmeister, St., "Weiterhin kräftiges Wachstum in Asien, Russland und den USA – Deutschland und Japan bleiben Nachzügler. Mittelfristige Prognose der Weltwirtschaft bis 2009", *WIFO-Monatsberichte*, 2005, 78(1), pp. 35-48, http://publikationen.wifo.ac.at/pls/wifosite/wifosite.wifo_search.get_abstract_type?p_language=2&pubid=25405.

Strategies for Higher Growth and Employment in Austria – Summary

Economic growth is neither in Austria nor in the EU as a whole strong enough as to make substantial inroads into unemployment. Against this background, the European Council of March 2005 assigned the highest priority to the goals of growth and employment and invited each member state to elaborate a national strategy for higher growth. The Austrian federal government has asked WIFO to submit, for a government summit early last May, a set of proposals for growth-enhancing measures for Austria. Action in seven policy areas as outlined by WIFO should be able to accelerate economic growth and ought to be integrated into an overall strategy.